SHARED LEADERSHIP, TEAM EFFECTIVENESS AND INNOVATION: ROLE OF EMPOWERING LEADERSHIP AND TEAM LEADER TRUSTWORTHINESS AT THE UNITED STATES INTERNATIONAL UNIVERSITY (USIU) – AFRICA

BY
ABDIRAHIM AMIN

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A Research Project Submitted to the Chandaria School of Business in Partial Fulfilment of the Requirement for the Degree of Master of Organizational Development (MOD)

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SUMMER 2018
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signature .................................................. Date ..............................................................
Abdirahim Amin (652972)

This project has been submitted for examination with my approval as the appointed supervisor.

Signature .................................................. Date ..............................................................
Dr. Scott Bellows

Signature .................................................. Date ..............................................................
Dean, Chandaria School of Business
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ABSTRACT

Shared leadership has recently taken center-stage in the leadership literature with numerous studies reporting its positive impact on team and organizational outcomes. While acknowledging the contributions of previous research, a blanket adoption of shared leadership in the Kenyan context may be counterintuitive. In fact, an extensive literature search revealed most studies on shared leadership were undertaken in the US, China, Turkey, Germany, and Japan; countries that might not share much with Kenya in many respects. The purported potential of shared leadership, and the paucity of research on the same in the Kenyan context necessitated the need to explore the effects of shared leadership on team effectiveness and team innovative behavior in the Nairobi-based United States International University (USIU) – Africa.

A survey research design was adopted to test the respondents’ perceptions because the required data was not available from any other source and primary data had to be collected. A survey approach was used as an inexpensive method of collecting data from a sample and generalizing the results to the constituent population. With the permission of the university authorities, a simple random sampling was utilized to identify the study participants among full-time non-faculty staff members of the university. A total of 204 respondents participated in the study by filling out a sixty-eight-item supervised, self-administered questionnaires between March and April 2018. SPSS was used to clean the data and generate descriptive statistics and structural equation modeling was undertaken using Mplus 6 to analyze the latent variables in the theory-specified model.

The study found that team leader trustworthiness and empowering leadership stimulate the emergence of shared leadership ($\beta = .344$, $p < .01$; $\beta = .456$, $p < .01$, respectively) and shared leadership is positively and significantly related to perceptions of team effectiveness ($\beta = .83$, $p < .01$) but negatively and significantly related to team innovative behavior ($\beta = -.25$, $p < .01$). The study also found that shared leadership mediates the relationship between team leader trustworthiness and team effectiveness ($\beta = .285$, $p < .01$); team leader trustworthiness and team innovative behavior ($\beta = -.086$, $p < .05$); empowering leadership behavior and team effectiveness ($\beta = .378$, $p < .01$); and empowering leadership behavior and team innovative behavior ($\beta = -.114$, $p < .01$). The results confirm the theory-specified model of the antecedents and outcomes of shared leadership and point to the importance of understanding the dynamics of these constructs.
An important contribution of this study is linking team leader’s trust worthiness to the emergence of shared leadership as this particular relationship has not been tested in previous studies.

The results of this study have some practical implications for practitioners and point to areas of further study for researchers. Shared leadership grows in a supportive environment where appointed leaders are willing to share influence, power, and control with their peers. This requires a heightened awareness of the benefits and pitfalls of shared leadership so that managers can harness its positive outcomes and limit potentially negative outcomes. For managers, learning to properly plan, communicate, and delegate work is essential. Equally important is coaching skills to make team members more self-reliant. Managers would also benefit from dealing with team members in a respectful manner and showing concern for employee welfare. For team members, understanding team dynamics and making useful contributions while retaining individual visibility is necessary. Finally, organizations should create a conducive environment that allows employees to feel safe and foster trust amongst themselves.

The study is not without limitations and future researchers should focus on replicating the research in other institutions, among teams that have different task complexities and interdependencies, and across industries and sectors. Secondly, future researchers may benefit from using longitudinal data as opposed to the cross-sectional data that was used in this study. This will help capture changes in perceptions of transient constructs like innovation which spring up when there are opportunities. Similarly, future research should use multiple raters to measure the model variables and employ multiple analysis approaches such as social network analysis and direct consensus models to measure team-level responses. Finally, and especially, researchers should test the factors that mediate the relationship between shared leadership and team innovative behavior.
ACKNOWLEDGEMENT

I would like to acknowledge Dr. Scott Bellows for his guidance while giving me the opportunity to find my way.
DEDICATION

To my wife, Atika, for her relentless love and support; my son Aamir for putting up with my long absences; and to my uneducated parents who educated a whole generation.
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Universities in Kenya face mounting challenges. As the global markets continue to open up, students have increasing choices in their field as well as country of study. Online degrees are becoming more common and acceptable and students can attend self-paced classes as opposed to the highly inflexible school-based classes. Perceived prestige of foreign degrees and questionable quality of domestic education continue to drive universities to the brink (Wanzala, 2016). With demand for higher education growing exponentially (Ogeto, 2015) and government funding to public universities steadily declining (Nganga, 2015), a crisis in the higher education sector is inevitable as evidenced by the frequent student riots and labor-related tussles between the government and unionized university staff. The employment market continues to seek well-rounded graduates with top-notch skills while universities continue to offer courses that no one wants (Oduor, 2018).

In a more globalized world, organizations face a myriad of challenges (Abdalkrim, 2013); changing workforce, leaps in technological revolution (Jovane et al., 2008), stiff competition, calls for more responsible enterprises (Park & Koehler, 2013) and ever-stringent regulations. Organizations that cannot survive in this environment are bound to be phased out and replaced by more adaptive organizations. There is an ever-increasing need to keep a balance between external environmental turbulence and internal business processes. As stakeholders put more claim to their stakes (Park & Koehler, 2013), leaders are required to be more creative in how they run organizations. Consumers demand high quality goods and services, buoyed by strict government-enforced quality requirements, availability of substitutes and powerful consumer protection groups. Burgeoning costs push decision-makers to institute cost-cutting measures and find new ways to grow and sustain organizations. As organizations are squeezed from all angles, there is heightened need to be more innovative, effective and adaptive in order to survive.

Organizations are moving towards team-based work (McDowell, Agarwal, Miller, Okamoto, & Page, 2016). Individual employees may not have the requisite skills and knowledge to drive organizations forward on their own and there is need for complimentary skills to be introduced to maximize efficiency and effectiveness of
organizations. The move from more hierarchical to flatter and leaner setups also requires a move towards team-based work processes. There is need to understand how optimal teams can be formulated, and what aspects of the organization, leadership, and internal processes need to change to optimize results. West and Altink (1996) believe that managers bring together people with diverse skills into teams with hopes of increasing effectiveness and adaptability in complex organizations and to promote creativity and innovation. The dual move from directive leadership to supportive leadership and the need for team-based output and outcomes heralded the introduction of shared leadership.

Shared leadership involves lateral influence where the agents of influence are often peers of the targets of influence Pearce and Sims (2002). The objective of shared leadership is for individuals to lead one another to the achievement of group or organizational goals or both (Barnett & Weidenfeller, 2016). Traditional leadership was concerned with top-down influence where direction, reward and reprimand would be vested in a formal or appointed leader. The notion that a leader ‘knows best’, is the best suited to guide, and is the most visionary in the organization is being replaced with the acknowledgement of the complementarity of organizational members. The complexities of the modern organization, and the pervasiveness of knowledge, do not afford an individual member the arrogance of absolute knowledge, power and control. Shared leadership which is characterized by collaborative decision-making and shared responsibility for outcomes (Hoch, 2014) is thus touted as an antidote to the complexities of the modern organization and a supplement to traditional vertical leadership. As opposed to traditional forms of leadership that do not encourage creativity and innovation (Pearce & Manz, 2005), shared leadership is an essential ingredient of organizations that need continuous innovation in order to offer the best products and services to their clientele in the most effective ways (Pearce & Manz, 2005; White & Smith, 2010).

Rapid changes in technology and shorter product life-cycles require rapid innovation and effectiveness at all levels of the modern organization. Innovation is the creation of new and useful, or functional ideas, and their application in organizational settings (Hoch, 2013). It is the intentional generation, promotion, and realization of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization (Janssen, Van de Vliert, & West, 2004). It involves the creation and exploitation of new ideas (Kanter, 1996) and the successful implementation of creative ideas within an organization (Amabile, 1988). The intended outcome of innovation is to
benefit the individual, the group, organization or wider society (West & Altink, 1996). The innovation process, however, is not smooth as depicted in theory but a messy and unstable process that is sensitive to many forces within and outside an organization (Kline & Rosenberg, 1989), and need high-involvement management practices and employee commitment thus requiring self-regulated employee behavior rather than controlled by sanctions and pressures external to the individual (Balkin, Tremblay, & Westerman, 2001).

Researchers such as Drescher, Korsgaard, Welpe, Picot, and Wigand (2014) believe that shared leadership has potential benefits for group functioning that should translate into higher performance. This could be because team leadership is assumed by the individual with the most relevant skills, knowledge and abilities for the particular issues facing the team at that particular moment (Pearce, 2004). Performance relates to how well one meets expected outcomes. In the case of teams, performance is measured on how well the team collectively meet their set objectives.

With the promise of better organizational performance and other positive outcomes, should leadership be shared? Researchers studying the impact of shared leadership across disciplines and industries tend to think so. It is believed that one of the means to a sustainable competitive advantage for organizations is through cultural change from a control-oriented to an involvement-oriented management culture based upon mutual trust (Davis, Schoorman, Mayer, & Tan, 2000). Participation in management and decision-making increases employee ownership over team and organizational outcomes. Similarly, trust which is the willingness of a party to be vulnerable to the actions of another party Mayer, Davis, and Schoorman (1995), has positive team and organizational outcomes. Shared leadership requires the existence of trust and distribution of power, control and influence within teams. As a result, existing leadership structures that support employee involvement and participation in decision-making may facilitate shared leadership. One such leadership behavior that has been linked to shared leadership is empowering leadership behavior.

Empowering leadership emphasizes the development of follower self-management and encourages and facilitates employees to lead and manage themselves (Tuckey, Bakker, & Dollard, 2012). Empowering leaders encourage independence of action and coordination of efforts with other team members as well as seeking challenges and opportunities to
grow (Pearce & Sims, 2002). Empowering leadership involves building the capacity of team members to become self-reliant, participative decision-making to foster ownership of decisions and outcomes, and information sharing to enhance team members’ understanding of organizational goals and expectations (Arnold, Arad, Rhoades, & Drasgow, 2000). Similarly, trust encourages leader and team members’ risk-taking behaviors as they have positive expectations of the trust referent (Mayer et al., 1995). Therefore, by encouraging empowering leadership behaviors and creating a culture of mutual trust and respect, organizations could harness the development of shared leadership.

1.2 Statement of the Problem
Shared leadership research has so far been undertaken in multiple countries such as the US (Daspit, Tillman, Boyd, & Mckee, 2013; Hmieleski, Cole, & Baron, 2012; Wood & Fields, 2007; Hmieleski, & Pearce, 2006; Wood, 2005; Pearce & Sims, 2002; George et al., 2002; Ensley,), Turkey (Erkutlu, 2012), South Korea (Lee, Lee, Seo, & Choi, 2015), China (Liu, Hu, Li, Wang, & Lin, 2014) and across industries such as high-technology companies (Liu et al., 2014), banking (Erkutlu, 2012), among students and student teams (Lee et al., 2015; Boies, Lvina, & Martens, 2010) startups (Ensley, Hmieleski, & Pearce, 2006), global manufacturing firms (Hoch & Kozlowski, 2014) as well as the training and development and public sector (Hoch, 2014).

With most of these studies acknowledging the positive promises of shared leadership, its applicability in the Kenyan context is suspect since our extensive search of the literature has not revealed any research conducted in the country. Whereas studies in other countries have linked shared leadership to positive team outcomes, a blanket generalization and application of those findings in the Kenyan context could prove problematic. Based on the foregoing, this study will examine how shared leadership affects team effectiveness and innovation in Kenya and how the results of the study can be utilized by academicians and practitioners to further advance the field of study.

1.3 Purpose of the Study
The main purpose of this study was to examine the effects of shared leadership on team effectiveness and innovation among full-time non-faculty staff at the United States International University (USIU) – Africa; and whether empowering leadership and team leader trustworthiness predict shared leadership.
1.4 Research Questions

The research questions that will be explored are:

1. Does empowering leadership predict the emergence of shared leadership?
2. Does team leader trustworthiness predict the emergence of shared leadership?
3. Does shared leadership predict team effectiveness and team innovation?
4. Does shared leadership mediate the relationship between empowering leadership and team leader trustworthiness and team effectiveness and innovation?

1.5 Rationale of the Study

Shared leadership and team outcomes have both received substantial attention over the years. However, an examination of how shared leadership affects team outcomes has not been conducted in the Kenyan context. An examination of the relationship between these variables could help both academicians and practitioners gain insight into the interactions between shared leadership and team outcomes such as team effectiveness and innovation. Such an understanding will help academicians further undertake more research in the field, especially in Kenya, while also helping practitioners refine their team leadership structures and processes to optimize performance. Secondly, the research has practical implications for human resource managers who want to conduct trainings on team dynamics and improve team outcomes. Shared leadership could be incorporated into team training and executive trainings.

1.6 Scope of the Study

The research was conducted in Nairobi Kenya among a sample of 204 non-faculty staff of the United States International University (USIU) – Africa. The study utilized a random sampling technique to identify the participants who took part in the study. The timeframe for the data collection was between March–April 2018, whereas the data analysis and report writing was done from May through August 2018.

This study was based on cross-sectional data and the results may not generalize as would be expected of a longitudinal study. Second, a sample of 204 full-time non-faculty staff members of the United States International University (USIU) – Africa participated in the study and this means different results may be obtained from a different sample group, and a different institution. Further limitations include the measurement of the variables as
perceptions of individual team members which may require testing the variables using multiple raters, and perhaps even at different timeframes.

1.7 Definition of Terms

1.7.1 Trustworthiness

Trustworthiness refers to one party’s belief about another’s attributions, motives, and intentions Albrecht (2002).

1.7.2 Empowering Leadership

Empowering leadership is a leadership behavior that is more about giving influence to than having influence over employees, and a central characteristic that describes empowering leadership (EL) is supporting employees’ autonomy (Amundsen & Martinsen, 2015).

1.7.3 Shared Leadership

Shared leadership describes team leadership where multiple team members engage in leadership by collaborating on decision-making and sharing responsibility for outcomes (Hoch, 2013).

1.7.4 Team Effectiveness

Team effectiveness is an assessment of the team’s current performance based on indicators of team quantity and quality of productivity (Barrick, Stewart, Neubert, & Mount, 1998).

1.7.5 Innovation

Innovation is the creation of new and useful, or functional ideas, and their application in organizational settings (Hoch, 2013).

1.8 Chapter Summary

This chapter introduced some of the shared leadership theories that were put forward by researchers in different disciplines. Leadership is an everyday organizational activity that is required to operationalize both routine and non-routine organizational needs. Over the years, leadership has been tied, rightly or wrongly, to positive team and organizational outcomes. Recent developments in the study of leadership have focused more on
leadership as a shared construct as opposed to the more traditional view of leadership as a legitimate top-down construct. Proponents of shared leadership contend that leadership characteristics do not reside in one individual alone, but rather leadership resides in each member of an organization or team in varying degrees. By sharing leadership within the team, the cumulative positive leadership qualities of all the team members can be harnessed and translated into better performance.
CHAPTER TWO

2.0 CRITICAL LITERATURE REVIEW

2.1 Introduction
This chapter reviews the extant shared leadership literature with the aim of understanding the linkage between shared leadership, team effectiveness and team innovation. A second objective is to establish a better understanding of the antecedents of shared leadership; namely empowering leadership and team leader trustworthiness. Section 2.2 looks at the relationship between empowering leadership and shared leadership; 2.3 looks at team leader trustworthiness and shared leadership; 2.4 discusses shared leadership, team effectiveness and innovation; 2.5 discusses the mediating role of shared leadership between empowering leadership and trustworthiness on one end, and team effectiveness and innovation on the other. Finally, a chapter summary rounds up the main themes explored in the literature review.

2.2 Empowering Leadership
According to Pearce & Sims (2002), empowering leadership emphasizes the development of follower self-management or self-leadership. It involves encouraging and facilitating employees to lead and manage themselves (Tuckey et al., 2012), and it emphasizes employee self-influence rather than top-down control (Pearce, 2004). Empowering leadership behaviors include “encouraging followers to assume responsibilities and work independently, coordinate efforts with other members of the team, think about problems as learning opportunities or challenges, seek out opportunities to learn and grow, and acknowledge and self-reward their efforts” (Tuckey et al., 2012, p. 17). Empowering leadership enhances power-sharing with followers by encouraging followers to use self-rewards as opposed to giving them rewards, facilitating follower self-leadership, engaging in participative goal-setting, and encouraging independent action (Tuckey et al., 2012).

Empowering leaders do not just delegate authority to employees to enhance the subordinate’ work motivation and performance (Hassan, Mahsud, Yukl, & Prussia, 2013), but also involve them in decision-making and encourage self-management. Martin, Liao, and Campbell (2013) argue that these leadership behaviors can help employees gain a sense of competence and autonomy, hence enhancing intrinsic motivation and subsequently proactive behavior. These behaviors further signal a leader’ confidence in the employee’ ability and competence to handle challenging work (Ahearne, Mathieu, &
Rapp, 2005). Citing previous research (e.g. Yukl and Fu, 1999; Yukl et al., 2009), Hassan et al. (2013) suggest that leaders who develop high-quality exchange relations consult more with their subordinates about important decisions and use their ideas and suggestions. Hassan et al. further contend that such behavior signals that the leader has confidence and trust in the subordinate’s skills and motivation to accomplish a difficult task or project.

The empowering leadership model developed by Arnold et al. (2000) features five dimensions of empowering leadership behavior: empowering leadership requires leading by example, meaning a leader has to be committed to his or her own work and the work of the team members to achieve higher performance. The second dimension is coaching which means enhancing the capacity of team members to become self-reliant through actions that educate them to become more efficient and self-reliant. Participative decision-making encourages team members to contribute to ideas and fosters ownership of decisions and outcomes. Empowering leadership also involves information sharing by the leader which enhances team members’ understanding of the organization’s goals and the expectations of the team leader. Finally, empowering leadership encourages showing concern for subordinates, an indication of support and fair treatment.

Extending the thoughts of other researchers (Ahearne et al. 2005; Arnold et al. 2000), Hon and Chan (2012) opine that empowering leaders formally delegate significant freedom and autonomy to their employees which they believe helps to promote a strong sense of autonomy and competence among subordinates. Amundsen and Martinsen (2015) hold similar sentiments and in their words, “to empower is more about giving influence to than having influence over, and a central characteristic that describes empowering leadership (EL) is supporting employees’ autonomy.” Empowering leadership, therefore, involves leaders’ actions that promote psychological empowerment and subordinate self-leadership (Amundsen & Martinsen, 2015). In this regard, we find Conger & Kanungo (1988)’ conceptualization of psychological empowerment, as cited by Tuckey et al. (2012), useful where “empowering others equates with motivating them to achieve as well as enabling them to do so, rather than merely delegating responsibility and authority.”

In advancing the social cognitive theory, Bandura (1989) dispels the notion that human behavior can be explained in unidirectional causation. Instead, Bandura proposes a triadic
reciprocal determinism of human behavior. In the triadic model, “behavior, cognition and other personal factors, and environmental influences all operate as interacting determinants that influence each other bidirectionally” (Bandura, 1989). In triadic reciprocity, the individuals influence their environment through their behavior and are in turn influenced by their behavior and the environment (Pearce & Sims, 2002). According to Pearce and Sims (2002), a key contribution of social cognitive theory is a framework for understanding how modeling influences individual behavior. With regard to empowering leadership, the leader models self-leadership behavior which is subsequently adopted by the subordinate (Pearce & Sims, 2002). The social cognitive theory serves as one of the foundations of empowering leadership.

Another important foundation of empowering leadership is SuperLeadership (Manz & Sims, 2001). SuperLeadership describes leadership that helps others to lead themselves (Manz & Sims, 2001). According to Manz and Sims (2001), SuperLeadership focuses on the “ability to maximize the contributions of others by helping them to effectively guide their own destinies rather than the ability to bend the will of others” (p. 5). Pearce and Sims (2002) further add that SuperLeadership involves strategies such as reconceptualizing obstacles not as problems but rather as opportunities for learning much as the cognitive behavior modification research pioneered by the likes of Meichenbaum (1979) which also provides a basis for empowering leadership behavior.

Empowering leadership is linked to various positive organizational outcomes such as organizational performance, knowledge sharing and team efficacy (Srivastava, Bartol, & Locke, 2006), safety participation (Martínez-Córcoles, Schöbel, Gracia, Tomás, & Peiró, 2012) and safety performance (Martínez-Córcoles, Gracia, Tomás, Peiró, & Schöbel, 2013), job satisfaction, organization commitment, IRB, and organization citizenship behavior (Fong & Snape, 2015). Empowering leadership' positive outcomes are also not confined to a specific industry or country as research has shown. For instance, Martínez-Córcoles et al. (2012) studied the effects of empowering leadership on safety participation among a sample of 495 employees from two Spanish nuclear power plants and found that empowering leadership behavior enhances workers’ safety performance. In another study, Martínez-Córcoles et al. (2013) concluded that empowering team leadership is a potential antecedent of safety performance in Spanish nuclear plants.
In an empirical study exploring the impact of empowering leadership on team performance in IT service, Lee, Lee, and Park (2014) concluded that empowering leadership improves team performance by facilitating knowledge sharing and the team’s absorptive capacity. Similarly, Hon and Chan (2012) studied how a leader’s behavior affects a team’s creative performance in the hotel industry and found that empowering leadership has a strong positive relationship with team creative efficacy when the level of team task interdependence is high. A longitudinal study involving 60 teams also revealed the long-term benefits of empowering leadership. Lorinkova, Pearsall, and Sims (2013) concluded that “although teams with directive leaders started performing well more quickly, their performance plateaued, whereas the emergent cognitions and improved learning and coordination capabilities of empowered teams allowed them to improve over time.” Fong and Snape (2015) linked empowering leadership to job satisfaction, organization commitment, IRB and organization citizenship behavior at a large telecommunications company in Hong Kong.

2.3.1 Empowering Leadership and Shared Leadership

Empowering leadership tends to benefit interdependent teams by establishing participative and collaborative norms among members, encouraging them to contribute ideas, decide on optimal courses of action, and take responsibility for team performance (Lorinkova et al., 2013). According to Pearce, Wassenaar, and Manz (2014), empowering leadership can be a pillar of a responsible shared leadership process in which members foster each other’s initiative, capacities, and mutual accountability. Fong and Snape (2015) have shown that empowering leadership is valid at the group-level. Due to empowering leadership’s focus on enhancing self-reliance and interdependence, Pearce, Manz, and Sims (2008) believe that shared leadership is created and developed by empowering leadership from above.

Hoch (2013) studied the relationship between shared leadership and innovation as well as the antecedents of shared leadership with vertical empowering leadership being one of them. Using data obtained from 43 work teams comprising 184 team members and their team leaders from two different companies, vertical empowering leadership was positively related to shared leadership. In investigating the antecedents of shared leadership in 59 consulting teams from a university, Carson, Tesluk, and Marrone (2007)
concluded that coaching, a dimension of empowering leadership, by an external leader is an important precursor for shared leadership.

In investigating the antecedents of shared leadership among 81 knowledge and manufacturing teams from a Danish company, Fausing, Joensson, Lewandowski, and Bligh (2015) found that an external empowering team leader and interdependence significantly predicted the extent of shared leadership. Fausing et al. contend that empowering team leader facilitates shared leadership.

2.3 Trustworthiness

Trust and trustworthiness are two important interrelated concepts that have different meanings and implications for theory and research. Mayer et al. (1995) define trust in terms of the “willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). A similar definition of trust is proposed by Rousseau, Sitkin, Burt, and Camerer (1998) who define trust as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (P. 395). These generally accepted definitions of trust have two underlying components; willingness to accept vulnerability, and positive expectation from the trustee.

Other definitions of trust abound. Cummings and Bromiley (1996) set out three interrelated aspects of trust. They hold that trust is

an individual's belief or a common belief among a group of individuals that another individual or group (a) makes a good-faith effort to behave in accordance with any commitments both explicit or implicit, (b) is honest in whatever negotiations preceded such commitments, and (c) does not take excessive advantage of another even when the opportunity is available…. Trustworthy behavior means that individuals actually behave according to (a), (b), and (c). (p. 303)
This definition of trust brings out the close link between trust and trustworthiness. What comes out clearly is what some researchers have referred to as character which is encompassed in trustworthiness as benevolence and integrity.

Davis et al. (2000) are of the opinion that a low-trust climate leads to employees venting their frustration and aggression by attempting to break management rules or by pursuing inappropriate goals which do not support a firm’ performance. Davis et al. further cite Argyris (1964) who argued that the degree of trust and respect between management and employees has a direct bearing on the performance of the organization, illustrating mechanisms by which firm performance can be affected. Citing Mayer and Gavin (2005), (Frazier, Johnson, Gavin, Gooty, & Snow, 2010) concede that if trust is not present in a work relationship between a subordinate and an authority figure, the subordinate will be preoccupied with protecting himself, to the detriment of value producing activities. On the other hand, an employee who can trust his or her supervisor is able to focus on value-producing tasks and activities, potentially leading to improved work outcomes.

Trustworthiness, on the other hand, relates to the conditions that define trust and are distinct from trust itself (Albrecht, 2002). According to Albrecht (2002), trustworthiness refers to one party’ belief about another’s attributions, motives, and intentions. The most accepted conceptualization of trustworthiness proposes that trustworthiness has three distinct dimensions. These are ability, benevolence and integrity. However, other researchers proposed that trustworthiness has three dimensions (Cummings & Bromiley, 1996) four dimensions (Mishra, 1996), five dimensions (Clark & Payne, 1997), and up to ten dimensions (Butler, 1991).

According to Mayer et al. (1995) ability, benevolence, and integrity are the three characteristics that appear most in the research literature and these three aspects seem to explain a major portion of trustworthiness. Though the three dimensions provide a wholistic understanding of trustworthiness, each dimension provides a unique perspective. Davis et al. (2000) posit that, together, these three dimensions “provide unique perceptual perspectives from which to consider the manager’s trustworthiness.”

Mayer et al. (1995) define ability as that group of skills, competencies, and characteristics that enable a party to have influence within some specific domain. The domain of the ability is specific because the trustee may be highly competent in some technical area, affording that person trust on tasks related to that area. According to Mayer et al. the
trustee may be trusted to undertake tasks that are within their specific areas of specialty but may not be trusted to do tasks outside their domain. Therefore, Mayer et al. propose that “trust is domain specific.”

To trust another party, one must be convinced that a trustee has the ability to accomplish a task or related tasks. Similar to what Mayer et al. (1995) had suggested, Davis et al. (2000) argue that ability is that group of skills and attributes which enables a party to have influence within some specific situation. This means that a trustee may be perceived to have ability in certain circumstances and not in others. It follows then that for one to be trusted it must be perceived that they have the skills and aptitude to make a difference. Davis et al. hold that a manager who is perceived as able to address a particular problem is likely to be more trusted than a manager who is perceived as less able.

According to (Colquitt, Scott, & LePine, 2007), ability captures the knowledge and skills needed to do a specific job along with the interpersonal skills and general wisdom needed to succeed in an organization. Colquitt et al. further suggests that ability captures the “can-do” component of trustworthiness by describing whether the trustee has the skills and abilities needed to act in an appropriate fashion. For a trustee to be gauged as able, the trustor must believe that the trustee 'can do' the task at hand. Other researchers have used other words to describe ability. In describing the conditions of trust, or what would be referred to as antecedents of trust, Butler (1991) described ten conditions among them competence. Competence is described as the knowledge and skills related to a specific task, akin to definitions provided by Mayer et al. (1995).

Mayer et al. (1995) suggest that benevolence is the perception of a positive orientation of the trustee toward the trustor. In relationships where there is no evidence of reciprocity, such as that of a mentor (trustee) and mentee (trustor), there is no obligation on the part of the mentor to be good but it is an act of benevolence that a mentorship relationship exists. Mayer et al. further suggest that benevolence is “the extent to which a trustee is believed to want to do good to the trustor” (p. 718) without expecting an extrinsic reward and without an overriding profit motive.

Colquitt et al. (2007) define integrity as the extent to which a trustee is believed to adhere to sound moral and ethical principles, equating to it to fairness, justice, consistency, and promise fulfillment. Integrity relates to the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable. Citing McFall (1987), Mayer et al.
(1995) indicate that a trustee might exhibit and follow certain principles and as such exhibits personal integrity. However, these set of principles must be deemed acceptable by the trustor for the trustee to be considered as having integrity.

Similarly, other researchers have alluded to integrity by referring to trustee’s consistency of past actions, what others say about the trustee, the trustee’s sense of justice and the congruency of the trustee’s actions and words in the past. For instance Butler (1991) lists integrity, consistency, and fairness as part of the ten conditions of trust. Mayer et al. (1995) caution, however, that consistency alone is insufficient to integrity as the trustee may consistently act in a self-serving manner.

2.3.1 Trustworthiness and Shared Leadership
Following on Lawler (1992), Davis et al. (2000) argued that one of the means to a sustainable competitive advantage for organizations is through cultural change from a control-oriented to an involvement-oriented management culture based upon mutual trust. As earlier discussed, trustworthiness is a precedent of trust and where it is available, it is likely to lead to trust between team members, and teams and their leaders. Trust has been shown to lead to positive outcomes for teams and organizations. Mayer et al. (1995) argued that trust leads to risk taking behavior such as delegation and empowerment on the part of leaders, and organizational citizenship behavior and enhanced individual performance on the part of subordinates. Such predisposition is likely to be followed by open exchange of information with team members and team members incrementally build on each other’s ideas as seen in environments where leadership is shared.

Team leaders who are trustworthy are more likely to trust their team members. This is based on the reciprocity of trustworthiness that was investigated by (Ferrin, Bligh, & Kohles, 2008) who found that trustworthiness works in a spiral fashion in dyadic relationships such that a leader’s trustworthiness was reciprocated by team trustworthiness. Similar results were reported by Cardona and Elola (2008) who contend that when subordinates perceive their leader trusts them, they tend to reciprocate and increase their trust in him or her. We, therefore, believe that a trustworthy team leader is likely to find their team members trustworthy and facilitate a conducive environment for shared leadership to emerge.
The relationship between team leader trustworthiness and shared leadership have not yet been studied. However, other studies have shown positive outcomes of trustworthiness. One such study by Albrecht (2002) tested perceptions of integrity and competence, subsets of trustworthiness, and trust in senior management as determinants of cynicism toward change. A total of 750 employees in two public sector institutions participated in the study. Results showed that perceptions of senior management integrity positively predisposed employees toward organizational change. Similarly, Lapierre (2007) studied the effects of supervisor trustworthiness behaviors on subordinate willingness to benefit the supervisor with extra-role workplace contributions. This empirical study involving 64 participants found that supervisor trustworthiness had a positive impact on subordinates’ willingness to reciprocate.

2.4 Shared Leadership

Leadership studies have typically been focused on the behavior of the appointed leader of some group or organization. However, this does not mean that leadership cannot be demonstrated by members of the group or organization (Pearce & Sims 2002). Leadership involves influence and several researchers have identified a range of leadership behaviors that serve as currency in the exchange of influence among leaders and followers (Pearce & Sims 2002). Much of the leadership literature discusses top-down influence, or influence directed at group or team members by appointed leaders. In contrast, shared leadership concerns itself with lateral influence where the agents of influence are often peers of the targets of influence. Pearce and Sims (2002) believe that vertical leaders continue to play a significant role in developing and maintaining shared leadership but lateral influence among peers should play an important role in explaining team dynamics and team effectiveness.

Related to shared leadership but not quite synonymous is the concept of emergent leadership. According to Hoch & Dulebohn (2017) emergent leadership describes an individual leadership phenomenon whereby an individual arises as team leader informally, without being assigned formal leadership responsibility. Thus, whereas emergent leadership ultimately results in the selection of an appointed leader, shared leadership can be conceptualized as the emergence of multiple leaders over the life of a team. In this regard, emergent leadership serves as one of the foundations of shared leadership.
A second theoretical framework that provides a useful insight into shared leadership is the substitutes for leadership literature. According to Kerr and Jermier (1978) a wide variety of individual, task, and organizational characteristics have been found to influence relationships between leader behavior and subordinate satisfaction, morale and performance. Some of these variables act primarily to influence which leadership style will best permit the hierarchical leader to motivate, direct and control subordinates while others act as substitutes for leadership tending to negate the leader’ ability to either improve or impair subordinate satisfaction and performance. The substitutes for leadership literature (Kerr & Jermier, 1978) suggest that certain conditions may act as substitutes for social sources of leadership. The substitutes for leadership include highly routinized work or professional standards (Pearce & Sims, 2002). It can, therefore, be argued that shared leadership may serve as a substitute for more formal appointed leadership.

The acknowledgement of the rise of team empowerment (Conger & Kanungo, 1988) and self-managed teams is a third theoretical framework of shared leadership. Empowering leadership emphasizes the development of follower self-management or self-leadership (Pearce & Sims, 2002) and sharing control and power (Conger & Kanungo, 1988) whereas the literature on self-managed teams focuses on how teams within organizations can operate without formal hierarchical leadership. According to Manz and Sims (1987) the use of self-managing groups involves a shift in focus from individual methods of performing work to group methods. Manz and Sims (1987) further state that when employees become members of a self-managing group, they tend to define their work roles in terms of their value as contributors to the group’s primary task rather than in relation to one specific job.

According to Hoch (2014) shared leadership “reflects a situation where multiple team members engage in leadership and is characterized by collaborative decision-making and shared responsibility for outcomes.” This definition emphasizes the rotational nature of shared leadership and the need for collaboration such that team ownership over outcomes is enhanced. In the traditional leadership literature, decision-making is a preserve of the formal leader and shared leadership proposes a shift to a more group-based decision-making. Similarly, Morgeson, DeRue, and Karam (2010) point out another key aspect of shared leadership in which team members share their distinct knowledge and access and build on each other’ ideas through knowledge sharing. The perception that the
hierarchical leaders ‘know best’ is being replaced with a phenomenon that recognizes the unique knowledge and contribution of individual members to the overall output of a team, and the organization.

Other compelling definitions of shared leadership have been advanced. According to Liu et al. (2014) “shared leadership occurs when leadership roles, responsibilities, or functions are shared by, or distributed among team members rather than taken by a single designated leader” (p. 284). Liu et al.’ conceptualization is a useful description of shared leadership and what is shared. Here there is less emphasis on the actual role the formal leader plays and more emphasis on what leadership roles and responsibilities individual team members execute. Inherent in Liu et al.’ definition of shared leadership is the belief that individual team members have leadership qualities and behaviors that they can share with the rest of the team. Barnett and Weidenfeller (2016) supplement Liu et al.’ conceptualization of shared leadership by stating that shared leadership is dynamic and interactive process where the leadership role is assumed by individuals at different times to achieve group or organizational goals or both.

We are reminded that leadership is not shared for the sake of it but to achieve team and/or organizational goals beyond what traditional leadership has to offer. Barnett and Weidenfeller (2016) point out the distinction between shared leadership and more traditional forms of leadership by stating that the influence processes involved in shared leadership “require and emphasize peer or lateral influence in addition to upward and downward hierarchical influence.” This further consolidates the expectation that shared leadership does not discount the need for hierarchical influence but to strengthen the need for also lateral influence. In light of the above, it can be argued that shared leadership operates at the team level as explained by various researchers explicitly or implicitly.

Erkutlu (2012) views shared leadership as the result of the distribution of leadership influence across multiple team members. We see, again, that what is being shared is influence, traditionally reserved for the formal leader, among multiple team members. The existence of a team is also seen as important for leadership to be shared. As opposed to traditional leadership where behaviors are enacted by formal leaders, when leadership is shared behaviors are enacted by multiple individuals (Bligh, Pearce, & Kohles, 2006). Though numerous researchers defined shared leadership differently, in the words of Barnett and Weidenfeller (2016) “each definition is more similar than different, and each
emphasizes the importance of collective or distributed and mutual influence of multiple team members on each other” (p. 336).

Numerous empirical studies have been conducted on the effects of shared leadership on performance and researchers have indicated the positive outcomes of shared leadership at the team and organizational levels. Drescher et al. (2014) are of the opinion that shared leadership has potential benefits for group functioning that should translate into higher performance and their opinion is supported by a number of studies on shared leadership and performance. For instance, shared leadership was positively related to the performance of virtual teams (Hoch & Kozlowski, 2014), innovative behavior (Hoch, 2013), team proactive behavior (Erkutlu, 2012), team effectiveness (Daspit, Tillman, Boyd, & Mckee, 2013) (Pearce & Sims, 2002) and group trust (Drescher et al., 2014) which in turn enhances performance.

Beyond virtual teams, Hoch, Pearce, and Welzel (2010) reported strong positive effects for shared leadership in predicting team performance when both age diversity and team coordination were low. This insightful research, therefore, makes it quite apparent that there are circumstances under which shared leadership does not necessarily translate into improved performance. For instance, Mehra, Smith, Dixon, and Robertson (2006) reported that distributed leadership network was not significantly related to superior team performance.

A meta-analysis of the relationship between shared leadership and team performance on a sample of 3882 teams pointed to a positive and moderate relationship between the two constructs (Nicolaides et al., 2014). In a separate meta-analysis involving 3198 teams, D’Innocenzo, Mathieu, and Kukenberger (2014) found a significant positive relationship between shared leadership and team performance further supporting claims of the positive benefits of shared leadership.

**2.4.1 Shared Leadership and Team Effectiveness**

In investigating vertical and shared leadership as predictors of the effectiveness of change management teams (CMTs), Pearce and Sims (2002) collected data from 71 CMTs, and 236 team members, at a large automotive manufacturing firm located in the mid-Atlantic United States. Data was collected from managers to whom teams reported, internal customers of team output, and team members. Leadership measures were collected at
Time 1, and effectiveness measures were collected approximately 6 months later at Time 2. For the purpose of their study, Pearce and Sims (2002) defined managers as people who were higher up in the organizational and had oversight responsibility for the teams.

Pearce and Sims (2002) found shared leadership to be an important predictor of team effectiveness. However, Pearce and Sims' (2002) investigation was carried out within the context of change management teams that had high degrees of decision-making latitude for improving the operations in their respective areas of responsibility and caution that their work is most applicable to high-autonomy teams that engage in complex tasks and may not generalize to traditional work groups. The study participants were also drawn from one organization. This limits the reach of this study.

Secondly, the research was conducted at a large automotive manufacturing firm located in the mid-Atlantic United States. The participants in the research were relatively homogenous and all were members of the CMTs. The average age of team members was 49.56 years with a standard deviation of 6.91 years. Nearly all participants were men (97.5%), and most had long tenure with their organization (M // 24.57 years, SD // 8.16) and with their respective teams (M // 15.32 months, SD // 10.26). Team size varied considerably, with a mean of 7.24 (SD // 2.73).

Pearce and Sims' (2002) study was conducted in an organization that was in a transition and the results might not generalize to more traditional work groups. The CMTs in this research were cross-functional, semi-permanent and highly interdependent. Although the CMTs were not entirely self-managing, they were at an advanced form of empowerment and had considerable autonomy in their own spheres of operations. Thus, they were not only responsible for identifying opportunities for positive change in the organization, but were also expected to implement said changes and to continue to find new opportunities for positive change.

In studying the influences of internal team environment, shared leadership and cohesion on the effectiveness of cross-functional teams, Daspit et al. (2013) had undergraduate students at a large university in the Southwestern USA divided into teams. Cross-functional teams consist of individuals from various functional areas in the firm that work together to obtain a specific goal. Twenty-four teams were constituted with a total membership of 142 participants. The students were assigned to teams to maximize heterogeneity in terms of functional diversity, age, gender and GPA grades.
Using structural equation modeling, Daspit et al. (2013) concluded that team effectiveness is enhanced when individuals engage in shared leadership. These important findings, however, are discounted by the study’s focus on cross-functional teams which might not behave like regular teams in their day-to-day work. Secondly, the researchers offer an important caveat that is worth mentioning; students were assigned to teams in which no appointed leader was present. In practice, however, most teams have an appointed leader and there is no telling what the results would be if the teams had an appointed leader as it usually is in industry. Finally, the study was conducted at a university in Southwestern US and the results may not generalize to other locations within and outside the US.

Finally, Mehra et al. (2006) used social network analysis to examine distributed leadership in work teams using sociometric data from 28 field-based sales teams. They investigated how the network structure of leadership perceptions considered at the team level of analysis was related to team performance. However, they failed to find support for the idea that the more leadership is distributed across the members of a team the better the team's performance.

### 2.4.2 Shared Leadership and Innovation

Innovation is the creation of new and useful, or functional ideas, and their application in organizational settings (Hoch, 2013). It is the intentional generation, promotion, and realization of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization (Janssen et al., 2004). It involves the creation and exploitation of new ideas (Kanter, 1996) and the successful implementation of creative ideas within an organization (Amabile, 1988). The intended outcome of innovation is to benefit the individual, the group, organization or wider society (West & Altink, 1996). Accordingly, different team members can perform different behaviors at different stages of the team innovation process (Hoch, 2013).

Innovation, which is entrepreneurial in nature, is disruptive and at odds with maintaining the status quo in organizations (Kanter, 1996). Kanter (1996) attributes this to the need for a set of practices that are different from the established routines where the desire for change is minimal. Kanter identifies four distinct characteristics of innovation and says that the innovation process is uncertain, knowledge-intensive, controversial, and crosses boundaries. The process is uncertain because the source of innovation or the occurrence
of opportunity to innovate may be unpredictable, there may be no precedence, and cost and schedule overruns cannot be anticipated. The innovation process is also knowledge-intensive as it generates new knowledge and the learning curve is steep. The innovation process is controversial as it involves competition with alternative course of action or competition with vested interests. Finally, the innovation process crosses boundaries since the process is rarely contained solely within one unit and requires multidisciplinary or cross-functional approach. As a consequence, innovation derives from risky work behaviors that may lead to unintended costs for the innovators involved despite their intention to produce anticipated benefits (Janssen et al., 2004).

In the words of Kanter (1996) innovation can "spring up weed-like despite unfavorable circumstances but they can also be cultivated, blossoming in abundance under favorable conditions." In Kanter’ conceptualization, individuals and groups carry out innovation processes at the micro-level; and “these microprocesses are in turn simulated, facilitated, and enhanced--or the opposite--by a set of macro-structural conditions." Kanter further contends that organizational conditions can actively stimulate and produce innovation as long as the nature of innovation process is properly understood. Given the fragility of the innovation process, Kanter holds that it is most likely to flourish where conditions allow flexibility, quick action and intensive care, coalition formation, and connectedness and "it is most likely to grow...collective pride and faith in people' talents, collaboration, and teamwork." This is supported by Scott & Bruce (1994) who found leadership, support for innovation, managerial role expectations, career stage, and systematic problem-solving style to be significantly related to individual innovative behavior.

Innovation is a complex, multi-stage process. Hoch (2013) identifies at least two different stages; generation of new and functional ideas, and their implementation. The ideas not only have to be new but they must also be useful and contribute to the individual, group or organizational goals. Hoch (2013) further subdivides the second stage into two phases namely idea promotion and idea realization. The second stage of the innovation process is concerned with building a coalition of supporters for the proposed ideas (Scott & Bruce, 1994) and the process gets completed when the ideas are realized through implementation (Hoch, 2013). Others suggest that the innovation process begins at the point of problem identification which should happen before idea generation (Scott & Bruce, 1994). Scott and Bruce (1994) also hold that these ideas could be novel or adopted.
Similar to the stages of innovation proposed above, Kanter (1996) identifies four overlapping and interrelated innovation tasks. These are:

(a) idea generation and activation of the drivers of the innovation process (the "entrepreneurs" or "innovators"); (b) coalition building and acquisition of the power necessary to move the idea into reality; (c) idea realization and innovation production, turning the idea into a model--a product or plan or prototype that can be used; (d) transfer or diffusion, the spreading of the model -- the commercialization of the product, the adoption of the idea. (p. 96)

In line with the thoughts of Scott and Bruce (1994) and Van de Ven (1986), Janssen et al. (2004) believe that the foundation of innovation is creative ideas which reside in individuals and groups and they carry out the innovation process from inception to completion. As a result, considerable research has been geared towards identifying personal factors, contextual factors, and their interactions that facilitate or inhibit individual and group innovation.

Although the innovation process may be an individual endeavor, more commonly work group members and peers influence individual innovation (Scott & Bruce, 1994). Scott and Bruce (1994) citing Roger (1954) suggest that individuals within cohesive work groups may perceive that they can contribute ideas without personal censure. Scott and Bruce (1994) believe that Individuals engage in role-making process that could lead to either high-quality team-member exchange (TMX) or low-quality team-member exchange. A high-quality TMX is characterized by mutual trust and respect and collaboration between a focal individual and the work group. On the other hand, in low-quality TMX , the individual is not integrated into the work group and collaboration, trust, and respect are low (Scott & Bruce, 1994). According to Scott and Bruce (1994) in conditions of high team-member exchange, individuals have additional resources available to them in the form of idea sharing and feedback. Other resources could be in the form of people with a mix of skills, knowledge, training and experience in different domains, funds, market information, production systems and databases of relevant information (Amabile, 1988).
West and Altink (1996) report that to the extent there are high levels of interaction among team members, open information sharing and shared influence over decisions, innovation is more likely to occur. Referring to the work of other researchers, West and Altink (1996) report that organizations with flat structures and high levels of communication between departments and functions are likely to be more innovative than traditional hierarchical organizations, characterized predominantly by vertical communication. Flatter organizations offer greater autonomy for individuals, teams, and departments by reducing centralized command and control (West & Altink, 1996).

According to Scott and Bruce (1994) creativity and innovation are used interchangeably in research studies and their distinction may be more one of emphasis than of substance. Whereas creativity has to do with the production of novel and useful ideas, “innovation has to do with the production or adoption of useful ideas and idea implementation” (Scott & Bruce, 1994, p. 581). Scott and Bruce further contend that another distinction may be found in the argument that creativity is more focused on creating new knowledge as opposed to innovation which encompasses the adaptation of products or processes from outside an organization. With this in mind, some studies linking shared leadership, innovation, and creativity are outlined below.

Hoch (2013) studied the relationship between shared leadership and innovation as well as the antecedents of shared leadership. Using data obtained from 43 work teams comprising 184 team members and their team leaders from two different companies, shared leadership was positively associated with innovative behavior as rated by the supervisors (Hoch, 2013). In a laboratory study investigating the impact of shared leadership on team creativity, Sun, Jie, Wang, Xue, and Liu (2016) recruited 108 students and divided them into long-term project teams and temporal task teams. They reported that shared leadership enhanced team creativity by facilitating constructive controversy. Wu and Cormican (2016) explored the relationship between shared leadership and creativity in engineering design teams. Using a social network perspective, Wu and Cormican collected data from 22 engineering design teams who adopt shared leadership. Wu and Cormican report that shared leadership is positively related to team creativity. Finally, through survey data from 285 individuals in 95 innovative teams, Hui-ying and Jian-peng (2013) studied the impact of shared leadership on innovative performance and the results showed that shared leadership influences innovation performance partially through knowledge sharing. Hui-ying and Jian-peng (2013) further indicate that shared leadership
has a more significant impact on innovation performance under the conditions of high task complexity.

2.5 The Mediating Role of Shared Leadership

2.5.1 Empowering Leadership and Team Effectiveness Through Shared Leadership

Research links empowering leadership behaviors to positive team and organizational outcomes. Empowering leadership improves work unit core task proficiency and proactive behaviors (Martin et al., 2013), has a positive relationship with knowledge sharing (Lee et al., 2014) and team efficacy which in turn have a positive relationship with team performance (Srivastava et al., 2006). Empowering leadership behaviors generated higher safety compliance behaviors (Martínez-Córcoles et al., 2013) and higher safety participation behaviors by team members (Martínez-Córcoles et al., 2012). Similarly empowering leadership affects psychological empowerment both directly and indirectly (Amundsen & Martinsen, 2015).

In investigating the antecedents of shared leadership among 81 knowledge and manufacturing teams from a Danish company, Fauing et al. contend that empowering team leader facilitates shared leadership. They further reported that shared leadership and team performance are positively related. Similarly, (Pearce & Sims, 2002) indicate that both empowering leadership and shared leadership significantly predict team effectiveness but shared leadership appears to be a more useful predictor of team effectiveness (Pearce & Sims, 2002).

2.5.2 Empowering Leadership and Innovation Through Shared Leadership

Leadership plays a vital role in fostering innovation processes and activities in organizations (Oke, Munshi, & Walumbwa, 2009). According to Denti and Hemlin (2012) leadership is an integral part of innovative organizational performance for at least two reasons; leaders construct the environments that favor creativity and ultimately innovation. In innovative cultures, employees’ ideas are valued and employees believe that it is safe to act on their ideas and learn from failure (Barsh, Capozzi, & Davidson, 2008).

According to Barsh et al. (2008), openness to new ideas and a willingness to experiment and take risks are among the attitudes, values, and behavior that promote innovation. In describing the environmental factors that influence creativity in organizations, Amabile
(1988) lists “freedom in deciding what to do or how to accomplish the task, a sense of control over one’s own work and ideas” (p. 147) as one of the top factors. Amabile (1988) describes an aspect of empowering leadership which positively influences team creativity (Hon & Chan, 2012). Creativity is closely linked to innovation and is sometimes described as a stage in the innovation process. However, a study by (Amundsen & Martinsen, 2015) indicates that psychological empowerment does not influence creativity.

Burpitt and Bigoness (1997) found a significant relationship between leaders’ empowering behavior and evaluations of team innovation among professional project teams. The study assessed the impact of leader-empowering behavior on the level of innovation among self-directed work teams. Self-directed work teams possess characteristics of shared team leadership. Similarly, in investigating the factors that mediate or moderate the relationship between leadership and innovation in organizations, Denti and Hemlin (2012) identified team reflection and team heterogeneity as some of the team level factors that mediated this relationship. Team reflection involves team members collectively considering the team’s goals, strategies, and processes. As such, Denti and Hemlin recommend that leaders may stimulate innovation by introducing norms that encourage team reflection processes, e.g., by means of debates, open communication, and divergent thinking (Denti & Hemlin, 2012). These are aspects of shared leadership.

Hoch (2013) studied the relationship between shared leadership and innovation as well as the antecedents of shared leadership. Using data obtained from 43 work teams comprising 184 team members and their team leaders from two different companies, shared leadership was positively associated with innovative behavior as rated by the supervisors. Hoch (2013) hypothesized that shared leadership will indirectly influence the relationship between vertical transformational and empowering leadership and team innovative behavior. However, the results did not support this hypothesis.

2.5.3 Trustworthiness and Team Effectiveness Through Shared Leadership

Individual, team, and organizational outcomes have been associated with leader trustworthiness in the past. Lapierre (2007) examined the influence of supervisor behaviors associated with different facets of trustworthiness on the willingness of subordinates to make extra-role workplace contributions of benefit to their supervisors. Lapierre’ empirical study involving 64 participants found that supervisor trustworthiness had a positive impact on subordinates’ willingness to reciprocate.
Similarly, Frazier et al. (2010) found that trust in the proximal referent (supervisors) led to increased ability to focus on work-related tasks as opposed to trust in the distal referent (higher-level managers). This is supported by Mayer and Gavin (2005) who reported that trustor’ willingness to trust leads to higher ability to focus on tasks and this ability subsequently leads to improved work outcomes.

In a meta-analysis involving 138 independent samples, Colquitt et al. (2007) tested the relationship between facets of trustworthiness and job performance. The results revealed that trustworthiness positively influences risk taking and job performance and this relationship was partially mediated by trust propensity. Risk-taking behavior may lead to shared leadership.

### 2.5.4 Trustworthiness and Innovation Through Shared Leadership

An extensive literature search revealed that not much is known about the dynamics of trustworthiness and team innovative behavior. However, it is known that trustworthiness is an antecedent of trust in many settings. Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another (Barczak, Lassk, & Mulki, 2010). Trust research revealed that trust fosters a collaborative culture which enhances team creativity (Barczak et al., 2010), positively influences knowledge sharing (Staples & Webster, 2008), and enhances knowledge sharing and team performance (Lee, Gillespie, Mann, & Wearing, 2010). For instance, Peters and Karren (2009) reported that as team members experienced higher levels of trust among them, the perceived performance of the project team, as rated by team members, also increased.

Hoch (2013) studied the relationship between shared leadership and innovation as well as the antecedents of shared leadership. Using data obtained from 43 work teams comprising 184 team members and their team leaders from two different companies, shared leadership was positively associated with innovative behavior as rated by the supervisors. Hoch (2013) hypothesized that shared leadership will indirectly influence the relationship between team member integrity and team innovative behavior and the results supported this hypothesis. Integrity is a component of trustworthiness.
2.6 Chapter Summary

In this chapter, the extant shared leadership literature was reviewed with the aim of understanding whether empowering leadership and team leader’ trustworthiness lead to the emergence of shared leadership and whether shared leadership, in turn, leads to team effectiveness and team innovative behavior. The aim of the literature review was to understand how the existing literature relates to the purpose of this study, and place this study within the existing framework. The literature review shows that little is known about effects of team leader trustworthiness on shared leadership, and the mediating role of shared leadership in the relationship between the antecedent conditions and outcomes.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology that was employed to undertake the research. In the following sections, we will discuss the research design, the population and sampling design, target population, sampling frame, sampling technique, the sample size, data collection methods, detailed research procedures and data analysis methods. This discussion will cover the steps taken in the research process from inception to completion such that the research can be replicated and validated, if need be.

3.2 Research Design

The research adopted a survey research design. According to Creswell (2014) a survey design studies a sample of a population to provide a quantitative description of the attitudes and opinions of respondents. The researcher collects numeric descriptions of attitudes or opinions from a sample of a population and generalizes the results to the population. According to Fowler (2014) the purpose of a survey is to provide statistical estimates of the characteristics of a target population and that a “by describing the sample of people who actually respond one can describe the target population.” Since this research involves perceptions of empowering leadership, team leader trustworthiness, shared leadership, team effectiveness, and innovation a survey research design was deemed appropriate.

A survey design was employed because the required data was not available from any other source and primary data had to be collected. Secondly, a survey design helps us generalize the data to the constituent population and have confidence since there is equal opportunity of representation based on the sampling method employed. Third, the use of standardized measurement that is consistent across all respondents ensures that comparable information is obtained about everyone who is described. Fourth, a survey design was used since this is the only way to ensure all the data needed to analyze these specific independent, mediating, and dependent variables are available and can be related. Finally, a survey design is an inexpensive way of collecting data and allows for a quick turnaround of filled questionnaires.
In using a quantitative approach, a researcher focuses on specific research questions or hypotheses and collects data to support or refute the hypotheses (Creswell, 2014). This research paper focuses on the relationship between the five variables outlined below.

Table 3.1 below provides a summary of the operationalization of the research variables:

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<thead>
<tr>
<th>VARIABLE</th>
<th>TYPE</th>
<th>DIMENSION</th>
<th>QUESTIONS</th>
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<tr>
<td>Empowering Leadership</td>
<td>Independent</td>
<td>Individual Empowering Leadership</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Team Empowering Leadership</td>
<td>4</td>
</tr>
<tr>
<td>Trustworthiness</td>
<td>Independent</td>
<td>Ability</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Benevolence</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Integrity</td>
<td>4</td>
</tr>
<tr>
<td>Shared Leadership</td>
<td>Mediating</td>
<td>Task Leadership Orientation</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relation Leadership Orientation</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change Leadership Orientation</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Micropolitical Leadership Orientation</td>
<td>5</td>
</tr>
<tr>
<td>Team Effectiveness</td>
<td>Dependent</td>
<td>Output Effectiveness</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Quality Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Change Effectiveness</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Organizing and Planning Effectiveness</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interpersonal Effectiveness</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overall Effectiveness</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Value Effectiveness</td>
<td>4</td>
</tr>
<tr>
<td>Innovation</td>
<td>Dependent</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

Table 3.1 List of variables

3.3 Population and Sampling Design

3.3.1 Target Population

According to Kothari (2004) a population refers to all the items under consideration in an inquiry or put differently, the total of items about which information is desired. In our study, the population consisted all the non-faculty staff members at the United States
International University (USIU) – Africa. Data obtained from the USIU human resource manager indicates that there is a total of 290 full-time non-faculty staff.

3.3.2 Sampling Frame

Kothari (2004) states that a sampling frame consists of a list of items from which the sample is to be drawn. The sampling frame consisted of all the 290 full-time non-faculty staff at the United States International University (USIU) – Africa obtained from the human resource manager.

3.3.3 Sampling Technique

A single stage sampling procedure was used to select respondents given that the research was conducted in one location, and in a homogeneous population. A simple random sampling technique was used to select respondents. In simple random sampling, each individual within the population has an equal probability of being selected (Anderson, Sweeney, & Williams, 2011).

3.3.4 Sample Size

First, Cochran’ sample size formula for large populations \( n_0 = Z^2pq/e^2 \) was used to calculate the ideal sample size.

\[
n_0 = \text{the large population sample size}
\]

\[
Z = Z – \text{value in a Z table which is a 1.96 for a 85% confidence level}
\]

\[
p = \text{proportion of the population which has the attribute in question. we took 50%, or 0.5 as a good measure}
\]

\[
q = 1 – p \text{ which is also 50% or 0.5}
\]

\[
e = \text{margin of error}
\]

\[
n = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384
\]

Since the population size of 290 non-faculty staff members was known, Cochran’s modified formula \( n = \frac{n_0}{1 + \frac{n_0 - 1}{N}} \) was used to come up with an adjusted sample size.
3.4 Data Collection Methods

Cross-sectional data was collected using structured questionnaires between March and April 2018. Structured questionnaires were used so that respondents understand the questions the same way in order to be able to generalize the results to the population. An advantage of using the questionnaire is that a larger sample can be contacted in a relatively inexpensive way (Kothari, 2004). Other advantages of using the questionnaire is that it is inexpensive to analyze the data.

Self-administered questionnaires were used because the respondents do not have to admit directly to an interviewer a socially undesirable or negatively valued characteristic or behavior. Given respondents were expected to provide sensitive information about their teams and team leaders, a self-administered questionnaire was deemed appropriate since sensitive information is more frequently, and almost certainly more accurately, reported in self-administered modes than when interviewers ask the questions. Third, the questions were close-ended and the target group have adequate reading and writing skills making it easy and efficient for the respondents to self-administer the questionnaire.

The questionnaire was divided into two main categories; a cover letter, a six-item section to collect demographic information, and the main questionnaire which contained 68 perceptual questions. All questions (except the demographic information) were tested on a continuous scale of 1 to 5 where 1 = ‘strongly disagree’ and 5 = ‘strongly agree’.

Team leader trustworthiness was rated with an eight-item scale by Mayer et al. (1995). This scale contained two ‘ability’ items, two ‘benevolence’ items and four ‘integrity’ items. One sample item for ability is “my team leader is competent and efficient in his/her work.” One sample item for benevolence is “my team leader is interested in my well-
being not just his own.” One sample item for integrity is “my team leader would keep his promises.”

Empowering leadership behavior was rated with an eight-item scale by Hoch (2013). This scale contained each four items on two dimensions of individual empowering leadership and team empowering leadership. One sample item for individual empowering leadership is “my team leader urges me to assume responsibilities on my own.” One sample item for team empowering leadership is “my team leader advises me to coordinate my efforts with the others who are part of the team.”

Perceptions of shared leadership was rated by individual team members with a twenty-item scale by (Grille & Kauffeld, 2015). This scale contained each five items on four dimensions of task leadership orientation, relation leadership orientation, change leadership orientation, and micropolitical leadership orientation. One sample item for task leadership orientation is: “As a team we clearly communicate our expectations.” One sample item for relation leadership orientation is “as a team we recognize good performance.” One sample item for change leadership orientation is “as a team we help each other to learn from past events.” One sample item from micropolitical leadership orientation is “as a team we assist each other to network.”

Perceptions of team effectiveness was rated by team members with a twenty-six-item scale by (Pearce & Sims, 2002). This scale contained five ‘output effectiveness’ items; three ‘quality effectiveness’ items; three ‘change effectiveness’ items; four ‘organizing and planning effectiveness’ items; four ‘interpersonal effectiveness’ items; four ‘overall effectiveness’ items; and three ‘value effectiveness’ items. One sample item for output effectiveness is “The team delivers its commitments on time.” One sample item for quality effectiveness is “The team performs duties accurately and consistently.” One sample item for change effectiveness is “the team copes with change very well.” One sample for item for planning and organizing effectiveness is “the team has its priorities straight.” One sample for interpersonal effectiveness is “the team communicates its progress.” One sample item for overall effectiveness is “the team is highly effective.” One sample item for value effectiveness is “the team makes valuable contribution to the company.”

Innovative behavior was rated by individual team members with a six-item scale by Hoch (2013). This scale contained each two items on the three dimensions of: idea generation,
idea promotion, and idea realization. One sample item for idea generation was “Our team creates new ideas concerning solutions for difficult problems.” One sample item for idea promotion was “In our team, we acquire approval for innovative ideas.” One item for idea realization was “Our team often implements innovative ideas in the work environment.”

3.5 Research Procedures

Before administering the questionnaire, a research assistant was identified and trained on the use of the data collection tools. Afterwards, a pilot survey was conducted on a sample of twenty respondents with similar characteristics to the target sample. The pilot was conducted to check the length of the survey, the clarity of the questions, the logic and flow of the questions, the interpretation or misinterpretation of the questions by the respondents and the validity and reliability of the instrument.

Results from the pilot survey confirmed the usefulness of the measurement tool. A formal request letter was drafted and shared with the chairperson of the non-faculty staff members to facilitate access to the participants and data collection started once permission was granted. A total of 204 respondents filled and returned the questionnaires to the research assistant.

3.6 Data Analysis Methods

According to Kothari (2004) data analysis refers to the computation of certain measures along with searching for patterns of relationship that exist among data-groups. Thus, relationships or differences supporting or conflicting with the original or new hypotheses should be subjected to statistical tests of significance to determine with what validity data can be said to indicate any conclusion.

The data was input into SPSS and cleaned of errors before proceeding to the analysis. Data cleaning includes editing where the data was checked for errors and omissions, coding, or assigning numerals to answers so that responses can be put into a limited number of categories, and data manipulation in order to extract meaning. The empowering leadership scale was coded as ‘EmpLead’; Trustworthiness as ‘TrustWor’; Shared Leadership as ‘SharedLe’; Team effectiveness as ‘TeamEff’ and Innovation as ‘Innovat’. This helped reduce the number of correlations to be interpreted while still retaining the meaning the data was supposed to convey. In this way, the same statistics
that would be gleaned from a scale of 20 questions would still be produced by one summated scale. SPSS was used to generate descriptive statistics such as mean, standard deviation, skewness and kurtosis.

Similarly, Mplus 6 was used to run a structural equation model. Structural equation modeling (SEM) was used to in an effort to illuminate any causal connections that may exist among the variables under consideration. Structural equation modeling was also used to assess our conceptualization of causal relationships dictated by theory.

3.7 Chapter Summary

In this chapter, the research methodology and the process that was used in conducting the research were explained. A survey design was used and data was collected from 204 non-faculty full-time staff at the United States International University (USIU) – Africa between March and April 2018 on a six-eight item questionnaire on their perception of empowering leadership, team leader trustworthiness, shared leadership, team effectiveness, innovation. The data was analyzed using SPSS and Mplus 6 and the results and findings are discussed in the following chapter.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

The purpose of this study was to investigate the impact of shared leadership on team effectiveness and innovation, and if empowering leadership and team leader trustworthiness predict shared leadership. This chapter presents the results and findings of the study.

4.2 Response Rate

Table 4.1 indicates that all of the questionnaires administered were returned. Thus, the response rate was 100 percent.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responded</td>
<td>204</td>
<td>100</td>
</tr>
<tr>
<td>Did not respond</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4.1 Response rate

4.3 Demographic Characteristics

This section discusses the general characteristics of the respondents in terms of their gender, age, duration of employment in the organization, level of responsibility within the organization, the number of years in current team, and the number of members in their team.

4.3.1 Gender

The respondents were asked to indicate their gender and the results are presented in Figure 4.1. Forty-nine percent of the respondents were female whereas 50.98% were male. This implies an almost equal number of females and male took part in the survey.
4.3.2 Age

The respondents were asked to indicate their age and the results are presented in Fig. 4.2. Almost nine percent (8.82%) of the respondents are below the age of 25 and the majority, 49.02% are between ages 25-35 years. Thirty-one percent (30.88%) are between ages 35-45, 10.78% are between 45-55 years old, and only 0.49% are above 55 years old.
Figure 4.2 Age of the respondents

4.3.3 Number of Years Worked in the Organization

The respondents were asked how many years they worked in the university and the results are presented in Figure 4.3. Almost sixteen percent (15.84%) of the respondents worked in the university between 0-1 years, 18.81% worked for 1-2 years, 15.84% worked in the institution for 2-3 years and a further 13.37% worked in the organization for 3-4 years. The majority of the respondents (36.14%), however, worked in the university for more than 4 years.
4.3.4 Level of Responsibility Within the Organization

The respondents were requested to disclose their level of responsibility within the institution with the option of indicating whether they are in the top management, middle management, non-managerial, or other criteria. The results are displayed in Figure 4.4 below. Almost eighteen percent (17.73%) of the respondents indicated that they are in top management, 41.38% indicated they are in middle management and 25.12% indicated they are non-managerial, 14.29% selected other, whereas 1.48% of the respondents did not select any category.

Figure 4.3 Number of years worked in the organization
Further, the respondents were asked about the number of years they were part of their current work teams. Figure 4.5 below displays the results. As indicated, 17.82% were in their current team between 0-1 years, 18.32% between 1-2 years, 16.34% between 2-3 years, 11.39% between 3-4 years, and the majority, 36.14%, were in their current teams for more than 4 years.

Figure 4.4 Level of responsibility within the organization

4.3.5 Number of Years in Current Work Team
Figure 4.5 Number of years in current work team

4.3.6 Number of Members in the Team

The respondents were asked about the number of members in their respective teams and the results are displayed in Figure 4.6 below. As indicated, 16.26% were in 3-5 member and 9-11-member teams respectively, 24.14% were in 6-8-member teams, 16.75% were in 11-13-member teams, and 26.60% were in teams with more than 13 members.
4.4 Descriptive Statistics of Variables

4.4.1 Empowering Leadership

An eight-item questionnaire was used to gauge empowering leadership and the findings are displayed in Table 4.2 below. Almost forty-five percent (44.6%) strongly agreed that their team leader encourages them to search for solutions to their problems without supervision and only 2.5% strongly disagreed, 27.5% strongly agreed that their team leaders urge them to assume responsibility on their own and only 1.5% strongly disagreed, 35.6% strongly agreed that their team leader urges them to learn new things and only 6.4% disagreed, 33% strongly agreed that their team leaders encourage them to give themselves a pat on the back when they meet new challenges and 9.4% disagreed, 39.9% strongly agreed that their team leaders encourage them to work together with others who are part of the team and only 4.4% disagreed, 38.9% strongly agreed that their
team leaders advise them to coordinate their efforts with the others who are part of their team and only 4.4 percent disagreed, 39.7% strongly agreed that their team leaders urge them to work as a team with other individuals who are part of the team and only 5.4% disagreed, and 42.3% strongly agreed, and only 1% strongly disagreed, that their team leaders expect that collaboration with the other members in the team works well.

<table>
<thead>
<tr>
<th>Empowering Leadership</th>
<th>Strongly Agree %</th>
<th>Disagree %</th>
<th>Neither agree nor Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>My team leader encourages me to search for solutions to my problems without supervision.</td>
<td>2.5</td>
<td>2.90</td>
<td>12.7</td>
<td>37.3</td>
<td>44.6</td>
</tr>
<tr>
<td>My team leader urges me to assume responsibilities on my own.</td>
<td>1.5</td>
<td>17.6</td>
<td>20.1</td>
<td>33.3</td>
<td>27.5</td>
</tr>
<tr>
<td>My team leader encourages me to learn new things.</td>
<td>0</td>
<td>6.40</td>
<td>14.9</td>
<td>43.1</td>
<td>35.6</td>
</tr>
<tr>
<td>My team leader encourages me to give myself a pat on the back when I meet a new challenge.</td>
<td>1</td>
<td>9.40</td>
<td>20.2</td>
<td>36.5</td>
<td>33.0</td>
</tr>
<tr>
<td>My team leader encourages me to work together with the others who are part of the team.</td>
<td>0</td>
<td>4.40</td>
<td>15.8</td>
<td>39.9</td>
<td>39.9</td>
</tr>
<tr>
<td>My team leader advises me to coordinate my efforts with the others who are part of the team.</td>
<td>1</td>
<td>4.40</td>
<td>17.2</td>
<td>38.4</td>
<td>38.9</td>
</tr>
<tr>
<td>My team leader urges me to work as a team with other individuals who are part of the team.</td>
<td>1</td>
<td>5.40</td>
<td>18.1</td>
<td>35.8</td>
<td>39.7</td>
</tr>
<tr>
<td>My team leader expects that the collaboration with the other members in the team works well.</td>
<td>1.5</td>
<td>7.00</td>
<td>12.4</td>
<td>36.8</td>
<td>42.3</td>
</tr>
</tbody>
</table>

Table 4.2 Empowering Leadership
4.4.2 Trustworthiness

Table 4.3 below displays the results on team leader trustworthiness. As indicated, 37.7% strongly agreed that their team leaders are competent and efficient in their work and 1% strongly disagreed, 34.5% strongly agreed that their team leader performs his/her work role for the organization very well and only 1% disagreed, 37.4% strongly believe that their team leader would act in their best interest and only 2% strongly disagreed, 37.7% strongly agreed that their team leader is interested in their well-being not just his/her own and only 2% strongly disagreed, 37.3% strongly agreed that their team leader is truthful in dealing with stakeholders and only 1.5% strongly disagreed, 33.8% strongly agreed that their team leader would keep his/her promise and only 1% strongly disagreed, 36% strongly agreed that they would characterize their team leader as honest and only 1.5% strongly disagreed, and a further 36% strongly agreed that their team leader was sincere and genuine and only 1.5% strongly disagreed.

<table>
<thead>
<tr>
<th>Trustworthiness</th>
<th>Strongly Disagree</th>
<th>Disagree %</th>
<th>Neither agree nor Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>My team leader is competent and efficient in his/her work.</td>
<td>1.0</td>
<td>4.9</td>
<td>13.7</td>
<td>42.6</td>
<td>37.7</td>
</tr>
<tr>
<td>My team leader performs his/her role for this organization very well.</td>
<td>1.0</td>
<td>5.4</td>
<td>16.3</td>
<td>42.9</td>
<td>34.5</td>
</tr>
<tr>
<td>I believe that my team leader would act in my best interest.</td>
<td>2.0</td>
<td>8.9</td>
<td>16.3</td>
<td>35.5</td>
<td>37.4</td>
</tr>
<tr>
<td>My team leader is interested in my well-being not just his own.</td>
<td>2.0</td>
<td>7.4</td>
<td>22.1</td>
<td>30.9</td>
<td>37.7</td>
</tr>
<tr>
<td>My team leader is truthful in dealing with stakeholders.</td>
<td>1.5</td>
<td>7.4</td>
<td>24.5</td>
<td>29.4</td>
<td>37.3</td>
</tr>
<tr>
<td>My team leader would keep his promises.</td>
<td>1.0</td>
<td>10.3</td>
<td>22.5</td>
<td>32.4</td>
<td>33.8</td>
</tr>
<tr>
<td>I would characterize my team leader as honest.</td>
<td>1.5</td>
<td>8.4</td>
<td>22.2</td>
<td>32.0</td>
<td>36.0</td>
</tr>
<tr>
<td>My team leader is sincere and genuine.</td>
<td>1.5</td>
<td>8.9</td>
<td>19.2</td>
<td>34.5</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Table 4.3 Trustworthiness
4.4.3 Shared Leadership

Table 4.4 below displays the results of the 20 questions relating to shared leadership in teams. As shown in the table, 37.7% of the respondents strongly agreed that as a team, they clearly assign tasks and only 2.5% disagreed, 38.2% strongly agreed that as a team they clearly communicate their expectations and only 2% disagreed, 36.8% strongly agreed that they provide each other with work relevant information and only 1% strongly disagreed or disagreed, 40.1% strongly agreed that they ensure everyone within the team knows their tasks and only 1% disagreed, 36.3% strongly agreed that as a team they monitor team goal achievement and only 1.5% strongly agreed, 35.5% strongly agreed that as a team they take sufficient time to address each other’s concerns and only 3% disagreed, 39.4% strongly agreed that as a team they recognize good performance and only 2.5% disagreed, 45.1% strongly agreed that as a team they promote team cohesion and only 2.9 disagreed, 35.6% strongly agreed that they support each other in handling conflicts within the team and 3% disagreed, 31.2% strongly agreed that as a team they never let each other down and 4.5% disagreed, 29.1% strongly agreed that they help each other to correctly understand ongoing processes in their teams and 0.5% disagreed, 34.7% strongly agreed that they help each other learn from past events and 1.5% disagreed, 36% strongly agreed that they help each other to correctly understand current company events and 2.5% disagreed, 35.5% strongly agreed that as a team they can inspire each other for ideas and 2.5% disagreed, 35.5% strongly agreed that as a team they support each other with the implementation of ideas and 4.4% disagreed, 30.7% strongly agreed that they use networks to support their team’s work and 4.5% disagreed, 33.7% strongly agreed that they ensure their team is supported with necessary resources to fulfill tasks and 5.5 disagreed, 29.4% strongly agreed that as a team they assist each other to network and 7.5% disagreed, 31.3% strongly agreed that they establish contact with important experts valuable for their team and 6% disagreed; and 31.8% strongly agreed that they are open to external assistance in the case of internal team problems and 2.5% disagreed.
<table>
<thead>
<tr>
<th>Shared Leadership</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Neither agree nor Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a team we clearly assign tasks.</td>
<td>0</td>
<td>2.5</td>
<td>6.4</td>
<td>53.4</td>
<td>37.7</td>
</tr>
<tr>
<td>As a team we clearly communicate our expectations.</td>
<td>0</td>
<td>2.0</td>
<td>7.8</td>
<td>52</td>
<td>38.2</td>
</tr>
<tr>
<td>As a team we provide each other with work relevant information.</td>
<td>0.5</td>
<td>0.5</td>
<td>8.8</td>
<td>53.9</td>
<td>36.8</td>
</tr>
<tr>
<td>As a team we ensure that everyone knows their tasks.</td>
<td>0</td>
<td>1.0</td>
<td>10.4</td>
<td>48.5</td>
<td>40.1</td>
</tr>
<tr>
<td>As a team we monitor goal achievement.</td>
<td>0</td>
<td>1.5</td>
<td>12.7</td>
<td>49.5</td>
<td>36.3</td>
</tr>
<tr>
<td>As a team we take sufficient time to address each other’s concerns.</td>
<td>0</td>
<td>3.0</td>
<td>17.2</td>
<td>44.3</td>
<td>35.5</td>
</tr>
<tr>
<td>As a team we recognize good performance.</td>
<td>0</td>
<td>2.5</td>
<td>9.9</td>
<td>48.3</td>
<td>39.4</td>
</tr>
<tr>
<td>We promote team cohesion.</td>
<td>0</td>
<td>2.9</td>
<td>6.9</td>
<td>45.1</td>
<td>45.1</td>
</tr>
<tr>
<td>We support each other in handling conflicts within the team.</td>
<td>0.5</td>
<td>3.0</td>
<td>9.9</td>
<td>51</td>
<td>35.6</td>
</tr>
<tr>
<td>As a team we never let each other down.</td>
<td>0.5</td>
<td>4.5</td>
<td>25.7</td>
<td>38.1</td>
<td>31.2</td>
</tr>
<tr>
<td>We help each other to correctly understand ongoing processes in our team.</td>
<td>0</td>
<td>0.5</td>
<td>14.3</td>
<td>56.2</td>
<td>29.1</td>
</tr>
<tr>
<td>As a team we help each other to learn from past events.</td>
<td>0.5</td>
<td>1.5</td>
<td>12.9</td>
<td>50.5</td>
<td>34.7</td>
</tr>
<tr>
<td>As a team we help each other to correctly understand current company events.</td>
<td>0.5</td>
<td>2.5</td>
<td>15.8</td>
<td>45.3</td>
<td>36.0</td>
</tr>
<tr>
<td>As a team we can inspire each other for ideas.</td>
<td>0.5</td>
<td>2.5</td>
<td>19.2</td>
<td>42.4</td>
<td>35.5</td>
</tr>
<tr>
<td>As a team we support each other with the implementation of ideas.</td>
<td>0</td>
<td>4.4</td>
<td>16.3</td>
<td>43.8</td>
<td>35.5</td>
</tr>
<tr>
<td>We use networks in order to support our team’s work.</td>
<td>0.5</td>
<td>4.5</td>
<td>15.3</td>
<td>49</td>
<td>30.7</td>
</tr>
<tr>
<td>We ensure that our team is supported with necessary resources to fulfill the task.</td>
<td>1.5</td>
<td>5.5</td>
<td>11.1</td>
<td>48.2</td>
<td>33.7</td>
</tr>
<tr>
<td>As a team we assist each other to network.</td>
<td>0</td>
<td>7.5</td>
<td>19.9</td>
<td>43.3</td>
<td>29.4</td>
</tr>
<tr>
<td>We establish contact with important experts valuable for our team.</td>
<td>1.5</td>
<td>6.0</td>
<td>15.9</td>
<td>45.3</td>
<td>31.3</td>
</tr>
<tr>
<td>As a team we are open to external assistance in the case of internal team problems.</td>
<td>1.5</td>
<td>2.5</td>
<td>12.6</td>
<td>51.5</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Table 4.4 Shared Leadership
4.4.4 Team Effectiveness

Table 4.5 below displays the results of the 26 questions relating to perceived team effectiveness. As indicated, 29.9% strongly agreed that their team delivers its commitment and 2.9% disagreed, 30% strongly agreed that their team delivers its commitments on time and 2.5% disagreed, 33.3% strongly agreed that the team provides a volume of work consistent with established standards and 2% disagreed, 34.8% strongly agreed that their team is highly effective at implementing solutions and 2.5% disagreed, 36.3% strongly agreed that their team delivers important changes and 2% disagreed, 35.5% strongly agreed that the quality of their team’s output is very high and 1% disagreed, 32.7% strongly agreed that their team performed duties accurately and consistently and 2% disagreed, 29.9% strongly agreed that their team eliminated root problems not just symptoms and 2% disagreed, 28.6% strongly agreed that their team faced new problems effectively and 3.4% disagreed, 31% strongly agreed that their team changed behavior to meet the demands and of the situation and 3.9% disagreed, 30.4% strongly agreed that the team coped with change very well and 4.9% disagreed, 34.3% strongly agreed that their teams set goals and priorities for maximum efficiency and 1.5% disagreed, 38.6 strongly agreed that their team developed workable plans and 1% disagreed, 34.3% strongly agreed that their team worked on important problems and 1% disagreed, 35% strongly agreed that the team had its priorities straight and 1% disagreed, 29.7% strongly agreed that their team communicated its progress and 7.9% disagreed, 29.4% strongly agreed that their team proactively communicated its progress and 9.5% disagreed, 30.7% strongly agreed that their team kept everyone informed and 9.4% disagreed, 30.5% strongly agreed that their team kept everyone informed on its progress and 8.5% disagreed, 37.3% strongly agreed that their team is highly effective and 3% disagreed, 36% strongly agreed that their team was making very good progress on the team’s charter and 2% disagreed, 41.3% strongly agreed that the team does very good work and 0.5% disagreed, 43.8% strongly agreed that their team did a very good job and 0.5% disagreed, 49.8% strongly agreed that their team’s contribution to the company was very valuable and 5.5% neither agreed nor disagreed, 48.8% strongly agreed that the team made very valuable contributions to the company and 4% neither agreed nor disagreed; and 47.8% strongly agreed that the contributions of the team was very valuable to the company and 5.5% neither agreed nor disagreed.
<table>
<thead>
<tr>
<th>Team Effectiveness</th>
<th>Strongly Disagree %</th>
<th>Disagree %</th>
<th>Neither agree nor Disagree %</th>
<th>Agree %</th>
<th>Strongly Agree %</th>
</tr>
</thead>
<tbody>
<tr>
<td>The team delivers its commitments.</td>
<td>0</td>
<td>2.9</td>
<td>16.2</td>
<td>51.0</td>
<td>29.9</td>
</tr>
<tr>
<td>The team delivers its commitments on time.</td>
<td>0</td>
<td>2.5</td>
<td>22.2</td>
<td>45.3</td>
<td>30.0</td>
</tr>
<tr>
<td>The team provides a volume of work consistent with established standards.</td>
<td>0</td>
<td>2.0</td>
<td>20.6</td>
<td>44.1</td>
<td>33.3</td>
</tr>
<tr>
<td>The team is highly effective at implementing solutions.</td>
<td>0</td>
<td>2.5</td>
<td>16.7</td>
<td>46.1</td>
<td>34.8</td>
</tr>
<tr>
<td>The team delivers important changes.</td>
<td>1</td>
<td>2.0</td>
<td>11.8</td>
<td>49.0</td>
<td>36.3</td>
</tr>
<tr>
<td>The quality of the team’s output is very high.</td>
<td>1</td>
<td>1.0</td>
<td>13.3</td>
<td>49.3</td>
<td>35.5</td>
</tr>
<tr>
<td>The team performs duties accurately and consistently.</td>
<td>0</td>
<td>2.0</td>
<td>15.3</td>
<td>50.0</td>
<td>32.7</td>
</tr>
<tr>
<td>The team eliminates root problems, not just symptoms.</td>
<td>1</td>
<td>2.0</td>
<td>18.9</td>
<td>48.3</td>
<td>29.9</td>
</tr>
<tr>
<td>The team faces new problems effectively.</td>
<td>1</td>
<td>3.4</td>
<td>12.3</td>
<td>54.7</td>
<td>28.6</td>
</tr>
<tr>
<td>The team changes behavior to meet the demands of the situation.</td>
<td>1</td>
<td>3.9</td>
<td>11.3</td>
<td>52.7</td>
<td>31</td>
</tr>
<tr>
<td>The team copes with change very well.</td>
<td>0.5</td>
<td>4.9</td>
<td>15.2</td>
<td>49</td>
<td>30.4</td>
</tr>
<tr>
<td>The team sets goals and priorities for maximum efficiency.</td>
<td>1.0</td>
<td>1.5</td>
<td>10.8</td>
<td>52.5</td>
<td>34.3</td>
</tr>
<tr>
<td>The team develops workable plans.</td>
<td>1.0</td>
<td>0.5</td>
<td>6.40</td>
<td>53.5</td>
<td>38.6</td>
</tr>
<tr>
<td>The team works on important problems.</td>
<td>1.0</td>
<td>0.5</td>
<td>4.50</td>
<td>59.7</td>
<td>34.3</td>
</tr>
<tr>
<td>The team has its priorities straight.</td>
<td>0.5</td>
<td>1.0</td>
<td>11.0</td>
<td>52.5</td>
<td>35.0</td>
</tr>
<tr>
<td>The team communicates its progress.</td>
<td>0.5</td>
<td>7.9</td>
<td>24.3</td>
<td>37.6</td>
<td>29.7</td>
</tr>
<tr>
<td>The team proactively communicates its progress.</td>
<td>0.5</td>
<td>9.5</td>
<td>26.4</td>
<td>34.3</td>
<td>29.4</td>
</tr>
<tr>
<td>The team keeps everyone informed.</td>
<td>0.5</td>
<td>9.4</td>
<td>25.2</td>
<td>34.2</td>
<td>30.7</td>
</tr>
<tr>
<td>The team keeps everyone informed on its progress.</td>
<td>0</td>
<td>8.5</td>
<td>27.0</td>
<td>34.0</td>
<td>30.5</td>
</tr>
<tr>
<td>The team is highly effective.</td>
<td>0</td>
<td>3.0</td>
<td>13.9</td>
<td>45.8</td>
<td>37.3</td>
</tr>
<tr>
<td>The team is making very good progress on the team’s charter.</td>
<td>0</td>
<td>2.0</td>
<td>5.50</td>
<td>56.5</td>
<td>36.0</td>
</tr>
<tr>
<td>The team does very good work.</td>
<td>0</td>
<td>0.5</td>
<td>7.00</td>
<td>51.2</td>
<td>41.3</td>
</tr>
<tr>
<td>The team does a very good job.</td>
<td>0</td>
<td>0.5</td>
<td>7.00</td>
<td>48.4</td>
<td>43.8</td>
</tr>
<tr>
<td>The team’s contribution to the company is very valuable.</td>
<td>0</td>
<td>0</td>
<td>5.50</td>
<td>44.8</td>
<td>49.8</td>
</tr>
<tr>
<td>The team makes valuable contributions to the company.</td>
<td>0</td>
<td>0</td>
<td>4.00</td>
<td>47.3</td>
<td>48.8</td>
</tr>
<tr>
<td>The contributions of this team are very valuable to the company.</td>
<td>0</td>
<td>0</td>
<td>5.50</td>
<td>46.8</td>
<td>47.8</td>
</tr>
</tbody>
</table>

Table 4.5 Team Effectiveness
4.4.5 Innovation

Table 4.6 below displays the results of the 6 questions relating to perceived team innovative behavior. As shown, 46.5% strongly agreed that their team created new ideas concerning solutions for difficult problems and only 7% neither agreed nor disagreed, 44.7% strongly agreed that their team searched for new working methods and techniques and 1% disagreed, 33.7% strongly agreed that in their team they acquire approval for innovative ideas and 1.5% disagreed, 34% strongly agreed that in their team, they made each other enthusiastic for innovative ideas and 1% disagreed, 33.3% strongly agreed that their team often implemented innovative ideas in the work environment and 3% disagreed, and 36.3% strongly agreed that after implementing ideas, they evaluated their utility and only 1% disagreed.

<table>
<thead>
<tr>
<th>Innovation</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our team creates new ideas concerning solutions for difficult problems</td>
<td>0</td>
<td>0</td>
<td>7.0</td>
<td>46.5</td>
<td>46.5</td>
</tr>
<tr>
<td>Our team searches out new working methods and techniques</td>
<td>0</td>
<td>1.0</td>
<td>8.0</td>
<td>46.2</td>
<td>44.7</td>
</tr>
<tr>
<td>In our team, we acquire approval for innovative ideas</td>
<td>0</td>
<td>1.5</td>
<td>11.6</td>
<td>53.3</td>
<td>33.7</td>
</tr>
<tr>
<td>In our team, we make each other enthusiastic for innovative ideas</td>
<td>0</td>
<td>1.0</td>
<td>11.5</td>
<td>53.5</td>
<td>34.0</td>
</tr>
<tr>
<td>Our team often implements innovative ideas in the work environment</td>
<td>0</td>
<td>3.0</td>
<td>16.2</td>
<td>47.5</td>
<td>33.3</td>
</tr>
<tr>
<td>After we implement ideas, we evaluate their utility</td>
<td>0</td>
<td>1.0</td>
<td>13.9</td>
<td>48.8</td>
<td>36.3</td>
</tr>
</tbody>
</table>

Table 4.6 Innovation
4.5 Correlations Matrix

The relationship between the variables was investigated using Pearson product-moment correlation coefficient. Preliminary investigations were performed to ensure no violations of the assumptions of linearity, normality, and homoscedasticity. The correlation coefficient of the variables and the alphas are indicated in Table 4.7 below.

<table>
<thead>
<tr>
<th></th>
<th>EmpLead</th>
<th>TrustWor</th>
<th>SharedLe</th>
<th>TeamEff</th>
<th>Innovat</th>
</tr>
</thead>
<tbody>
<tr>
<td>EmpLead</td>
<td>.937</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TrustWor</td>
<td>.805**</td>
<td>.964</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SharedLe</td>
<td>.425**</td>
<td>.506**</td>
<td>.955</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TeamEff</td>
<td>.360**</td>
<td>.393**</td>
<td>.769**</td>
<td>.962</td>
<td></td>
</tr>
<tr>
<td>Innovat</td>
<td>.270**</td>
<td>.348**</td>
<td>.631**</td>
<td>.743**</td>
<td>.893</td>
</tr>
</tbody>
</table>

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

Table 4.7 Correlation matrix

4.5.1 Empowering Leadership and Trustworthiness

Pearson’s correlation coefficient between perceptions of empowering leadership and trustworthiness score showed a reliable association ($r = .805$, $r^2 = .648$, $p < .01$). Change in empowering leadership accounted for 65% of the variance in trustworthiness.

4.5.2 Empowering Leadership and Shared Leadership

The correlation coefficient between perceptions of empowering leadership and shared leadership score showed a reliable association ($r = .425$, $r^2 = .18 p < .01$). The correlation coefficient between empowering leadership and shared leadership account for 18% of the variance in shared leadership.

4.5.3 Trustworthiness and Shared Leadership

The correlation coefficient between perceptions of team leader trustworthiness and shared leadership score showed a reliable association ($r = .506$, $r^2 = .26 p < .01$). The correlation coefficient between team leader trustworthiness and shared leadership account for 26% of the variance in shared leadership.
4.5.4 Shared Leadership and Team Effectiveness

The correlation coefficient between perceptions of shared leadership and team effectiveness score showed a reliable association (r = .769, \( r^2 = .59 \ p < .01 \)). The correlation coefficient between shared leadership and team effectiveness account for 59% of the variance in team effectiveness.

4.5.5 Shared Leadership and Innovation

The correlation coefficient between perceptions of shared leadership and team innovative behavior score showed a reliable association (r = .631, \( r^2 = .40 \ p < .01 \)). The correlation coefficient between shared leadership and team innovative behavior account for 40% of the variance in team innovative behavior.

4.5.6 Team Effectiveness and Innovation

The correlation coefficient between perceptions of team effectiveness and team innovative behavior score showed a reliable association (r = .743, \( r^2 = .55 \ p = .01 \)). The correlation coefficient between team effectiveness and team innovative behavior account for 55% of the variance in team innovative behavior.

4.6 Modeling

Mplus 6 was used to establish the relationship between all latent variables. Structural equation modeling was used to assess the extent to which the observed data fit the pre-specified theoretically-driven model. The table below summarizes the model fit information.

<table>
<thead>
<tr>
<th>Model</th>
<th>( X^2 )</th>
<th>df</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>318.591</td>
<td>9</td>
<td>.973</td>
<td>.10</td>
<td>.031</td>
</tr>
</tbody>
</table>

\( X^2 \) is the Chi-square, df are the degrees of freedom, CFI is the comparative fit index, RMSEA is the root-mean-square error of approximation, SRMR is the standardized root-mean-square residual

Table 4.8 Results of structural equation model

As shown in the table, the results of the hypothesized causal structure model indicated that the model fit well the sample. The adequacy of the model fit was ascertained using Chi-square test, Comparative Fit Index (CFI), Root-Mean-Square of Approximation
(RMSEA), and the standardized root-mean-square residual (SRMR). A properly fit model must have the following fit characteristics: RMSEA upto .1; CFI > 0.9; SRMR < .08. The derived model shows acceptable fit: the chi-square value $\chi^2 = 318.591.05$, $df = 9$, CFI = .973; RMSEA = .1; and SRMR = .031

4.6.1 Effects of Antecedent and Mediator Variables

The study sought to understand the effects of team leader trustworthiness and empowering leadership (antecedents) on shared leadership; and the effects of shared leadership (mediator variable) on team effectiveness and team innovative behavior. The results are summarized in Table 4.9 and Figure 4.7 below.
Table 4.9 Effects of antecedent and mediator variables

<table>
<thead>
<tr>
<th>Mediating Variable:</th>
<th>Outcome Variables:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Leadership</td>
<td>Innovation</td>
</tr>
<tr>
<td></td>
<td>-.251</td>
</tr>
<tr>
<td></td>
<td>&lt; .01</td>
</tr>
<tr>
<td></td>
<td>Team Effectiveness</td>
</tr>
<tr>
<td></td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>&lt; .01</td>
</tr>
</tbody>
</table>

Summary of Direct Effects

<table>
<thead>
<tr>
<th>Shared Leadership</th>
<th>Empowering Leadership</th>
<th>Trustworthiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>β</td>
<td>p</td>
<td>β</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>.456</td>
</tr>
</tbody>
</table>

Outcome Variables:

| Innovation        | -.114                 | < .01           | -.086           | < .05           |
| Team Effectiveness| .378                  | < .01           | .285            | < .01           |

Summary of Indirect Effects

(Via Shared Leadership)

| Innovation        | -.114                 | < .01           |
| Team Effectiveness| .378                  | < .01           |

Note: N = 204. Trustworthiness correlates .805 with Empowering Leadership. Statistically significant results are reported in boldface font.
Figure 4.7 Structural equation model
4.6.2 Empowering Leadership and Shared Leadership

The model explained almost 46% (45.6%) of the total variance in perceived shared leadership. The effect of empowering leadership on perceived shared leadership was positive and statistically significant ($\beta = .456, p < .01$). The positive and significant relationship means that if empowering leadership increases by 1-unit, shared leadership increases by .456 units.

4.6.3 Trustworthiness and Shared Leadership

The model explained more than a third (34.4%) of the total variance in perceived shared leadership. The effect of team leader trustworthiness on perceived shared leadership was positive and statistically significant ($\beta = .344, p < .01$). The positive and significant relationship means that if team leader trustworthiness increases by 1-unit, shared leadership increases by .344 units.

4.6.4 Shared Leadership and Team Effectiveness

The model explained 83% of the total variance in perceived team effectiveness. The effect of shared leadership on perceived team performance was positive and statistically significant ($\beta = .83, p < .01$). The positive and significant relationship means that if shared leadership increases by 1-unit, shared leadership increases by .83 units.

4.6.5 Shared Leadership and Innovation

The model explained 25% of the total variance in perceived team innovative behavior. The effect of shared leadership on perceived team innovative behavior was negative and statistically significant ($\beta = -.25, p < .01$). The negative and significant relationship means that if shared leadership increases by 1-unit, innovation decreases by .25 units.

4.6.6 The Mediating Role of Shared Leadership

Table 4.10 below shows the indirect mediating effects of shared leadership on team effectiveness and innovative behavior.
Table 4.10 The mediating role of shared leadership

4.6.6.1 Empowering Leadership and Team Effectiveness

The relationship between empowering leadership and team effectiveness was mediated by shared leadership. As illustrated in Figure 4.7, and summarized in Table 4.10, the standardized regression coefficient between empowering leadership and shared leadership was statistically significant, as was the standardized regression coefficient between shared leadership and team effectiveness. The standardized indirect effect was $(.456) (.83) = .378$ as shown in Table 4.10 and is statistically significant ($p < .01$).

4.6.6.2 Empowering Leadership and Team Innovation

The relationship between empowering leadership and team innovation was mediated by shared leadership. As illustrated in Figure 4.7 illustrated, and summarized in Table 4.10, the standardized regression coefficient between empowering leadership and shared leadership was statistically significant, as was the standardized regression coefficient between shared leadership and team effectiveness. The standardized indirect effect was $(.456) (-.251) = -.114$ as shown in Table 4.10 and is statistically significant ($p < .01$).

4.6.6.3 Trustworthiness and Team Effectiveness

The relationship between team leader trustworthiness and team effectiveness was mediated by shared leadership. As illustrated in Figure 4.7, and summarized in Table 4.10, the standardized regression coefficient between trustworthiness and shared leadership was statistically significant, as was the standardized regression coefficient between shared leadership and team effectiveness. The standardized indirect effect was $(.344) (.83) = .285$ as shown in Table 4.10 and is statistically significant ($p < .01$).
4.6.6.4 Trustworthiness and Team Innovation

The relationship between team leader trustworthiness and team innovative behavior was mediated by shared leadership. As illustrated in Figure 4.7, and summarized in Table 4.10, the standardized regression coefficient between trustworthiness and shared leadership was statistically significant, as was the standardized regression coefficient between shared leadership and team effectiveness. The standardized indirect effect was (.344) (-.251) = -.086 and is statistically significant (p < .05).

4.7 Chapter Summary

This chapter presented the results of the data that was collected from the non-faculty staff members at the United States International University (USIU) -Africa. The data was manipulated using SPSS and Mplus 6 and the results and findings were presented using pie charts, histograms, tables and figures for ease of reference and understanding. The next chapter will present the discussion of the results of the study and provide recommendations for future research.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter is divided into four major segments each building on the other. The chapter begins with a summary of the study from inception to completion, followed by a discussion of the major findings of the study and how this provides support, or not, to previous research. Conclusions are drawn from the research findings and compared and contrasted with previous studies. Finally, recommendations are made in terms of future research and practical implications of the findings of the study.

5.2 Summary

Businesses everywhere continue to face challenges; extreme competition, inadequate internal business processes, dynamic markets, and changing workforce. Kenyan universities, similarly, are not immune to these challenges and there is need to come up with creative ways to survive in a competitive and highly regulated environment while still achieving the social goals that institutions of higher learning purport to serve. Shared leadership, which is a move away from the traditional hierarchical leadership models, holds some keys to some positive organizational and team outcomes and has recently taken center-stage in the leadership literature.

To assess whether shared leadership can ameliorate the challenges facing universities, a survey research was designed to assess the effects of shared leadership on team effectiveness and team innovative behavior, and whether empowering leadership and team leader trustworthiness predict the emergence of shared leadership at the United States International University (USIU) – Africa. Data was collected from a sample of 204 full-time non-faculty members of the United States International University (USIU) – Africa. The data was analyzed and pertinent characteristics of the respondents as well as the emerging results are described in the foregoing chapters.

Structural equation modeling was used to test the conceptual model that was derived from theory. Overall, the results support the theoretical model and demonstrate that team leader trustworthiness and empowering leadership function as antecedents of shared leadership (β = .456, p < .01; β = .344, p < .0, respectively) and that shared leadership is associated
with team effectiveness and team innovative behavior (β = .83, p < .01; (β = -.25, p < .01 respectively). Thus, the results demonstrated that shared leadership plays a key role in explaining the relationship between trustworthiness and empowering leadership, and team outcomes which in this study were team effectiveness and innovative behavior.

5.3 Discussions

5.3.1 Empowering Leadership and Shared Leadership

The study sought to find out if empowering leadership predicts the emergence of shared leadership. Results from the analysis show that perceptions of empowering leadership predict the emergence of shared leadership in teams (β = .456, P < .001) in line with what previous research indicates. Hoch (2013) who studied the effect of empowering leadership on shared leadership reported a positive and statistically significant relationship (β = .75, p < .001). Similarly, Fausing et al. (2015) found that an empowering team leader facilitates shared leadership (β = .45, p < .001). In a separate study, Carson et al. (2007) reported that coaching, a dimension of empowering leadership, has a direct relationship with shared leadership (β = .26, p < .05).

The current study and Fausing et al. (2015) revealed a modest prediction of shared leadership by empowering leadership (β = .456, p < .001; and β = .45, p < .001 respectively). This is at odds with Hoch (2013) who reported a stronger prediction (β = .75, p < .001). The difference may be as a result of the different vantage points from which empowering leadership and shared leadership were measured. This study, and Fausing et al. measured perceptions of empowering leadership from the team members’ perspective where Hoch used team leaders’ self-rating of empowering leadership behaviors. In all three studies, the team members rated their perceptions of shared leadership. The similarity in the measurement of empowering leadership and shared leadership may explain the similarity in the results of this study and Fausing et al. and the divergence with Hoch.

Other differences may be related to team composition, nature of teams, line of work, countries and locations of study and the analysis approach. Hoch (2013) conducted her research in two companies with a sample of 43 teams comprised of 184 team members who were involved in product development and training and development. These teams were involved in highly complex and cognitive, interdependent knowledge-based work.
The team members were 89% male with 98% of team leaders being male. The average team member age was 23 years (SD 4.92), and average team leader age was 30 years. In Kenya, employees join the workforce late and team leaders tend to be older. The gender composition in the current study is also quite even (51% male, 49% female) and closer to Fasuring et al. (2015) study (67% male). Therefore, the context of the study, teams’ gender composition, task complexity and age composition might explain some of the observed differences.

5.3.2 Trustworthiness and Shared Leadership

The study sought to find out if team leader’s trustworthiness predicts the emergence of shared leadership. The results from the analysis show that perceptions of team leader trustworthiness predict the emergence of shared leadership in teams ($\beta = .344$, $p < .01$). Though no previous known studies had linked team leader’s trustworthiness to shared leadership, we had hypothesized that a leader’s trustworthiness may be reciprocated by employees based on the work of Ferrin, Bligh, and Kohles (2008) who suggested that trustworthiness works in a spiral fashion in dyadic relationships. Studies that tested team members’ integrity, an aspect of trustworthiness, returned positive results for the emergence of shared leadership.

Hoch (2013) looked at the role of employee integrity in predicting shared leadership and reported a positive and significant relationship ($\beta = .77$, $p < .01$). The results of the current study are more modest ($\beta = .344$, $p < .01$) and this may be because a summated scale of all three components of trustworthiness; ability, benevolence, and integrity were used with the team leader being the referent where Hoch only measured integrity, a subcomponent of trustworthiness, with employees being the referent.

Secondly, in this study employees rated their team leader’s trustworthiness whereas Hoch (2013) had employees rate their own integrity. In both studies, however, perceptions of shared leadership were rated by the team members. The divergence of the results may be as a result how integrity was rated. It may be that team members are more inclined to rate their own integrity more positively. The combined effects of self-rating both shared leadership and team members’ own integrity may be reflected in Hoch’ results. It is also plausible that the different strands of trustworthiness namely ability, benevolence and integrity have different effects on the emergence of shared leadership. The fact that the
current study utilized a summated scale to combine all the three aspects of trustworthiness would thus not allow us to properly compare these results.

5.3.3 Shared Leadership and Team Effectiveness

The study sought to find out if shared leadership has an effect on perceived team effectiveness and the results indicate that shared leadership has a positive and significant effect on team effectiveness ($\beta = .83, p < .001$). Daspit et al. (2013) who also measured perceptions of shared leadership and its effects on team effectiveness reported that shared leadership positively and significantly predicts team effectiveness ($\beta = .69, p < .001$). Pearce and Sims (2002) who had looked at the effects of shared leadership on team effectiveness split shared leadership into aversive, directive, transactional, transformational, and empowering leadership and assessed its effect on team effectiveness as rated by managers, customers, and team members. The analysis returned mixed results on the effect and strength of the relationship between various forms of shared leadership and team effectiveness based on whether this was rated by the managers, customers, or team members.

Pearce and Sims (2002) conducted their research at a large automotive manufacturing firm located in the mid-Atlantic United States, among a highly homogenous members of a cross-functional management team, at an organization that was in transition. They had cautioned that their findings might not generalize to other locations and different teams. The current study shows that shared leadership is equally potent in predicting team effectiveness at an organization that is not in transition and in traditional functional team settings. Similarly, Daspit et al. (2013) had carried out their study among cross-functional student teams at a large university in the Southwestern USA and equally reported positive effects of shared leadership on team effectiveness.

Shared leadership leads to the emergence of shared team norms and behaviors. It may be that these shared norms and the promotion of team cohesion propels the team to achieve more in terms of effectiveness. Similarly, group norms could encourage compliance and team members may enforce such norms explicitly or implicitly. As a result, if positive group norms and strong enforcement exist, team members would potentially be bound to achieve the high standards set by the team. Through self-regulation, teams could continue to be effective.
5.3.4 Shared Leadership and Innovation

The study sought to find out the effect of shared leadership on team innovative behavior and the results indicate that shared leadership has a negative and significant effect on team innovative behavior ($\beta = -0.251$, $p < .001$). The results of the current study are at odds with previous research on shared leadership, innovation and team creativity. For instance, Hoch (2013) reported a positive and significant relationship ($\beta = 0.8$, $p < .01$) between shared leadership and team innovative behavior as rated by supervisors. Similarly, Wu and Cormican (2016) found a positive statistically significant correlation between shared leadership and team creativity ($\beta = 0.63$, $p<.01$) - creativity is sometimes regarded as the idea generation stage of innovation. Sun et al. (2016) reported similar results stating that shared leadership positively predicted team novelty ($\beta = 0.53$, $p<.05$).

So far, the only study that positively and significantly linked shared leader to team innovative behavior is Hoch (2013). In the study, Hoch had team supervisors rate team innovative behavior. Supervisors may perceive the work of their team members as a reflexion of their own work and may be inclined to provide positive ratings of team innovation. In the same study, shared leadership was rated by team members who may equally be inclined to portray their teams positively. This may have led to positive ratings of both shared leadership and team innovative behavior and that these potential biases were reflected in the results of the study. Similarly, given that innovation is sometimes seen as a response to opportunities, it is plausible that the current research, or research by others, measured innovation at a time when there were no, or otherwise, opportunities to innovate. The transient nature of innovation may require a longitudinal data as opposed to cross-sectional data.

At the idea generation stage of the innovation process, team members may be able to provide resources in the form of information sharing, refining ideas, contributing knowledge and skills. Beyond this stage, however, the team may have to promote their ideas to persons outside of the team (higher-up managers) who might not share their enthusiasm for the ideas or who may not have the same detailed understanding the team has. This could lead to good ideas being overlooked. Even when ideas are exciting and others accept their likely viability, their implementation may be impeded by resource constraints and may not see the light of day. This might explain why shared leadership stimulates team creativity and the team novelty and not the whole innovation process.
The discrepancy in the results may also be explained by the effects of shared leadership on team processes, nature of the teams involved in the studies and organizational culture. The innovation process is at odds with the normal organizational processes and procedures; it questions the status quo. Shared leadership stimulates strong group norms and expectations of accountability of individual team members to the team. On the other hand, innovation may require unusual thoughts, suggestions, and ideas that may be at odds with the thoughts of the team and those with innovative ideas may not raise their ideas to avoid the social costs of speaking up such as embarrassment and humiliation. Whereas shared leadership may facilitate conformity to group norms and group-think, innovation requires flexibility and quick action. Teams may take long to discuss ideas and make decisions or reach a consensus. Though this may be good in facilitating group cohesion, it might lead to good ideas being watered down, time-barred, and even create disinterest from the initiators of the idea.

Similarly, strong team norms may enforce conformity to established behaviors that may not be supportive of divergence. Explicit or implicit team norms may reinforce existing attitudes and behaviors and dissuade would-be innovators from disrupting the group processes. Cohesive teams provide social support to their members and non-conformists may be afraid to lose the social support. Shared leadership also creates an environment where an individual’s ideas are discussed and added on to by the team by injecting their combined knowledge, skills, and experiences. In this way, the initiator of the idea may not claim ownership over novel ideas. Employees who are especially concerned with individual recognition may not contribute to the team and may end up not suggesting innovative ideas.

5.3.5 The Mediating Role of Shared Leadership

5.3.5.1 Empowering Leadership and Team Effectiveness Through Shared Leadership

This study found that shared leadership mediates the relationship between empowering leadership and team effectiveness ($\beta = .378$, $p < .01$). No previous studies reported the mediating effect of shared leadership on the relationship between empowering leadership and team effectiveness making it difficult to draw comparisons. However, empowering leadership has been shown to improve work unit core task proficiency and proactive behaviors and has a positive relationship with knowledge sharing. Shared leadership
requires knowledge sharing and task proficiency within the team which empowering leadership may facilitate. Shared leadership in turn positively impacts team effectiveness.

5.3.5.2 Empowering Leadership and Innovation Through Shared Leadership

The results of this study reveal that shared leadership mediates the relationship between empowering leadership and innovation ($\beta = -.114$, $p < .01$). This is in line with Hoch (2013) who had reported the mediating effect of shared leadership. The point of departure, however, is that the current results show negative mediation whereas Hoch reported positive indirect effect. This rather odd and unexpected finding may be explained by the relationship between shared leadership and innovation which is negative ($\beta = -.251$, $p < .001$). Possible reasons for the divergent results are; Hoch had team leaders rate their team’s innovative behavior. Given that a team’s work may be perceived as a reflection of the team leader’s competence, team leaders may provide positive ratings of desirable team behaviors. Secondly, there was a difference in the tasks the teams were involved in. In Hoch’ sample, the teams were involved in product development and training and development tasks that, by nature, may require innovative behavior. On the other end, the current study looked at traditional teams that were involved in routine tasks.

5.3.5.3 Trustworthiness and Team Effectiveness Through Shared Leadership

The study sought to understand whether shared leadership mediates the relationship between team leader’ trustworthiness and team effectiveness. The findings show that shared leadership mediates the relationship between team leader trustworthiness and team effectiveness ($\beta = .285$, $p < .01$). Team leader trustworthiness may be an indication of team members’ trustworthiness hence developing trust between team leaders and members, and between team members. Trust in the supervisor has been found to influence employees’ ability to focus on work-related tasks and employees’ willingness to make extra-role workplace contributions. In teams where leadership is shared, trust in fellow team members and the leader could lead to focus on work-related tasks and extra-role contributions by team members which may be reflected in the team’ work output.

5.3.5.4 Trustworthiness and Innovation Through Shared Leadership

The study also sought to understand whether shared leadership mediated the relationship between team leader trustworthiness and team innovative behavior. It is shown that
shared leadership mediates the relationship between shared leadership and team innovation ($\beta = -0.086, p < .05$). According to Hoch (2013) shared leadership mediated the relationship between team member integrity – component of trustworthiness - and team innovative behavior. The main difference, however, between this study and Hoch’s is this study focused on team leader’ trustworthiness as opposed to team members’ integrity. Secondly, this study found that shared leadership negatively affects team innovative behavior and it seems this negative effect outweighs the positive effect of team leader’ trustworthiness on shared leadership. It may be that shared leadership creates an environment where teams take excessive time to make decisions and implement ideas thus subduing the innovative drive.

5.4 Conclusions

5.4.1 Empowering Leadership and Shared Leadership

Empowering leadership and shared leadership are two constructs that have been linked to positive individual, team, and organizational outcomes. A number of studies have indicated that empowering leadership and shared leadership facilitate organizational performance, knowledge sharing and team efficacy. This means that organizations should promote empowering leadership and shared leadership to reap their attendant benefits. This study shows that empowering leadership predicts the emergence of shared leadership in teams and should be curated.

5.4.2 Trustworthiness and Shared Leadership

Team leader’ trustworthiness is an important precursor of shared leadership as indicated by this study and previous research. The trustworthiness and shared leadership literature, however, had focused on team members’ trustworthiness and not much is known about how team leader’ trustworthiness stimulates the emergence of shared leadership. This study tried to contribute to the literature by assessing if team leader’ trustworthiness supports the emergence of shared leadership in teams and the results are encouraging.

5.4.3 Shared Leadership and Team Effectiveness

This study sought to find out whether shared leadership affects team effectiveness and the results show that shared leadership is a potent predictor of team effectiveness. Positive team outcomes are important for organizational performance. Effective teams produce
quality goods and services and contribute to the bottom-line of the organization. This research further strengthens the findings of previous research in different contexts.

5.4.4 Shared Leadership and Innovation

Research shows that shared leadership should be encouraged but so should team innovation. The results of this study, however, indicate that shared leadership negatively impacts innovation. This is at odds with the theory-driven model as well as previous research. Plausible reasons for the divergence between these findings and previous research may be attributed to the different contexts in which the studies were undertaken and the different methodologies adopted. Nonetheless, more research is needed to understand this phenomenon more and explore ways to limit the negative consequences of shared leadership should future research support these results.

5.4.5 The Mediating Role of Shared Leadership

The results of this study show that shared leadership mediates the relationship between team leader’ trustworthiness and empowering leadership, and team effectiveness and innovative behavior. The study contributes to the existing literature by examining the role shared leadership plays in the trustworthiness – team outcomes literature, specifically how perceived team leader’ trustworthiness may lead to the emergence of shared leadership. A review of the literature had revealed that previous studies had measured trustworthiness of team members and not the team leaders. Similarly, the study looked at the mediating effect of shared leadership on the relationship between empowering leadership, and team effectiveness and innovation and supported the theory-driven expectations of mediation.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Empowering Leadership and Shared Leadership

Team leaders should be encouraged to delegate more, coach their team members so they can be self-reliant, and model good behavior by showing commitment to their work and the work of the team. Team leaders should also be encouraged to foster participative decision-making in their respective teams, and share important work information with their teams. Team leaders should not hoard information but should focus on explaining
important company events and processes to their team members. Finally, team leaders should show concern for the welfare of their team members through fair treatment and support. At the organizational level, team leaders should be taught to be more organized and efficient so they know what to delegate and when. Team leaders should also be trained on team dynamics and how to foster team spirit. In this way, team leaders may be able to manage the complexities of shared leadership. Organizations should also institute supportive cultures that emphasize concern for the welfare of employees.

5.5.1.2 Trustworthiness and Shared Leadership

Team leader’ trustworthiness could be cultivated by giving team leaders the tools and resources necessary to enhance their ability, benevolence, and integrity. Leaders could be offered training in their areas of work such that they have the competence to oversee and support the work their teams do. This could improve perceptions of team leader’ ability. Supervisors and team leaders are seen as representatives of their organizations and their actions are perceived as a reflection of the organization’ intent. Benevolent supervisors signal a benevolent institution. As such, focus should be put on a supportive culture that treats its employees fairly and without malice. Institutions could also enact processes and procedures that show concern for employees’ well-being including promoting work-life balance, healthy living, fair and transparent disciplinary procedures and generous medical insurance. Finally, organizations may emphasize the integrity of the organization and promote employees’ alignment with the moral values of the institution. Policy statements and value statements as well as training on ethics and personal integrity should be emphasized.

5.5.1.3 Shared Leadership and Team Effectiveness

Effective communication supports team work and is one of the characteristics of shared leadership. Team members should be trained to communicate effectively and provide critical feedback to peers. Shared leadership requires that teams set their own goals and monitor their work and should, therefore, be trained on goal-setting and work monitoring. Similarly, conflict management skills come in handy as teams are expected to handle their internal conflicts without causing undue delays. Finally, teams have to be trained on boundary-setting and the need for constructive conflict to avoid group-think and excessive team cohesion from negatively impacting their effectiveness.
5.5.1.4 Shared Leadership and Innovation

Team leaders and organizations should foster the positive aspects of teams by reinforcing team subcultures that lead to positive team and organizational outcomes. However, team leaders should also keep a check on the emergence of negative team outcomes such as group think, ‘we versus them’ mentality, and suppression of individual voice and innovation. Team leaders and organizations should reward individual as well as team achievements. Some team members may be more comfortable if their individual contribution to the organization is recognized and may withhold good ideas if such avenues are not available. This calls for a balance between promoting team work while ensuring individual visibility and growth is not decimated. Managers should be taught to gauge the ‘pulse’ of their teams to know when to change things around.

5.5.1.5 The Mediating Role of Shared Leadership

The mediating role of shared leadership has returned both positive and negative results. While enhancing the potential benefits of shared leadership, its potential negative outcomes should be limited. To this end, team leaders should encourage both team and individual innovation. Individuals who may be more comfortable innovating outside of a team’ confines should be given opportunities to contribute while balancing the team’s needs. Similarly, sharing leadership should not lead to decision paralysis. Team leaders must know when to step in and nudge their teams in the right direction.

5.5.2 Recommendations for Future Research

5.5.2.1 Empowering Leadership and Shared Leadership

Measuring the impact of empowering leadership from different focal points could yield different results. Future research should focus on combining team leader ratings with team member ratings to even-out potential biases. Different analysis methods should also be used to test team-level constructs such as shared leadership. Future research should, therefore, consider multiple raters and analysis such as aggregated scores and social network analysis.

5.5.2.2 Trustworthiness and Shared Leadership

Future research should consider combining ratings of team leader trustworthiness and team member self-ratings of trustworthiness. Researchers should also consider isolating
the effects of each of the components of trustworthiness namely ability, benevolence, and integrity on shared leadership. In this way, specific recommendations could be made on how shared leadership maybe be promoted in teams. Finally, longitudinal research should be conducted to capture shifting perceptions and their effects. Multiple research locations and teams should also be considered.

5.5.2.3 Shared Leadership and Team Effectiveness

Shared leadership was measured using a twenty-item scale and it would be prudent to break this scale down into its constituent sub-scales. In this way, the effect of each of the four sub-scales can be measured against team effectiveness. Similarly, team effectiveness was measured on a combined twenty-six item scale that could be broken down into seven sub-scales. Future research should consider the interaction of each of the predictor sub-scales with the team effectiveness sub-scales. Future research should also measure team effectiveness from different sources such as internal clients of a team’s output, external clients, team leaders, higher-up managers, and team self-ratings aggregated at the team level so as to limit bias in the measurement.

5.5.2.4 Shared Leadership and Innovation

Future research should use multiple sources to rate shared leadership and team innovative behavior to limit potential rater biases. Research should also explore the factors that mediate the relationship between shared leadership and team innovative behavior. Suggestive issues to look into include the mediating role of team cohesion in the relationship between shared leadership and team innovation. Future research should also consider measuring the effects of the various sub-scales of shared leadership on team innovative behavior. Assumptions of homogenous results should be discarded and the relationship between all the variables explored to check if the results of the summated scale are similar or different from the individual sub-scales. This will have more practical value for academicians and practitioners.

5.5.2.5 The Mediating Role of Shared Leadership

The current research used summated scales to measure shared leadership and its antecedents and outcomes. Future research should be more specific and focused. To inform practitioners and researchers, the interaction of various sub-scales should be
explored. Future researchers should also further test this model in other organizations and teams to see if the mediating role of shared leadership behaves in a similar fashion.

5.6 Chapter Summary

In this chapter, we discussed the results of the study vis-à-vis the extant literature on the antecedents and outcomes of shared leadership. Specifically, the study looked at if empowering leadership and team leader trustworthiness may lead to the emergence of shared leadership among team members and established positive and significant relationships. Similarly, the study looked at whether shared leadership predicts team effectiveness and team innovative behavior and found a positive significant relationship with the former and a negative significant relationship with the latter. Finally, the study looked at the mediating role of shared leadership in the above antecedent-outcomes nexus and established that shared leadership plays a mediating role in this relationship. Based on these findings, conclusions were drawn and recommendations suggested for practitioners and future researchers.
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March 10, 2018

Dear Participant,

My name is Abdirahim Amin and I am a graduate student at the United States International University (USIU) - Africa, I am examining the relationship between shared leadership and team effectiveness and innovation in Kenya and I am kindly inviting you to participate in this research study by completing the attached survey questionnaire.

The following questionnaire will require approximately **30 minutes** to complete. There is no compensation for responding nor is there any known risk. In order to ensure that all information will remain confidential, please do not include your name. Copies of the project will be provided to my supervisor. If you choose to participate in this project, please answer all questions as honestly as possible and return the completed questionnaires promptly to the research assistant. Participation is strictly voluntary and you may refuse to participate at any time.

Thank you for taking the time to assist me in my educational endeavors. The data collected will provide useful information regarding shared leadership in the Kenyan context. If you would like a summary copy of this study, please complete and return the accompanying Request for Information Form and return it to me on email. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact me on 0729 557 907.

Sincerely,

Abdirahim Amin

Detach here:

******************************************************************************

Request for Information:
Please send a copy of the study results to the address listed below.
Name: 
Address: 
Please do not return this form with your survey. Return to: abdirahimabass@yahoo.com
Appendix II: Questionnaire

SECTION ONE: BIOGRAPHICAL QUESTIONNAIRE

For each of the questions below, please tick the option that best describes you.

1. Please select your gender
   Male [ ]  Female [ ]  Other [ ]

2. Select your age bracket.
   Below 25 [ ] 25 -35 years [ ] 35 - 45 years [ ]
   45 – 55 years [ ]  above 55 years [ ]

3. How many years have you worked for this organization?
   0 – 1 years [ ] 1– 2 years [ ] 2 – 3 years [ ] 3 –4 years [ ] More than 4 years [ ]

4. Select your responsibility level within the organization.
   Top management [ ] Middle Management [ ] Non-managerial [ ]
   Other [ ]

6. How many years have you been a member of your current work team?
   0 – 1 years [ ] 1– 2 years [ ] 2 – 3 years [ ] 3 –4 years [ ] More than 4 years [ ]

7. How many members does your work team have?
   3 – 5 members [ ] 6 – 8 members [ ] 9 –11 members [ ]
   11 –13 members [ ] More than 13 members [ ]
SECTION A

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
<thead>
<tr>
<th>#</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>My team leader encourages me to search for solutions to my problems without supervision.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>My team leader urges me to assume responsibilities on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>My team leader encourages me to learn new things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>My team leader encourages me to give myself a pat on the back when I meet a new challenge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>My team leader encourages me to work together with the others who are part of the team.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>My team leader advises me to coordinate my efforts with the others who are part of the team.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>My team leader urges me to work as a team with other individuals who are part of the team.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>My team leader expects that the collaboration with the other members in the team works well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
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### SECTION B

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
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<tr>
<th>#</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>My team leader is competent and efficient in his/her work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>My team leader performs his/her role for this organization very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>I believe that my team leader would act in my best interest.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>My team leader is interested in my wellbeing not just his own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>My team leader is truthful in dealing with stakeholders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>My team leader would keep his promises.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>I would characterize my team leader as honest.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>My team leader is sincere and genuine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tbody>
</table>

### SECTION C

**INSTRUCTIONS**
When filling this section, please focus on the TEAM and not the official team leader. For instance, when responding to 'as a team we clearly assign tasks', instances of the formal team leader assigning tasks do not count.

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
<thead>
<tr>
<th>#</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>As a team we clearly assign tasks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>As a team we clearly communicate our expectations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>As a team we provide each other with work relevant information.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>Statement</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>As a team we ensure that everyone knows their tasks.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>As a team we monitor goal achievement.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>As a team we take sufficient time to address each other’s concerns.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>As a team we recognize good performance.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>We promote team cohesion.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>We support each other in handling conflicts within the team.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>26</td>
<td>As a team we never let each other down.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>27</td>
<td>We help each other to correctly understand ongoing processes in our team.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>28</td>
<td>As a team we help each other to learn from past events.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>29</td>
<td>As a team we help each other to correctly understand current company events.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>30</td>
<td>As a team we can inspire each other for ideas.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>31</td>
<td>As a team we support each other with the implementation of ideas.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>32</td>
<td>We use networks in order to support our team’s work.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>33</td>
<td>We ensure that our team is supported with necessary resources to fulfill the task.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>34</td>
<td>As a team we assist each other to network.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>35</td>
<td>We establish contact with important experts valuable for our team.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>36</td>
<td>As a team we are open to external assistance in the case of internal team problems.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
## SECTION D

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
<thead>
<tr>
<th>#</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>The team delivers its commitments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38</td>
<td>The team delivers its commitments on time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39</td>
<td>The team provides a volume of work consistent with established standards.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
<td>The team is highly effective at implementing solutions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41</td>
<td>The team delivers important changes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>The quality of the team’s output is very high.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>43</td>
<td>The team performs duties accurately and consistently.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44</td>
<td>The team eliminates root problems, not just symptoms.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

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<tr>
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<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>The team faces new problems effectively.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46</td>
<td>The team changes behavior to meet the demands of the situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47</td>
<td>The team copes with change very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48</td>
<td>The team sets goals and priorities for maximum efficiency.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49</td>
<td>The team develops workable plans.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50</td>
<td>The team works on important problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51</td>
<td>The team has its priorities straight.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### SECTION E

Please circle the option that best describes your level of agreement with the following statements (1=Strongly Disagree; 2= Disagree; 3 = Neither agree nor disagree; 4 = Agree; 5 = Strongly Agree)

<table>
<thead>
<tr>
<th>#</th>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>The team communicates its progress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53</td>
<td>The team proactively communicates its progress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54</td>
<td>The team keeps everyone informed.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55</td>
<td>The team keeps everyone informed on its progress.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56</td>
<td>The team is highly effective.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57</td>
<td>The team is making very good progress on the team’s charter.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>58</td>
<td>The team does very good work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>59</td>
<td>The team does a very good job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>60</td>
<td>The team’s contribution to the company is very valuable.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>61</td>
<td>The team makes valuable contributions to the company.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>62</td>
<td>The contributions of this team are very valuable to the company.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>63</td>
<td>Our team creates new ideas concerning solutions for difficult problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>64</td>
<td>Our team searches out new working methods and techniques</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>65</td>
<td>In our team, we acquire approval for innovative ideas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>66</td>
<td>In our team, we make each other enthusiastic for innovative ideas</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>67</td>
<td>Our team often implements innovative ideas in the work environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>68</td>
<td>After we implement ideas, we evaluate their utility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>