

**AKENTEN APPIAH-MENKA UNIVERSITY FOR SKILLS TRAINING AND
ENTREPRENEURIAL DEVELOPMENT**

**EFFECT OF TRANSFORMATIONAL LEADERSHIP ON EMPLOYEES
INNOVATIVENESS IN HEALTH TRAINING INSTITUTIONS IN ASHANTI REGION:
THE ROLE OF KNOWLEDGE SHARING**

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NOVEMBER, 2023

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THE ROLE OF KNOWLEDGE SHARING**

**A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT STUDIES
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REQUIREMENTS FOR THE AWARD OF A MASTER OF PHILOSOPHY DEGREE IN
BUSINESS MANAGEMENT.**

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NOVEMBER, 2023

DECLARATIONS

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree at this university or elsewhere.

Eunice Asante Asuaa

Signature: Date:

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

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DEDICATION

This work is dedicated to my husband, Mr. George Frimpong.

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GLOSSARY/ABBREVIATION

EI	Employee Innovativeness
HTI	Health Training Institutions
KS	Knowledge Sharing
TL	Transformational Leadership

ABSTRACT

Health Training Institutions in Ghana are crucial for producing competent healthcare professionals, but bureaucratic procedures often delay employee suggestions due to delayed implementation. Studies on employee innovativeness, emphasizing human-development resources, have largely focused on education, while individual-level innovation has received less attention in recent years. Identifying the mediating role of knowledge sharing in the relationship between employee innovativeness and transformational leadership in Health Training Institutions in Ashanti Region was the focus of this study. All public Health Training Institutions in the Ashanti Region were the institutions considered for this study. An approach to analysis with a causal design of research were adopted for the study. Teaching staffs in these institutions were the study participants with a total sample size of 248 but a retrieved form totalling 244 from which analysis was carried out in SPSS version 22. It was found that, transformational leadership positively affect employee innovativeness. Also, transformational leadership positively affect knowledge sharing. Employee innovativeness is positively impacted by knowledge sharing. As a result, knowledge sharing was found to partially mediate the relationship between transformational leadership and employee innovativeness. It was recommended that, Management of Health Training Institutions in the Ashanti Region and Ghana in general should put in place schemes that supports employees continuous learning which horns their innovation inclination. Organizations should use the power of information sharing to spur innovation and maintain competitiveness in a business environment that is rapidly changing by acting on these findings.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The leadership behaviours of Institutional top management can have a major influence on the effectiveness and level of innovation of staff (Yanney, 2014). This is because an organization's leadership style is one of the aspects that affect how well and efficiently subordinates can administer their duties (Eliyana et al., 2019). Staff are inspired to offer their best after leaders are able to build a welcoming and supportive work environment. However, each leader is distinct and has varied skills, and this mostly affects how he leads (Purwanto et al., 2021b). Among the various styles of leadership, transformational leadership is identified as a cutting-edge style, which has resulted in extensive study on its effect on employee performance (Advani, 2015).

Transformational leadership is known as a leadership strategy that transforms followers for the better with the goal of fostering their own leadership potential (Mena et al., 2018). The four essential components of transformational leadership, according to Odumeru and Ogbonna (2013), are intellectual stimulation, drive, inspiration, and thoughtfulness for each individual. This style of leadership lays a lot of focus on the outcomes and accomplishments of the followers, which motivates them to work harder to forward the organization's objectives, a position that is confirmed by Russell et al. (2018).

Researchers (e.g., Al-Amin, 2017; Mangkunegara & Huddin, 2016) have found a considerable correlation between transformational leadership and work productivity. According to Advani (2015), transformational leadership has an impact on how well-motivated subordinates are at work. Leaders that employ transformational leadership typically motivate their people to go above and beyond expectations by modifying the vision, leading by example, encouraging, and kindling the

drive for change (Purwanto et al., 2021b). According to Aarons et al. (2014), leaders that exhibit transformational leadership characteristics create a conducive environment that is favorable for implementation and sustainability of corporate goals. Also, improvements in management performance are only a few of the outcomes that transformational leadership has been demonstrated to have a positive effect on employees (Para-González et al., 2018).

Theoretical research on transformational style of leading indicates that during periods of organisational transformation, this type of leadership is especially crucial, such as when a novel practice is implemented (Farahnak et al., 2020). Another illustration is the research by Carter et al. (2013), who discovered that transformational leadership was linked to better the quality of the relationships with subordinates during the implementation of organisational change, which was subsequently connected to improved civic engagement and task performance. Particularly in terms of attitudes toward change, transformational leaders have a number of influences on subordinates' views. According to Bommer et al. (2005) analysis, "transformational leadership 'transforms' individual subordinates to increase their receptivity to and ability to implement organisational change."

Transformational leadership style aids in the realisation of organizational missions, visions, and goals (Alsayed et al., 2012) since it makes use of subordinates influence, expertise, and knowledge through cordial dialogue and contact, encouragement of counsel and recognition, and, lastly, through open and kind integration practices. Thus, Gill et al. (2018) assert the impact of transformative leadership can be perceived in supporting efficient methods for producing knowledge and vibrant teamwork for practical knowledge acquisition. For Baafi et al. (2021), since transformational leaders inspire their teams to be more proactive and productive, employees learn new skills which leads to increased innovation, and subsequently gives their organizations a

competitive edge (Nguyen, 2022). Giving subordinates the freedom to significantly improve organizational performance makes them feel more at ease and encourages creative thinking (Dani & Gandhi, 2021). Employees with strong self-efficacy may become more innovative since transformational leadership style gives them the chance to grow and become innovative thinkers (Ardi et al., 2020).

Many organizations view innovation as a critical goal for their performance since it has the potential to deliver results for the organizations. The definition of employee innovativeness is "participation in innovative behaviours, which include actions related to the innovation process, such as concept realisation, idea generation, and idea promotion, with the aim of creating innovations" (Parzefall et al., 2008). According to Kimwolo and Cheruiyot (2018), employee innovativeness refers to a person's capacity to develop original concepts, business ideas, technology, and tactics. As they affect at multiple levels, sometimes individually but mostly during conversation, the factors that affect employee innovativeness are sometimes categorized into three main sections: individual, team, and organizational (Abbas & Wu, 2019). Innovation necessitates a certain amount of drive that might encourage people to take on challenges and risks, like organizational support that enables staff members to partake in extra-curricular tasks (Kurtessis et al., 2017). How innovatively people think and act within a business is one of the key factors impacting its competitiveness (Jing et al., 2021). This gives businesses a competitive edge by assisting them in bringing in and keeping more customers. Similar to this, employee creativity results in successful organizations (Tazeem & Muhammad, 2011).

Although the association between transformational leadership and employee innovativeness appears to be directly correlated (Ardi et al., 2020), there may have some capability intermediary factors. Transformational leadership and employee innovativeness, for instance, could possibly be

influenced by employees' capacity to independently achieve desired organizational results (Poespowidjojo et al., 2018). Similarly, the relationship between transformational leadership style and employee innovativeness can be mediated by variables such as knowledge sharing.

Knowledge sharing, to a broad extent, refers to the practice of transferring practical knowledge and organizational expertise to corporate processes via interpersonal communication channels (Alavi & Leidner, 2001). In order to create and use organizational knowledge, which are crucial processes related to knowledge management and organisational innovation (Hendriks, 2004; Huysman et al., 2002), information sharing is required. Sharing knowledge also involves the capacity to translate framed experiences, data, and expert insights into actions (Wiewiora et al., 2013). It fosters innovation as its essential for employee innovativeness (Castaneda & Cuellar, 2020). This, according to Serenko and Bontis (2016), has elevated knowledge sharing to the top of the list of management research subjects.

Employees who share their expertise are able to trade tacit and explicit information as well as experience and skills (Hoegl et al., 2003). Companies can therefore access their own information as well as that of other organizations through knowledge sharing (Cummings, 2003). The exchange of knowledge is one activity that promotes innovation in that without knowledge exchange, innovation is not likely to happen (Castaneda & Cuellar, 2020). Collaborative learning has proven to be an efficient and effective method for innovativeness. With the scope of innovation, knowledge sharing refers to the sharing of expertise geared toward developing or enhancing quality goods and services. Sharing knowledge is a crucial resource that underpins the ability to produce products (Kremer et al., 2019). A company that promotes knowledge exchange is more likely to generate fresh concepts and support creative thinking. Belso-Martinez and Diez-Vial

(2018) discovered that businesses tend to have greater capacity for innovation when they participate more in knowledge networks.

According to the World Health Organization (2009), nursing schools have an objective of producing competent and qualified nurses possessing the skills, mindset, and information required to improve public health and bolster health systems. Nursing educators must be properly prepared in order for nurses to develop their skills, attitudes, and knowledge (World Health Organization, 2016). The education of healthcare professionals, nurses among others, is continually changing. Competent academic instructors are essential for the success of the nursing profession. Many nurses with clinical expertise are being sought after for faculty positions, but in order for these clinicians to develop into expert teachers, pedagogical development strategies are needed, as clinical expertise does not always convert into proficiency in instructing within an academic context (Smith et al., 2019; Spencer, 2013).

Skill development comes with time (Murray et al., 2014), as well as young nurses need assistance and direction to advance in the course of their work, nurse educators require assistance in their new roles (Spencer, 2013). In order to promote nurse educators' transition to faculty, considerably more comprehensive initiatives are required (World Health Organization, 2006). Nursing educators require adequate mentoring assistance (Kalensky & Hande, 2017) individualized faculty orientation support (Ross & Dunker, 2019), and sufficient training in teaching abilities (Booth et al., 2016) in order to successfully deliver their mandate. Such initiatives depends on the leadership in place in the institution. To this end, this study aims to evaluate how knowledge sharing performs as a mediating variable in the relationship between transformational leadership and employee innovativeness.

1.2 Problem Statement

Health Training Institutions (HTI) in Ghana play a critical role in producing competent healthcare professionals who are well-equipped to meet the evolving population's requirements for healthcare. To ascertain the provision of superior care and the development of innovative solutions, it is essential to foster employees' innovativeness within these institutions. The leadership style embraced by the administration in these institutions goes a long way to impact on tutors and/or staffs' innovativeness. For most HTI in the Ashanti Region, employees' views and suggestions always delayed in implementation because of the bureaucratic procedures involved in seeking approval for ideas. Considering the fact that management of most HTI in the Ashanti Region adopt different styles of leadership either than transformational leadership, they have not been able to expand their network and collaborate with teaching and non-teaching staff to ensure continuous knowledge exchange amongst staff via conferences, seminars, workshops amongst others.

Although there are some advancements in our comprehension of the part that leaders play in the success of institutions, there are still knowledge gaps. For example, it has been observed that employee attitudes towards the innovation can play a critical role in its success and that leaders are crucial to the implementation process (Abass & Wu, 2019), however, the ways in which leaders might influence followers' perspectives towards innovation have received less attention. A number of studies have concentrated on innovation at the organizational level as the importance of human-development resources has increased. Although people generate and analyze new ideas (Abass & Wu, 2019), individual-level innovation has received less attention (Bos-Nehles & Veenendaal, 2017). Thus, reasonable proof of the linkage between transformational leadership and employee innovation as mediated by knowledge sharing is deemed to be insufficient, particularly in the context of HTI in Ghana.

In contemporary organizational settings, the correlation between transformational leadership and employee innovativeness has garnered significant attention in academic research. However, while the direct influence of transformational leadership on employee innovativeness has been explored, there remains a gap in understanding the potential mediating role of knowledge sharing in this relationship. Despite acknowledgment of the positive impact of transformational leadership on fostering an environment conducive to innovation, the mechanisms through which knowledge sharing serves as a mediator in enhancing employee innovativeness remain underexplored. This gap in understanding raises questions about the intermediary processes that link transformational leadership behaviors, the facilitation of knowledge sharing practices, and subsequent impacts on employee innovativeness within organizations. Addressing this gap is crucial for comprehensively elucidating the intricate dynamics between leadership styles, knowledge exchange processes, and the resultant innovative behaviors exhibited by employees. Hence, It is necessary to investigate the effect of transformational leadership specifically on employees' innovativeness within the context of Health Training Institutions in the Ashanti Region.

1.3 Research Objectives

1.3.1 Main Objectives

The primary goal is ascertaining how knowledge sharing functions as a mediator in the link between transformative leadership and employee innovativeness in Health Training Institutions in Ashanti Region.

1.3.2 Specific Objectives

The specific objectives, in relation to employees in Health Training Institutions in Ashanti Region were:

1. To examine the effect of transformational leadership on employee innovativeness.

2. To ascertain the connection between transformational leadership and knowledge sharing.
3. To determine the relationship between knowledge sharing and employee innovativeness.
4. To assess the mediating role of knowledge sharing on the relationship between transformational leadership and employee innovativeness.

1.4 Research Questions

1. How is employee innovativeness affected by transformational leadership in HTI in Ashanti region?
2. What is the link between knowledge sharing and transformational leadership?
3. What is the relationship between knowledge sharing and employee innovativeness?
4. How does knowledge sharing mediate the impact of transformational leadership on employee innovativeness?

1.5 Significance of the Study

The results of this study significantly advance three key fields: policy, research, and practice. In order to discuss the problem of creativity from the viewpoint of employees, the current work offers useful information to academia, individual Health Training Institutions in Ghana, corporate bodies, and the government. It suggests that corporations adopt transformational leadership style since it spurs employees who have an innate drive to confidently express their innovative concepts and suggestions to enhance organizational performance. Interestingly, it considers the mediatory role of one constructs – knowledge sharing on the relationship between transformational leadership and employee innovativeness. Thus, the results of this study encourage institutional leads to consider developing workplaces where staff members may freely express their opinions and alter the current situation when appropriate, which may ultimately have a good impact on their degree of innovativeness. More importantly, the current study offers ideas with the goal of empowering

Health Training Institutions (HTI), corporations, other academic institutions, and the government to alter the structures, rules, procedures, and practices that stifle employee creativity. By filling in gaps about leaders willingness to exchange knowledge (knowledge sharing) thereby resulting in employee innovativeness, the study further advances academic research. It also offers guidance for further research.

1.6 Scope of the Study

The study was restricted to Health Training Institutions in the Ashanti Region of Ghana. This implies a defined geographic focus for the research, giving the investigation a more focused setting. The sector was mainly limited to Health Training Institutions and the main constructs considered in the study were transformational leadership, employee innovativeness and knowledge sharing.

1.7 Limitations of the Study

The extent to which the study's findings can be extrapolated to a broader population may be restricted by the sample size. It could be difficult to transfer study results from one sector or geographic area to another. The results' external validity may be limited by the particularities of Ghana's Ashanti Region and health training facilities. Furthermore, the study's limited data gathering schedule precluded long-term data collection.

1.8 Organization of the Study

The study is divided into five chapters: the first is the Introduction; the second is the Literature Review; the third is the Research Methodology; the fourth is the Results and Discussion; and the fifth is the Summary, Conclusion, and Recommendation. Background information, problem statement, study objectives, research questions, study significance, study scope, study limitations,

overview of methodology, and study organization are all covered in the first chapter. An overview of the theoretical and empirical literature relevant to the thesis's themes is provided in chapter two. The study methodology, demographics, sampling strategy, sample size, data analysis, and reliability are all thoroughly explained in Chapter 3. The research's findings are presented and discussed in chapter four. Additionally, a summary of the main findings, implications, recommendations, and suggestions for further study are provided in Chapter 5.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section outlines the theoretical, empirical, and conceptual frameworks that provide context for the research being conducted. Examining the theories that most effectively clarify the relationship among the research constructs (transformational leadership, knowledge sharing, and employee innovativeness) is the focus of the theoretical framework. In contrast, the conceptual framework illustrates the visual relationship between the variables, and the empirical review explores the work of other academics on the subject.

2.1 Theoretical Review

2.1.1 Transformational Leadership Theory

Transformational leadership, in contrast to transactional leadership, is built on the leader's personality trait and capacity to effect change via objectives and visions (Ahmad, 2012). Transformative leadership, in contrast to transactional leadership, is built on the leader's personality trait and capacity to effect change via objectives and visions (Lin & Hsiao, 2014). The values, goals, needs, and priorities of followers are stimulated, inspired, and transformed by transformational leaders. By doing this, they are successful in inspiring followers to go above and beyond what they initially planned on achieving, and frequently even beyond what they felt was possible (Robbins & Coulter, 2007). Thus, transformative leaders motivate their followers to perform better and achieve other successful work-related goals (Ahmad, 2012).

According to DuBrin (2010), transformational leadership is the type of leadership that bestows positive changes on the workplace. This is largely because transformational leaders inspire their followers and foster a positive atmosphere at their workplaces by urging staff members to inquire,

reflect on their jobs and work, come up with answers to issues at work, give various learning possibilities, and value creative ideas (Jha, 2014).

Such leaders inspire their followers to put up extraordinarily high levels of effort, motivation, selflessness, and performance (Pastor & Mayo, 2006). Additionally, they receive the best output from subordinates as a result of their ability to increase their chances of success and sharpen their creative problem-solving abilities (Waldman et al., 1990). In addition to the aforementioned, followers develop adoration, respect, and trust for transformational leaders. These are regarded as crucial catalysts that inspire followers to go above and beyond expectations (Yukl & Mahsud, 2010).

According to Northouse (2001), transformational leadership is the capacity to inspire others to make positive changes and follow your example. According to meta-analyses, transformational leadership has the strongest correlation with successful workplace outcomes of any type of leadership (Lai, 2011). Individualized concern, idealized influence, intellectual stimulation, and inspired motivation were the four behavioral components Bass used to create his concept of this leadership (Madhu & Krishnan, 2005).

Transformational leadership theory is based on an idea that was first introduced by Burns and Bass in 1978. Because they provide intellectual stimulation, transformational leaders, according to Bass, inspire their followers to see leadership from new perspectives.

Through motivating inspiration and charisma, leaders can convey the idea that they are individuals who can personally assist and care for their subordinates (Bass, 1985). Mekpor and Dartey-Baah (2017) describe transactional leadership as a managerial leadership approach that prioritises managing, allocating, supervising, and keeping an eye on each person's performance..

Transactional leaders will monitor employees' work, give special attention to those who perform exceptionally well, and reprimand and threaten those who deviate from established standards.

Transformational leadership theory provides a framework to elucidate the connection between transformational leadership and employee innovativeness. This theory posits that transformational leaders inspire and motivate their followers by fostering a sense of purpose, encouraging creativity, and promoting a vision that transcends individual interests (Bass, 1985). Transformational leaders serve as role models, gaining the trust, respect, and admiration of their followers. Employees are inspired to emulate these leaders, leading to increased commitment to organizational goals and values. This alignment with the leader's vision encourages employees to exhibit innovative behavior. Transformational leaders articulate a compelling vision of the future that inspires and motivates employees. By communicating high expectations and instilling a sense of purpose, leaders encourage employees to go beyond their comfort zones and explore new ideas and approaches. This inspiration often stimulates innovative thinking among employees (Madhu & Krishnan, 2005).

Transformational leaders challenge the status quo by encouraging creativity, critical thinking, and problem-solving. They foster an environment where employees are encouraged to question existing practices, suggest improvements, and experiment with new methods. This stimulation of intellectual curiosity and openness to new ideas contributes to employee innovativeness. Transformational leaders pay attention to the individual needs, strengths, and development of their followers. They provide support, coaching, and autonomy, allowing employees to explore their innovative potential. By recognizing and nurturing employees' unique talents, leaders encourage them to take risks and innovate (Mekpor & Dartey-Baah, 2017).

In essence, the relationship between transformational leadership and employee innovativeness lies in how these leaders inspire, challenge, support, and empower their followers. Through their visionary approach, encouragement of creativity, intellectual stimulation, and personalized support, transformational leaders create an environment that fosters innovation among employees. This leadership style promotes a culture of continuous improvement, exploration of new ideas, and willingness to take calculated risks, ultimately enhancing employee innovativeness within an organization.

2.1.2 Path-goal Theory

Path-Goal theory belongs to the approach of contingency, focusing on the interactions between patterns of leadership behaviour and the elements found in a leadership setting. The thesis is founded on the idea that no single leadership approach is appropriate in every circumstance (Fielder, 1967). The Path-Goal proposition, according to House and Mitchell (1975), concentrates on the behaviors a leader employs to motivate followers to realise both individual and organizational goals. House (1971) initially distinguished between two categories of leadership behavior: behavior aimed at meeting individual needs and behavior that clarifies the road to achieving goals. These descriptions suggest that they were not adequately operationally specified as a component of the theory.

Four clearly defined behaviors were added to the original two leadership behaviors (House & Mitchell, 1975). Among the four were directed leadership, which is defined as a leader's psychological support for followers through routine duties like outlining expectations for subordinates, outlining how to do those jobs, and providing instructions on time. Additionally, helpful leadership, which is another behavior centered on being amiable and accessible as well as eager to meet people's needs. The third style of leadership is participatory leadership, which is

often a directive style that emphasizes involvement in decision-making and encourages subordinates to share ideas and make proposals that can be implemented by the organization. Performance-focused leadership is the fourth behavior, which targets pushing people to reach their potential by setting high criteria for performance and emphasizing on performance excellence (House & Mitchell, 1975). The same person can demonstrate leadership traits in many contexts.

According to Ratyan et al. (2013), a manager can influence subordinates and open doors for goal attainment by implementing one or more of these behaviors. The core of the path-goal theory, according to House (1996), is that leadership effectiveness rests in the adoption of behaviors that complement surroundings and skills of subordinates in a way that is advantageous to their personal fulfilment and the effectiveness of their work units., and makes up for systemic flaws.

The Path-goal theory has some flaws; due to the fact that the theory is made up of several interconnected hypotheses sets, applying it to a particular organizational environment is challenging. Despite being a leader-oriented theory, it fails to recognize the transactional character of leadership. Additionally, the approach discourages subordinates from taking part in the leadership process (Ratyan et al., 2013). Despite these flaws, the theory has a number of advantages, such as providing a foundation for understanding circumstances when a leader's actions will influence a person's output and contentment at work in specific leadership behaviors (Cote, 2017).

The theory offers a fantastic framework for assisting people in clarifying goals and setting goals through guidance and mentoring to reach productivity goals (House & Mitchell, 1975). The path-goal theory, in the opinion of Ratyan et al. (2013), is used to describe how the behavior of the leader influences the subordinate's pleasure, desire, and productivity. According to the theory, a single leader might use multiple leadership behaviors at various points in time and in various

circumstances. This study contends, on the basis of the assumptions put forth according to the path-goal hypothesis, public officials serve as coordinators and employ a variety of leadership behaviors to encourage subordinates toward innovative behavior by eliminating barriers, establishing support systems, and creating an environment that fosters innovation.

As per the path-goal hypothesis, an individual's actions as a source of influence can alter a subordinate's mindset, drive, and behavior (Malik et al., 2016). Leadership behaviors seem to be a useful tool for meeting the need for an innovative workforce considering the public sector's high levels of environmental complexity (Baafi et al., 2021). The success of a company is dependent on the Innovative Work Behaviour (IWB) of its employees, which affects performance and image consequences (Yuan & Woodman, 2010). According to several studies (Decramer et al., 2013; Knies et al., 2015), the majority of public organisations are facing mounting pressure to maximise their efficiency levels while simultaneously enhancing the quality and safety of their services. As a result, it is likely that creating and putting in place more productive tools and workflows will become crucial in the future success and persistence of governmental entities. By using resources inefficiently, a lack of creativity or innovative ideas hampers how the general public performed and other economic sectors.

Most of the time, a lack of imagination and innovation prevents costs, deadlines, and quality requirements from being met (Awosika, 2014). Thus, the research of IWB is crucial to enhancing the performance of the public sector's service delivery because such behavior is particularly necessary in that sector (Torugsa & Arundel, 2016). IWB and creativity are related concepts that frequently overlap, thus it's vital to make this distinction. Although innovation by definition entails both the creation and application of new ideas (Khan et al., 2015). Since innovative behavior comprises taking in concepts from others that may be characterized as unique to the company or

department as well as generating one's own original ideas, creative behavior is typically regarded as one part of IWB. Additionally, whereas IWB encompasses both the creation and implementation of new ideas, creative behavior just addresses the innovation of new ideas. Generally speaking, innovation and innovation are distinguished in the same ways.

The Path-Goal Theory, a leadership theory focuses on how leaders can motivate their followers to achieve goals by clarifying paths to success, removing obstacles, and providing necessary support. While the theory primarily emphasizes how leaders can facilitate goal attainment, it can also shed light on the relationship between knowledge sharing and employee innovativeness within an organization (Malik et al., 2016). In the context of knowledge sharing and employee innovativeness, leaders employing the Path-Goal Theory can clarify the pathways to encourage and facilitate knowledge sharing among employees. By communicating the importance of knowledge sharing in innovation, leaders set the direction and highlight the relevance of shared information to innovative outcomes (Malik et al., 2016). Effective leaders using this theory identify and eliminate barriers that hinder knowledge sharing. This could involve addressing hierarchical constraints, lack of communication channels, or a culture that discourages sharing ideas. Leaders create an environment where employees feel comfortable sharing their insights and experiences. Leaders utilizing the Path-Goal Theory provide the necessary support and guidance to foster knowledge sharing conducive to innovation. They offer resources, mentorship, and encouragement, incentivizing employees to engage in sharing knowledge that could contribute to innovative solutions.

According to the Path-Goal Theory, leaders adapt their style to fit the needs of their employees and the situation. In the context of fostering innovativeness through knowledge sharing, leaders might adopt different approaches based on the nature of the innovation, the team's dynamics, and

the knowledge-sharing culture within the organization (Yuan & Woodman, 2010). By leveraging the Path-Goal Theory, leaders can motivate and guide employees toward innovative behavior through knowledge sharing. The theory highlights the role of leaders in creating a supportive and encouraging environment where knowledge is freely exchanged, leading to the generation of novel ideas and innovative solutions. Leaders who apply the principles of the Path-Goal Theory effectively can influence the organizational culture, encouraging knowledge sharing as a means to achieve innovative outcomes.

2.2 Concept Review

The empirical review has been developed in accordance with the study's specific objectives. The contributions of transformational leadership on employee innovativeness under the mediatory variables of knowledge sharing have been acknowledged in literature.

2.2.1 An Overview of Leadership Styles

It is difficult to pinpoint a single leadership style and assert that it is applicable in every circumstance because there are many different types of leaders. Stated differently, determining which type of leadership is superior to another can be challenging. It is necessary to select the right leadership style based on the circumstances, followers, and context. It's believed that effective leaders allow their team members the autonomy and encouragement they require to meet the goals of the organisation according to Al-Malki and Juan (2018). It is essential for leaders to provide motivating leadership so that team members can help the organisation reach its objectives. Among their most valuable assets, the team members view the leader's position. This makes sense because team leaders are essential to setting ground rules for the group and supporting other members in resolving conflicts. The need for leaders among team members has led to the development of new

ideas about how leaders might benefit the members of the team. The effectiveness of the teamwork depends on the leaders' management style.

Task leadership is primarily concerned with ensuring that the task is completed accurately and on time. behavior or management style. Leaders that are task-oriented produce plans with realistic objectives that can boost group output. On the other side, person-focused leadership focuses primarily on improving the atmosphere that inspires and motivates employees (Al-Malki & Juan, 2018).

To ensure the effectiveness of the teamwork, leaders should adhere to the various team styles outlined by recent Deloitte research. Pioneering teams are willing to take chances and constantly work to surpass expectations in order to attain their goals and objectives. Additionally, innovators are constantly looking for new ideas and innovative solutions to problems that already exist. Guardian is a different fashion trend that is well-liked by teams. Guardians might be seen of as the opposite of pioneers' style. Guardians are less prone to change than pioneers since they always favor stability. The next style is called drivers; who are quite swift and enjoy a challenge. They make an effort to address new issues as quickly as they can use the information and resources available to them. In addition to the three team forms mentioned previously, integrators are another type that is utilised. They place a higher priority on relationships and believe that collaboration is the only way for teams to succeed. Teams that adhere to the aforementioned approaches are therefore seen to benefit from a variety of factors, including innovation, improved teamwork, and speedy decision-making.

There are differences in leadership styles that might affect an organization's effectiveness or performance. Leading is a social influence process where a leader recruits followers to help them

accomplish goals of the organisation (Nanjundeswaraswamy & Swamy, 2014). A person who delegated work to others or used influence to persuade them to accomplish something is a leader. Employers today need competent executives who understand the complexities of the rapidly changing global environment. Employee effectiveness will soar if the work is well-structured and the team member and the leader get along well. A leader's leadership style is defined as their generally consistent pattern of behaviour. Various leadership ideologies may have an impact on effectiveness or organisational performance. Ezenagu (2017) assert that the characteristics of a leader's leadership style have been substantially responsible for the success or failure of appropriate companies, nations, and other social units.

Leaders that are autocratic or authoritarian set strict rules about what has to be done, when it has to be done, and how it should be done. It is also evident that the followers and the leader are distinct from one another. Decisions made by autocratic leaders are made independently, with little to no input from the organization as a whole. Scientists found that decision-making was less creative under autocratic rule (Pizzolitto et al., 2022). It is harder to go from an authoritarian to a democratic mindset than the other way around. When this strategy is used improperly, it is commonly perceived as being repressive, controlling, and autocratic. Democratic leadership, often known as participative leadership, is usually the most successful style of leadership. Democratic group leaders set the agenda, but they also interact with the group and value suggestions from other members. Participant leaders promote participation of the group while retaining ultimate decision-making authority. Members of the group are more driven and innovation due to their sense of involvement in the procedure (Khan et al., 2015).

The literature considers leadership to be a topic that is often studied. People define leadership as a person's approach to directing others. Although leaders are in charge Various leadership

philosophies have varied approaches for effectively allocating activities and roles. Leaders are thought to have a positive impact on the effectiveness of the organisation through influencing the team members. Leaders in particular have a big influence on their followers in the organisation. To assess the efficacy of distinct leadership philosophies, such as transactional and transformational, it is imperative to comprehend their mechanisms of operation..

The followers of transactional leadership are usually driven by an incentives system. But still, this strategy does not provide long-term incentive. Using transformational leadership as an example, this approach helps to increase teamwork inside the firm (Bass & Avolio, 1990; Klaic et al., 2020). Transformational leaders give their followers a feeling of inclusion in the business. These executives inspire employees to put company goals ahead of personal goals and interests with their powerful inspirational vision. These leaders are seen as energetic and eager. Conversely, CEOs that practise laissez-faire offer their staff a happy work environment and the autonomy to make their own decisions. Laissez-faire executives often neglect to offer feedback on finished work because they give their subordinates total autonomy over decision-making. (Yang, 2015).

2.2.2 Transformational Leadership Style

According to Nugroho et al. (2020), transformational leadership style places an emphasis on the manner in which individuals interact with one another and forge bonds that boost motivation in both the leader and the followers. Transformational leaders are more likely to pay close attention to their followers. Transformational leadership, according to Purwanto et al. (2021), is an approach to leadership in which individuals interact with one another and form bonds that increase the motivation and morale of leaders and followers. Those who employ this kind of transformational leadership typically motivate their people to go above and beyond expectations by sharing the vision, leading by example, providing support, and igniting the desire for change for the better..

Because they respect, admire, and when followers trust their leader, they often go above and beyond what is asked of them. With cunning and charm, leaders enthuse and alter the people under their care.. Yunita and Dewi Purba (2021) assert that leaders have direct authority and the capacity to have a profound influence on their subordinates. Teachers' behavior will be strongly influenced by managers' leadership style given that leadership is a method by which people can mentor other members of a group toward reaching shared objectives. According to Tschannen-Moran (2003), the indications used to assess transformational leadership are as follows: 1) Idealized influence; strong self-belief in achieving the objectives of a transformational leader. 2) Inspirational motivation refers to transformational leaders' attempts to motivate their people to achieve seemingly impossible goals. 3) Intellectual stimulation, which refers to transformational leaders' initiatives to encourage educators to adopt fresh viewpoints 4) Individualized consideration, which is the way a transformational leader acts when he considers, considers, and decides what his teachers' requirements are.

One of the most extensively researched leadership philosophies is transformational leadership, which has demonstrated effectiveness in addressing internal Organisational disputes and improving performance (Avolio et al., 2009). Specifically, studies on transformative leadership have demonstrated that it positively affects a variety of organisational outcomes, such as greater effectiveness at the management, employee, and team levels (Hater & Bass, 1988; Krishna, 2011). Additionally, transformational leadership style is linked to increased positive results, such as reduced turnover thoughts and burnout (Bycio et al., 1995), as well as improved employee sentiments, such contentment with their work (Podsakoff et al., 1996; Walumbwa et al., 2005) and organizational commitment (Constable & Russell, 1986; Corrigan et al., 2002).

According to theoretical studies on transformational leadership, this behaviour is especially crucial during periods of organisational transition, like when a novel practice is implemented (Avolio et al., 1999; Bass & Riggio, 2006). The capacity to recognise the need for change and motivate adherents to set aside individual interests in the team's and business's favour, and inherently inspire followers to greater performance levels are all characteristics of transformational leaders (Judge & Piccolo, 2004). The relationship between transformational leadership and change Scientific research has been done on implementation in a number of research. For instance, in companies undergoing a big system overhaul. Aarons et al. (2011) found that maintaining a positive workplace culture required transformational leadership in particular. Another illustration is the research by Carter et al. (2013), who discovered that transformational leadership was linked to better during the execution of organisational change, the quality of the relationships with subordinates was found to be associated with improved task performance and civic behaviour.. The attitudes of employees are influenced by transformational leaders in a variety of ways, particularly regarding perspectives on change. According to Bommer et al. (2005) analysis, "transformational leadership transforms" individual employees to increase their capacity for and openness to enacting organizational change.

The procedure of fostering motivation and loyalty among employees to fulfill organizational goals, missions and goals that leaders have advocated is known as transformational leadership (Alsayed et al., 2012). It has been regarded as a leadership strategy that alters followers for the better with the intention of molding them into leaders (Mena et al., 2018). The four essential components of transformative leadership, according to Odumeru and Ogbonna (2013), are idealized influence, mental stimulation, inspiring drive, and individual consideration. They contend that this style of strong focus is placed by leaders on the outcomes and accomplishments of the followers, which

motivates them to work harder to forward the organization's objectives, a position that is confirmed by Russell et al. (2018). For instance, the emphasis on individual connections, which is essentially the core business of the higher education sector, is in line with transformational leadership approaches. Furthermore, transformational leadership is thought to be a leadership style that is more likely to produce creative ideas that may handle the problems of a disrupted corporate setting (Black, 2015).

According to Birasnav et al. (2011), organizations that want to capitalize on human capital for sustained competitive advantage must adopt a transformational leadership approach. Additionally, Khan et al. (2018) contend that transformational leadership's ability to modify knowledge management systems can have an influence on the efficiency of human resources. According to Birasnav et al. (2011), who conducted research on the correlation between transformational leadership and human capital, transformational leaders have the most impact on human capital. They do this by modifying their employees' views of the benefits of human capital through knowledge management processes, creating organizational cultures, and encouraging communication.. Transformational leadership is seen to have a favorable impact on the performance of SMEs, and this association is shown to be important when it comes to the relationship between leadership behaviors and SMEs (Yanney, 2014).

Leadership has also been distinguished from management, which is concerned with organizing work, keeping track of how the organization is run on a daily basis, and assigning funds and tasks to accomplish organizational objectives. Transformational, transactional, and laissez-faire leadership styles, along with democratic and situational leadership styles, have all been offered as alternative leadership models, such as those of Bass (1986). However, the transformational and transactional leadership styles - which are described below – are of importance to this study.

Leadership that is transformational has been characterized as having the capacity to inspire followers with a compelling vision, inspire action, and empower individuals to bring about change. By attending to their needs, listening intently, promoting their progress, counseling, and guiding them, they care for and treat individual employees.

In addition, the complexity of the public sector necessitates a leadership style that draws on a variety of behavioral philosophies, as this will be the most effective way to foster staff innovation and high performance (Baafi, 2020).

2.2.3 Employee's Innovative Work Behaviour

According to West and Farr (1990), innovative work behavior (IWB) is "any actions taken by employees with the intention of creating, introducing, and/or applying (within a job, group, or organisation) of concepts, methods, goods, or practises that are fresh to the relevant adoption unit and are purportedly very beneficial to the relevant adoption unit." Employee innovative work behavior (IWB) is described by Yuan and Woodman (2010) as "the creation, acceptance, and application of novel ideas for goods, technology, and work practices by employees." simply stating that fresh concepts are being applied to a current activity. According to Scott and Bruce's (1994) theory, innovative work behaviour includes proactive organisational actions like putting good ideas into practise in addition to the generation of original ideas.. Currently, it is common perception that innovative work behavior includes a wide range of actions linked to idea production, concept support, and idea implementation (Scott & Bruce, 1998). The IWB of employees is at the core of an efficient organization. The literature has made reference to the importance of employees' creative work behaviors for organizational sustainability (Agarwal et al., 2012). It is crucial to determine what supports or promotes employees' innovative behavior

because it is the cornerstone of the organization's ability to operate at a higher level (Scott & Bruce, 1994).

2.2.4 Dimensions of Innovative Work Behaviour

Theoretical distinctions between various aspects, which are frequently connected to various phases of the innovation process, are made in a significant amount of IWB research. One operationalization of IWB as a multi-stage process is provided by Scott & Bruce (1994). While De Jong and Den Hartog (2010) came to the same conclusion about concept exploration, idea generation, idea championing, and idea execution, Scott and Bruce (1994) made a distinction among generating ideas, idea promoting, and idea realisation. The IWB process, according to Kleysen and Street (2001), entails opportunity discovery, generativity, formative inquiry, advocacy, and implementation. However, Scott and Bruce's operationalization is the one that has been most widely used since it makes a clear distinction between the different processes, demonstrating three distinct tasks that don't cross. Secondly, although numerous models over three levels processes since been created, there is frequently no empirical support for their validity (Nijenhuis, 2015). Searching for ways to enhance current products or procedures or solve problems by combining or rearranging information and preexisting notions includes idea exploration and generation (De Jong & Den Hartog, 2010). Once an idea is generated, concept promotion becomes important. This often means that the formation of a strong coalition is necessary (Galbrath, 1982), the necessity to mobilise reserves (Howen & Higgins, 1990; Ford, 1996), risks must be taken and the appropriate individuals must be engaged (Kanter, 1983; Amabile 1996) since the majority of ideas are uncertain about whether their advantages will (Kanter, 1988). Lastly, but just as importantly, rolling out novel initiatives involves actions such as creating a model or prototype of the innovative product, technology, process, or technique. (Janssen, 2004). Because of this, the

last stage of the IWB focuses on actually creating, testing, and implementing the creative endeavour.

2.2.5 Knowledge Sharing

Singh et al (2021) highlighted the significance of knowledge sharing within organizations. These studies often explore the factors influencing knowledge sharing behaviors among individuals and teams. Factors such as organizational culture, trust, communication, leadership support, and technology have been identified as crucial drivers that either facilitate or hinder knowledge sharing practices. Kim and Park (2020) delved into the impact of knowledge sharing on organizational performance. Empirical evidence suggests that effective knowledge sharing leads to increased innovation, better problem-solving capabilities, enhanced decision-making processes, and overall improved organizational performance. Organizations that foster a culture of knowledge sharing tend to be more adaptable and competitive in dynamic environments (Sa'adah & Rijanti, 2022). Moreover, role of knowledge sharing in different contexts, including virtual teams, communities of practice, and cross-cultural settings. Understanding how knowledge is exchanged and utilized across diverse settings has been a focus of empirical investigations, shedding light on the nuances and challenges associated with sharing knowledge across boundaries.

Additionally, Deng et al. (2023) emphasize the role of technology in facilitating knowledge sharing. Platforms, tools, and systems designed to support knowledge sharing activities have been studied extensively to understand their effectiveness in encouraging collaboration and information exchange among individuals and groups. However, challenges related to knowledge sharing persist. Studies have identified issues such as knowledge hoarding, lack of incentives, fear of knowledge loss, and inadequate infrastructure as barriers that impede effective knowledge sharing within organizations (Silva de Garcia, 2022). Knowledge sharing have contributed significantly to

understanding the complexities surrounding this concept. They provide valuable insights into the drivers, benefits, challenges, and contextual factors influencing knowledge sharing behaviors and its impact on organizational performance (Ahmad & Karim, 2019).

2.3 Empirical Review

2.3.1 Transformational Leadership and Employee Innovativeness

Lewis et al. (2018) came to this conclusion after surveying the cities of Rotterdam, Copenhagen, and Barcelona, there are 322 senior administrators. They discovered that the actions of transformative leaders had a major beneficial impact on creativity. To that end, Noteworthy is the fact that transformational leadership places a strong emphasis on charisma, employee motivation, and the communication of motivating visions. Ricard et al. (2017) used a five-item scale to quantify transformational leadership in the study, which employs using structural equation modelling, the data are examined. An innovation capacity measurement with 3 items was employed in the study. Similar findings were reached by Li et al. (2019), who used data from a survey of 281 employees of multinational corporations in China to draw their conclusions. They found that transformational leadership has a significant and strong effect on employees' innovative behavior. Using the SPSS macro procedure, the analysis was done. The Multifactor Leadership Questionnaire's 12 components were used to gauge transformational leadership (MLQ).

According to Jaskyte (2004), there has not been much attention paid to the actual investigation of the association between innovation and leadership. However, some scholars have, amongst other variables investigated the relationship between transformational leadership and employees' innovativeness. Majority of such studies have shown that there is a close relationship between these variables. Several research studies have demonstrated the importance of innovation within companies; consequently, effective leadership has been seen as a potential catalyst. Employee

creativity can be encouraged by transformational leadership by creating an innovative work environment (Jaiswal & Dhar, 2015). Given the close linkage between transformational innovative work practices and leadership, managers should strive to exhibit transformational leadership qualities for the purpose of raising their staff members' ability to innovate (Afsar et al., 2014).

Epitropaki (2001) looked at the connection between innovation and transformational leadership. According to the study's findings, innovation can be successfully achieved when a leader adopts a transformational style. Reuvers et al. (2008) discovered a favorable and significant correlation between transformational leadership and innovative work behavior. The results from Khan et al. (2009) found that employee innovation is positively and significantly impacted by transformational leadership. Shunlong & Weiming (2012) found that transformational leadership was notably positively correlated with the innovative behaviour of the employees. The findings of the Mokhber et al. (2015) study confirm the positive relationship between employee innovation and transformational leadership. Al-edenat (2018) discovered a positive connection between employees' innovativeness and transformational leadership. In light of the results presented here from earlier research, the following hypothesis is put forth:

H1: Transformational leadership has a significant and positive effect on employee innovativeness.

2.3.2 Transformational Leadership and Knowledge Sharing

Various approaches exist to inspire individuals and execute organizational plans. Effective leadership stands out as one such approach, playing a multifaceted role beyond mere organizational management. It significantly influences knowledge generation, dissemination, and utilization within an organization, unlocking its full potential. Transformational leaders possess the ability to engage their employees in diverse organizational activities, allowing them to comprehend the significance of tasks, thus fostering increased motivation and better performance (Humphrey,

2002). Notably, individuals play a pivotal role in the knowledge-sharing process; knowledge originates at the individual level and gradually extends to groups and eventually the organizational level. Consequently, individuals can exchange experiences and technical information through this progression. However, for effective knowledge sharing, several factors, with leadership style being foremost, must be taken into account (Xiong & Deng, 2008).

Leaders bear the responsibility of cultivating a culture that esteems knowledge, encourages its dissemination, and fosters allegiance within the organization (Bollinger & Smith, 2001). It is essential to recognize that leaders within a company are not the sole repositories of knowledge; instead, they should promote individuals to share their insights. Hence, the pertinent question arises: What type of leadership best suits a knowledge-based organization? (Bukowitz & Williams, 1999). According to Politis (2001), the concept of knowledge sharing within a company gives rise to a transformational style of leadership. Furthermore, leaders need to create new opportunities for employees to share knowledge, thereby entrusting them with the responsibility to enhance their knowledge pool. Leaders must evaluate and harness the potential of workers to leverage their intellectual capacities optimally. Transformational leaders guide others in making informed intellectual decisions based on their expertise (Nonaka & Takeuchi, 1995).

The effectiveness of the knowledge-sharing process relies on the support provided by the transformational leadership style, particularly through intellectual stimulation (Chen & Barnes, 2007). As previously mentioned, transformational leadership positively correlates with knowledge sharing within organizations (Yang, 2007). Carmeli and Levi (2010) propose that the effectiveness of transformational leadership hinges upon the reciprocal relationship between leaders and members. Leaders are expected to enhance employees' relational identification to boost knowledge-sharing activities.

H2: There is a positive and significant connection between transformational leadership and knowledge sharing.

2.3.3 Knowledge Sharing and Employee Innovativeness

According to Serenko and Bontis (2016), knowledge sharing is currently regarded as one of the most significant management study subjects. Knowledge sharing, refers, more broadly, to the practise of integrating organisational knowledge and human experience into business processes through channels of communication (Oyemomi et al., 2019). Helmstädter (2003) describes sharing of knowledge as human interactions agents when knowledge serves as the primary input. Employees who share their expertise are able to trade tacit and explicit information as well as experience and skills (Hoegl et al., 2003). The capacity to translate framed experiences, data, and expert insights into actions is another aspect of knowledge sharing (Wiewiora et al., 2013).

Little information is provided in the literature that is currently available about what knowledge sharing actually entails in organizations and what the most obvious and quantifiable results of effective knowledge sharing might be (Lee & Choi, 2003). Even though it can be quite challenging, sharing information with coworkers has a favourable correlation with reduced manufacturing costs, quicker fulfilment of fresh development initiatives, innovation capability, performance of the team and the business, including revenue growth from services and new products. The knowledge sharing techniques, according to some academics, may not necessarily boost organizational performance. Instead, information sharing techniques may result in intermediate effects that enhance organizational performance (Law & Ngai, 2008; Lee & Choi, 2003).

The sharing of knowledge among employees is crucial to its success. Applying knowledge to the creation of new goods or services or to their enhancement leads to a continuous competitive edge (Ceylan, 2013). Although economic resources, modern infrastructure, and technology all contribute to enabling innovation, worker knowledge exchange is the primary force behind it. Innovations frequently necessitate the exposure and manipulation of tacit knowledge, or information that a worker has picked up informally and uses instinctively. Sharing knowledge thus lays the groundwork for creative work practices (Hansen, 1999). Additionally, such collaboration helps a firm improve its core competencies and increase its competitiveness (Chuang, 2004). The exchange of knowledge is one element that encourages innovativeness. Without knowledge exchange, innovation is not likely to happen (Kremer et al., 2019). Collaborative learning has proven to be a productive and successful method for successful innovation (Adams et al., 1998). The creation of unique ideas, their promotion, and notably their implementation-related activities are all examples of innovative work practices. According to our assessment, each of these appears to include information transfer, also known as knowledge sharing. Experts contend that businesses that encourage employees to share their knowledge will be more innovative than those that do not. Although several innovation taxonomies exist, there are four different categories of innovations, as defined by OCDE (2005): product, process, organizational and marketing. To benefits and keep a competitive advantage, innovation is one of the most crucial organizational capabilities. Three categories can be used to define the innovation process: the people involved, the sorts of activities that lead to innovation, and the different forms of innovations (Diercks et al., 2019). Most cultures and institutions are not adequately orientated toward innovation, according to Pfothenauer et al. (2019), hence we cannot secure economic competitiveness. The need for innovation is also

growing among global politicians. Innovation aims to unite innovators and regulators so they can come to an agreement on how a particular breakthrough may be implemented.

Many authors claim that knowledge sharing techniques in businesses can help them gain a competitive advantage. In more recent studies, the effects of knowledge sharing on numerous facets of innovation were empirically addressed. Nevertheless, there aren't many studies that connect innovation, information exchange, and company performance in a comprehensive way. In order to increase innovation speed or quality, businesses should consider the crucial preconditions that result in explicit or tacit knowledge sharing.

Enhancing an employee's capacity for innovation, which is a subset of the total firm's capacity for innovation, requires knowledge sharing, a key knowledge management technique (Ologbo et al., 2015). In their study, Ologbo et al. (2015) discovered that knowledge sharing affects employees' capacity for innovation. Crhová and Matošková (2019) examined the relationship between knowledge sharing and three dimensions of financial success, innovativeness, and human resource utilisation within a company. The findings demonstrated that information exchange and innovativeness are strongly correlated. In their study, Lathong and Saeheng, (2021) discovered that knowledge exchange events have a bigger impact on a person's capacity for innovation than they do on an organization. It can therefore be said from the previous studies that:

H3: There is a positive and significant connection between knowledge sharing and employee innovativeness.

2.3.4 Transformational Leadership, Knowledge Sharing and Employee Innovativeness

Studies shows what part knowledge-sharing behavior plays as a mediator in assessing the link between transformational leadership and employee innovativeness. Researchers have looked into

the possibility that sharing knowledge serves as an intermediary in the connection between creative behavior and transformational leadership (e.g., Zheng et al., 2017; Bednall et al., 2018).

Birasnav et al. (2013) reveals that transmission and application of knowledge totally mediated the association between transformative leadership and process innovation. Zheng et al. (2017) reveals that knowledge sharing and innovation performance are significantly and positively impacted by transformational leadership. Transformational leadership's relationship to innovation performance is, however, somewhat mediated by knowledge sharing. Hussain et al. (2017) found that employees' innovativeness and transformational leadership have a positive linkage, and knowledge sharing plays a mediating function between transformational leadership and employee innovativeness. According to Bednall et al. (2018), knowledge sharing mediates the linkage between transformational leadership and innovativeness. Afsar et al. (2019), discovered that relationship between transformational leadership and innovative work practices is mediated by knowledge sharing. Sudibjo et al. (2021) found that through knowledge-sharing behaviors, transformational leadership has a positive effect on innovative work behavior. According to Sudibjo and Prameswari (2021), through knowledge-sharing, transformational leadership has a positive impact on innovative work behavior. On the premises of the findings of previous studies highlighted above, the researcher hypothesises that:

H4: Knowledge sharing positive and significantly mediate the relationship between transformational leadership and employee innovativeness.

2.4 Conceptual Framework

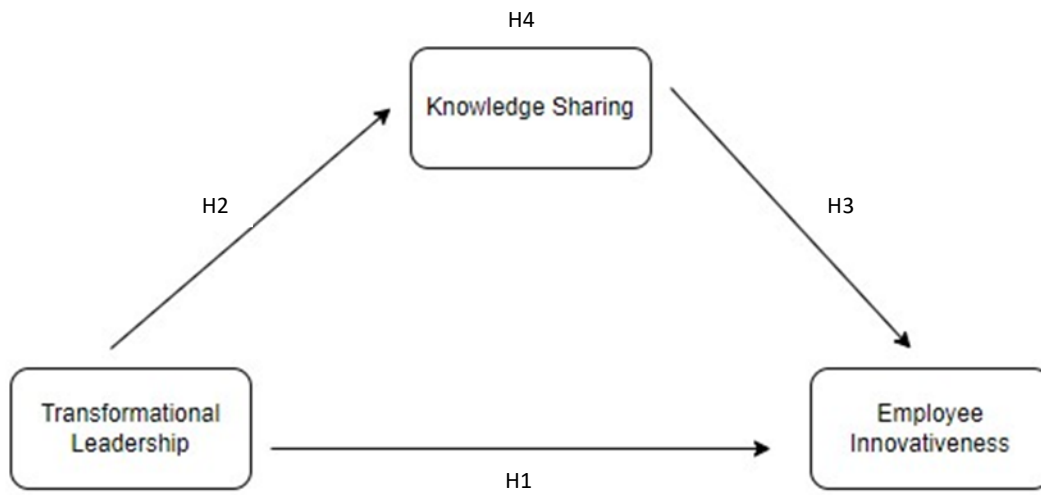


Figure 2.1: Conceptual Framework of Study Variables

(Source: Author's Construct, 2023)

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The research sought to determine how transformational leadership affected workers' innovativeness in Health Training Institutions in Ashanti Region, Ghana as mediated by knowledge sharing. The methodologies used in the study were reported in this chapter, which was structured as follows: research methodology, population, study region, sampling technique, data gathering tool, data collection methods, as well as data analysis and processing.

3.2 Research Design

Research design, according to Van Wyk and Taole (2015) is the general method used to connect relevant empirical studies for conceptual research questions. As suggested by Creswell (2018), For a quantitative research strategy, there are three primary types of research designs: longitudinal designs, non-experimental (such as case studies and surveys), and experimental (scientific experiments). The study's causal research approach, which compares the associations between variables, makes it non-experimental. Because of its special ability to assist researchers in establishing a causal connection among two or more factors in an effort to show how a variable impacts other(s), a causal research design was used in this research (Creswell, 2014). Additionally, when analysing data for a causal research design, using statistical tests like regression and correlation aids in inference-making (Creswell & Creswell, 2017). According to Blumberg et al. (2014), a causal design, extends transcend studies that are descriptive and enables the study's conclusions to be broadly applied. Also, the cross-sectional survey time horizon method was used, allowing for the collecting information, either quantitative or qualitative, on a large

number of units at once with the goal of analysing the data and identifying correlations between factors.

3.3 Research Approach

There are three, in accordance with Creswell and Poth (2016), primary methods for conducting research: mixed methods, qualitative methods, and quantitative methods. According to Creswell (2014) The goal of the quantitative approach is to describe events by the collection of numerical data and subsequent analysis through methods based on mathematics, including statistics. Additionally, the researcher would be able to extrapolate sample results to the population from which they were obtained thanks to the quantitative research approach. Case studies, observation, guided interviews, and literature reviews are methods for obtaining data for the qualitative analysis. (Yates, 2014). To prepare for qualitative analysis, the researcher gathers information from the quantitative survey results through in-person interviews with project management committee members. Mixed methods are a strategy to gather and combine both quantitative and qualitative data at a given point in the research process inside a single study in order to shed light on the research subject. (Creswell, 2005; Tashakkori & Teddlie, 2003). According to Creswell et al. (2006), the patterns and details of a situation are captured in a study by combining both forms of data because both qualitative and quantitative approaches are not adequate in and of themselves.

According to Saunders et al. (2015), there are three key differences between qualitative and quantitative research methodologies. The first distinction made by the experts is that in order to develop study hypotheses, a researcher using a quantitative research approach can separate, identify, and connect variables. This is untrue in reference to the qualitative research methodology. Second, the authors distinguish themselves by pointing out that impartiality in data collecting and analysis methodologies is made possible by the quantitative research technique. However, in the

course of gathering and analyzing data for qualitative research, subjectivity is frequently introduced. Generalizing sample results to the entire population is not the aim of the qualitative research technique, but the quantitative research method makes use of bigger samples and permits sample results to be applied to the whole population. A quantitative research methodology was used in this investigation due to the type of research goal, the precise aims, the hypotheses, and the kind of primary data that needed to be collected and examined. Considering that the study examined causal relationships between the variables under investigation, a quantitative research design was appropriate (Saunders et al., 2009).

3.4 Study Locations - Health Training Institutionss in Ashanti Region

Ghana's Health Training Institutionss are essential to the country's healthcare system because they offer specialized instruction and training to people who want to become nurses and midwives. Scatered across the country, these colleges place a strong emphasis on producing knowledgeable and trained healthcare professionals that can help Ghana provide high-quality healthcare. In this study, HTIs in Ashanti Region are considered, and they are listed in Table 3.1.

Table 3.1: Health Training Institutionss in the Ashanti Region

Name of College	Location
Health Training Institutions	Fomenea
Health Training Institutions	Kokofu
Health Training Institutions	Tepa
SDA Health Training Institutions	Asamang
Presbyterian Health Training Institutions	Agogo
Health Training Institutions	Kumasi

SDA Health Training Institutions	Kwadaso
Health Training Institutions	Mampong
St. Patrick’s Health Training Institutions	Maase Offinso
St. Michael’s Health Training Institutions	Pramso
Ear, Nose and Troat Nursing	Kumasi

Source: Field Data (2023)

3.5 Study Population

The components that can supply the required information are referred to as the study's population, while the frame of sampling is an exhaustive inventory of all the components inside a group that is suitable for serving as a sample's source (Malhotra & Birks, 2007; Saunders & Townsend, 2016). The population was made up of employees of Ghana's Ashanti Region's health training institutions. Participants in the research must possess extensive understanding about order to ensure accurate data, as they are required by law to be adults (those older than 18).

3.6 Sampling Procedure and Sample Size

A sample, as stated by Malhotra and Birks (2007), The people in the demographic were employees of Ghana's Ashanti Region's health training institutions. It's critical to keep in mind that study participants are legally considered adults (those who are older than 18), thus they should possess in-depth information in order to ensure correct reportage. (Saunders et al., 2015). Sampling that is both non-probability and probability techniques are available to researchers. The technique of probability sampling states that every component of the population has an equal chance of being selected for every instance and that this may be calculated. However, non-probability sampling means that the researcher must use human judgement to select sample components because it is

unknown how likely it is that each example in the population will be selected (Sekaran & Bougie, 2016). Saunders et al. (2012) broadly classified sampling techniques into probability and non-probability sampling techniques. In the case of probability sampling techniques, the chance (probability) of each case being selected from the population is known and is normally equal for all cases. On the other hand, in non-probability sampling techniques, the probability of each case being selected from the total population is unknown. This study used convenience sampling, which is a non-probability sampling technique. Convenience sampling enables a researcher to select respondents which are easily available and willing to be engaged in the study. This approach was selected because it is straightforward and easy to implement. Researchers can quickly gather participants who are readily available, saving time and resources compared to more complex sampling methods. The Krejcie and Morgan Table was used to estimate the study sample size. Based on the model Table, using 700 as the total staff for the institutions, sample size of 248 was anticipated but 244 was used for the study. Considering the fact that only 244 questionnaire retrieved from the respondent were good for the analysis of the study.

3.7 Source of Data

According to Polit and Hungler (1999), data is any information gathered throughout the course of a study or research project. Both primary and secondary data are possible. According to Corti et al. (2019), "primary data" refers to information that may be acquired from sources including systematic observation, data from archives, answers to surveys and interviews, and case studies that have been put together. The synthesis of public and unpublished research-related papers is known as secondary data information, and it includes the research's logical structure (Corti et al., 2019). Information was gathered for the purpose of this study using a primary data source. The

study used a questionnaire as a research tool to collect primary data. Because it has not yet been published and is more dependable, authentic, and impartial, the study used primary data.

3.8 Data Collection Instrument

A structured questionnaire was the tool utilized to get the data. In order to collect the information necessary to respond to the research inquiries and achieve the study's goals, closed-ended questions were used. Answers to closed-ended questions must be chosen from a list of possibilities, and each choice must be taken into consideration independently of the others. Given the respondents' hectic schedules, it is justified to utilize a self-administered questionnaire so they can respond in an unsupervised manner. According to Sekaran and Bougie (2016), using a questionnaire to collect data ensures higher uniformity, consistency, and impartiality. A questionnaire is effective for gathering information from a large number of respondents, is less expensive than conducting interviews, decreases interviewers' biases, and is quick and simple to complete. Unfortunately, this instrument has significant flaws, including poor clarity, low response rates, and potential literacy difficulties (Kaplan & Saccuzzo, 2017). Despite these issues, the questionnaire was still used because it is often regarded as an effective tool for gathering data for a quantitative study. The questionnaire's content was derived from the research goals and questions of the study, which was then written in a straightforward and suitable style to prevent uncertainty and draw in responders' attention. 22 measurement items were used under transformational leadership and its dimensions which were adapted from Carless et al. (2000). Also 19 measurement items were used under employee innovativeness which were adapted from Hurt et al. 1977; Pallister and Foxar (1998). Lastly, 15 measurement items were used under knowledge sharing and its dimensions which were adapted from Hoff and Ridder (2004).

3.9 Validity and Reliability

The study made sure the research tool (questionnaire) was valid and reliable by using a variety of ways to assess and enhance it. One way to address face validity was to provide peers with extensive research backgrounds close reading privileges so they could identify and correct any mistakes. In an attempt to guarantee content validity, the instrument underwent one last thorough examination by a supervisor who specialised in the subject topic before being put into use. Contrarily, the degree of internal consistency of the measuring equipment over time is what is referred to as reliability. (Saunders, 2011). This means that even when used by various researchers, a tool is deemed reliable if it consistently yields the same results when concepts are measured from the same or comparable respondents. Another way to define dependability is the consistency of an instrument or method of acquiring data (Cresswell, 2014). The study's research instrument underwent a reliability test, the findings of which including the Cronbach alpha were reported in the introduction of the following chapter. A Cronbach alpha of 0.7 indicates that an instrument is deemed dependable or above.

3.10 Data Collection Procedure

An introduction letter that had been signed by the departmental head was obtained and brought into the field before any data was collected. This measure was implemented to guarantee that participants would not contest the legitimacy of the complete data gathering procedure. Following approval from relevant authorities, the respondents were given the questionnaires at random. The employees of Health Training Institutions in Ashanti Region were given the questionnaire to complete. The data collection operation was given ten (10) working days in order to guarantee a

maximum and timely response rate. The questionnaires were collected after the predetermined amount of time. The main challenge faced during the exercise was certain staff members' reluctance to participate in the data collection process for a variety of reasons, including rigid schedules and concerns about confidentiality. Nevertheless, this challenge was lessened by attending to the complaints of the respondents. For example, because of their busy schedules, the employees were forced to complete the questionnaires during breaks.

3.11 Ethical Consideration

The participant's rights, values, and preferences must be respected by the researcher. All researchers, according to Gay et al. (2009), should be aware of ethical issues and take care to address them in their study. Participants must not suffer social, psychological, or bodily damage, and researchers must get their informed permission. The following moral concerns were taken into account based on this recommendation to get the cooperation of the participants. Respect for the participants' rights, values, and preferences is required on the side of the researcher. Once more, the researcher secured informed permission and made certain that research subjects were aware of the purpose of the study and any risks associated with participation. As a result, it was less likely that volunteers would be exploited or convinced to take part in the study when they were unaware of its criteria. Additionally, the researcher explained to the respondents that the survey was for academic reasons only and that their confidentiality would be guaranteed, which in part encouraged them to react honestly.

3.12 Data Analysis

Verifiable verifications were carried out at the end of the complete data collection procedure to ensure and correct data. Consequently, before data processing and coding any inconsistent and

Partially-filled survey forms were suitably eliminated. In order to find the underlying truth, Pandey and Pandey (2015) define data analysis as the examination of the organized content. The collected data was meticulously examined and verified for accuracy. The Statistical Package for Social Sciences version 22 (SPSS Version 22) was used to code and enter the questionnaire. This program was employed since it aids in the organization and summary of data to include crucial criteria that are helpful for data analysis. The aims of the study were discussed using descriptive statistics (mean, standard deviation), as well as regression analysis.

3.13 Reliability

A scale's degree of reliability reveals how error-free it is from chance. (Pallant, 2013) or how consistently When repeated measurements are made, it produces results. taken (Kent, 2007). A structured questionnaire was the tool utilized to get the data. In order to collect the Details needed to address the research inquiries and achieve the study's goals, closed-ended questions were used (Pallant, 2013). It should be 0.7 or greater for the individual consistency reliability. The Cronbach Alpha values were all around 0.9 as shown in Table 4.2 for the variables; "Transformation leadership," "Employee Innovativeness," and "Knowledge Sharing." This suggests that every construct and scale that was utilized to evaluate the variables for the study was valid.

Table 3.2: Reliability of Questionnaire Items for the Study Constructs

Variable	Cronbach Alpha	No. of Items
Transformational Leadership (TL)	0.948	25
Employee Innovativeness (EI)	0.937	18
Knowledge Sharing (KS)	0.908	15

Source: Field Data (2023)

3.14 Chapter Summary

This chapter specifically examined the methodologies employed in the study as well as the research design, study organisation, population, sampling procedure, data collection instrument, data collection protocol, data processing, and analysis. Specifically, the chapter clarified that the causal design of the study was used in order to accomplish its goals. It also showed that to analyze the data acquired in an effort to meet the goals of the study, a combination of inferential and descriptive statistical tools were used. The study's findings and analysis were reported in the next chapter.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

This chapter entails the socio-demographic characteristics of respondent, assesses the effect of transformational leadership on employee innovativeness in Health Training Institutions in Ashanti region of Ghana: the mediating role of knowledge sharing. A total 248 questionnaire were issued, but 244 were fully responded to and thus were used for the analysis in this chapter, accounting for a response rate of 98.38%.

4.1 Socio-demographic Characteristics

The sample of the study was 244 number of workers in Health Training Institution in Ashanti region of Ghana. A summary of the respondent's sociodemographic characteristics is given in Table 1. There were 56 males, denoting 23% while female respondents were 188 representing 77%. This suggests that, the employees in Health Training Institution in the Ashanti Region is made up of more of women than their men. In Table 4.1, employees within the range of 21-31 years and 32 – 41 years were 213 and 23 representing 87.3% and 9.4%, respectively. This was followed by 8 respondent which fell into the age range of 42- 51 years which constituted 3.3% of the respondents. After that, by zero (0) respondent were within 52 years and above representing 0%. This implies that majority of the employees in Health Training Institution in Ashanti region are the age group of 21 -31 years.

Table 4.1: Socio-demographic characteristics of Respondents

Variable	Options	Frequency	Percentage
Gender:	Male	56	23
	Female	188	77
Age:	21 – 31years	213	87.3
	32 – 41years	23	9.4
	42 – 51years	8	3.3
	52 years & Above	0	0
Marital Status:	Married	31	12.7
	Single	213	87.3
	Divorced	0	0
	Widowed	0	0
Edu. Qualification:	No formal edu	1	0.4
	JHS	2	0.8
	SHS/SS	35	14.3
	Diploma	161	65.9
	Bachelor	19	8
	Master's	16	6.5
	PhD	0	0
	Others	10	4.1

Source: Field Data (2023)

However, the marital status of the respondent was Married and Single was 31 and 213 representing 12.7% and 87.3% respectively, followed by divorced and widowed were 0 and 0 representing 0% and 0% respectively.

Table 4.1, again presents the educational attainment of the employees in Health Training Institution in Ashanti region. Evidently, the majority of respondents sampled that is 1 (0.4%) have never been to school followed by 2 (0.8%) who also had JHS certificate. Followed by 35 (14.3%) with SHS certificate, moreover 161 respondents with Diploma certificate representing 65.9%, followed by 19 respondents with bachelor certificate being 8%, Also respondent with master's degree certificate were 16 representing 6.5%. Respondent with PhD and Others were 0 and 10

representing 0% and 4.1% respectively. As a result, the vast majority of the staff members at the Health Training Institution received formal schooling.

4.2 Descriptive Analysis

4.2.1 Transformational Leadership

The descriptive analysis for this particular aspect is outlined in Table 4.2. Respondents provided their assessments on the measurement items using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Mean scores surpassing 3 were categorized as falling within the 'agree' category, while mean scores below 3 were categorized as falling within the 'disagree' category. The overall mean score for transformational leadership was computed as 3.918, which is above 3. Consequently, it was inferred that the respondents were in agreement that their respective leaders employ transformation leadership style in their operations. Furthermore, it was observed that all the individual measurement items within this construct had mean scores exceeding 3. This signifies that the respondents concurred with the statements.

Table 4.2: Transformational Leadership

Items	Minimum	Maximum	Mean	Std. Deviation
TLIa2	1	5	4.22	.980
TLV3	1	5	4.15	1.146
TLS5	1	5	4.14	1.102
TLPR1	1	5	4.13	1.096
TLS4	1	5	4.11	1.062
TLIa3	1	5	4.03	1.179
TLV2	1	5	3.98	1.172
TLIb4	1	5	3.98	1.165
TLIb3	1	5	3.96	1.095
TLIa1	1	5	3.95	1.104
TLIa5	1	5	3.94	1.188
TLIb1	1	5	3.93	1.085
TLS3	1	5	3.92	1.121
TLIb2	1	5	3.92	1.126

TLV1	1	5	3.90	1.296
TLIb9	1	5	3.89	1.127
TLIa6	1	5	3.88	1.271
TLIa4	1	5	3.87	1.199
TLIb8	1	5	3.86	1.135
TLV4	1	5	3.84	1.351
TLS1	1	5	3.83	1.149
TLV5	1	5	3.82	1.317
TLPR2	1	5	3.77	1.175
TLIb7	1	5	3.74	1.174
TLIb6	1	5	3.72	1.129
TLIb5	1	5	3.68	1.269
TLS2	1	5	3.64	1.261
Total			3.918	1.166

Source: Field Data (2023)

The mean and standard deviation (SD) of the various of sub-categories of transformational leadership are presented in Table 4.2.

Table 4.3: Descriptive Statistics of sub-constructs of Transformational Leadership

Factors	Mean	SD	Ranking
Inspirational	3.9816	.87489	1 st
Personal Recognition	3.9488	.97733	2 nd
Visionary	3.9385	.97186	3 rd
Supportive	3.9279	.96379	4 th
Intellectual	3.8525	.86083	5 th

Source: Field Data (2023)

The highest mean score (mean = 3.982 on a 5-point scale, SD = .875) is recorded for “inspirational” which means that the respondents “agree” that their leaders are inspirational. Also, “personal

recognition” had the second highest mean score (mean = 3.9488, SD = .97733). Then also, the majority of the respondents agree that their leaders were visionary (mean = 3.9385, SD = .97186).

The sub-variable which is ranked fourth is the fact that the leaders are supportive. A mean score of 3.9279 (SD = .96379) connotes that majority of the respondents “agree” that the leaders are supportive.

4.3.2 Knowledge Sharing

The descriptive analysis for this particular aspect is outlined in Table 4.4. Respondents provided their assessments on the measurement items using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Mean scores surpassing 3 were categorized as falling within the 'agree' category, while mean scores below 3 were categorized as falling within the 'disagree' category. The overall mean score for knowledge sharing was computed as 3.927, which is above 3. Consequently, it was inferred that the respondents were in agreement that their respective leaders share knowledge with employees to enhance business operations. Furthermore, it was observed that all the individual measurement items within this construct had mean scores exceeding 3. This signifies that the respondents concurred with the statements.

Table 4.5: Knowledge Sharing

Items	Minimum	Maximum	Mean	Std. Deviation
KSW3	1	5	4.24	1.051
KSW2	1	5	4.23	.997
KSW1	1	5	4.22	1.037
KSF3	1	5	4.11	1.026
KSN2	1	5	4.09	.964
KSF1	1	5	4.09	1.017
KSN1	1	5	4.07	1.059
KSF2	1	5	4.07	1.048
KST3	1	5	4.05	1.035

KSN3	1	5	3.97	1.083
KST1	1	5	3.84	1.158
KST2	1	5	3.75	1.166
KSB3	1	5	3.62	1.333
KSB1	1	5	3.36	1.397
KSB2	1	5	3.21	1.380
Total			3.927	1.117

Source: Field Data (2023)

In Table 4.5, the descriptive statistics of the various sub-variables of knowledge sharing are presented.

Table 4.5: Descriptive Statistics of sub-constructs of Knowledge Sharing

Factors	Mean	SD	Ranking
Willingness	4.2295	.87706	1st
Frequency	4.087	.88197	2nd
Norms	4.0451	.91438	3rd
Technology	3.8778	.94922	4th
Barriers	3.3962	1.1199	5th

Source: Field Data (2023)

Willingness (mean = 4.2295, SD = .87706), frequency (mean = 4.087, SD = .88297), norms (mean = 4.0451, SD = .91438) had favourable responses on a 5-point likert scale. The majority of respondents agreed that leaders and other comrades were willing to share knowledge.

4.3.3 Employee Innovativeness

The descriptive analysis for this particular aspect is outlined in Table 4.3. Respondents provided their assessments on the measurement items using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Mean scores surpassing 3 were categorized as falling within the 'agree'

category, while mean scores below 3 were categorized as falling within the 'disagree' category. The overall mean score for employee innovativeness was computed as 3.901, which is above 3. Consequently, it was inferred that the respondents were in agreement that their respective firms employ strategies to market their products or services. Furthermore, it was observed that all the individual measurement items within this construct had mean scores exceeding 3. This signifies that the respondents concurred with the statements.

Table 4.6: Employee Innovativeness

Items	Minimum	Maximum	Mean	Std. Deviation
EI1	1	5	4.18	.999
EI2	1	5	4.14	1.023
EI3	1	5	4.08	1.015
EI4				
EI5	1	5	4.07	1.036
EI6	1	5	4.05	.997
EI7	1	5	4.03	1.056
EI8	1	5	3.97	1.145
EI9	1	5	3.97	1.060
EI10	1	5	3.97	1.122
EI11	1	5	3.96	1.095
EI12	1	5	3.95	1.088
EI13	1	5	3.93	1.105
EI14	1	5	3.91	1.042
EI15	1	5	3.89	1.071
EI16	1	5	3.65	1.206
EI17	1	5	3.64	1.116
EI18	1	5	3.56	1.183
EI19	1	5	3.27	1.400
Total			3.901	1.098

Source: Field Data (2023)

Table 4.7 presents the descriptive statistics of the various sub-variables of employee innovativeness. The average innovativeness score among employees indicates that, on a 5-point likert scale, the average innovativeness level displayed by study participants is close to 4,

indicating a rather high level of innovativeness. The mean value for employee innovativeness suggests that, on average, employees' innovativeness is high.

4.3 Correlation

To assess the role of knowledge sharing as a mediator between transformational leadership and employee innovativeness, a correlation analysis was run. This was done by adding up control variables to ascertain the relation between the variables (transformational leadership, knowledge sharing and employee innovativeness).

Table 4.7: Correlation Matrix

Variable	1	2	3	4	5	6	7
1. Gender	1						
2. Age	-.415**	1					
3. Marital Status	-.319**	.634**	1				
4. Edu. Qualification	.198**	-.543**	-.357**	1			
5. TL	-.091	-.054	-.038	.035	1		
6. EI	.028	-.085	-.079	.066	.780**	1	
7. KS	.058	-.097	-.041	.033	.488**	.589**	1

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

Source: Field Data (2023)

From Table 4.8 it was indicated that any variable that correlates to itself has a correlation coefficient of one (1). Gender negatively correlates to age with a correlation coefficient of -.415 which was statistically significant at 0.01. The relationship between gender and marital status was negative with a correlation coefficient of -.319 which is statistically significant. The relationship

between gender and educational qualification was positive with a coefficient of .198 which is statistically significant at 0.01. The relationship between gender and transformational leadership was negative with a coefficient of -.091 which is found to be statistically insignificant at 0.01. The relationship between gender and employee innovativeness was positive with a coefficient of .028 which was found to be statistically insignificant at 0.01. The relationship between gender and knowledge sharing was positive with a coefficient of .058 which was statistically insignificant at 0.01.

The relationship between age and marital status was found to be positive with a correlation coefficient of .634 which is statistically significant at 0.01. Age negatively correlates educational qualification with a correlation coefficient of -.543 which is statistically significant at 0.01. Age negatively correlates transformational leadership with a correlation coefficient of -.054 found to be statistically insignificant at 0.01. Age negatively correlates employee innovativeness with a correlation coefficient of -.085 which is found to be statistically insignificant at 0.01. Also, there is an existence of a negative relation between age and knowledge sharing with a correlation coefficient of -.097 found to be statistically insignificant at 0.01.

The relationship between marital status and educational qualification is negative with a correlation coefficient of -.357 which is statistically significant at 0.01. Marital status negatively correlates transformational leadership with a correlation coefficient of -.038 which is statistically insignificant at 0.01. Marital status negatively correlates employee innovativeness and knowledge sharing with a correlation coefficient of -.079 and -.041, respectively which are statistically insignificant at 0.01.

The relationship between educational qualification and transformational leadership is positive with a correlation coefficient of .035. Educational qualification positively correlates employee innovativeness and knowledge sharing with a correlation coefficient of .066 and .033, respectively. The relationship between transformational leadership and employee innovativeness is positive with a correlation coefficient of .780 which is statistically significant at 0.01. Transformational leadership positively correlates knowledge sharing with a correlation coefficient of .488 which is statistically significant at 0.01. Employee innovativeness positively correlates knowledge sharing with a correlation coefficient of .589 which is statistically significant at 0.01.

4.4 Path Analysis

To estimate the effect of the variables, the analysis were run in five models as presented Table 4.9. The effect of transformational leadership on employee innovativeness is captured as model 2, the effect of transformational leadership on knowledge sharing is model 4, and model 5 estimates how knowledge sharing mediates the link among employee innovation and transformational leadership style. The research was controlled for gender, age, education and marital status. Model 1 and 3 shows the effect of the controls on the knowlegee sharing and employee innovatioveness respectively. According to the data, non of the controls had significant positive effect on either knowlegee sharing and employee innovatioveness ($p > 0.05$). The codes for gender were 1-male and 2-female.

Table 4.8: Regression Output

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	VIF
Constant	4.081 (9.257**)	.483 (1.462)	4.148 (9.672**)	.751 (2.237*)	.018 (.069)	
Gender	-.020 (-.158)	.179 (2.211*)	-.013 (-.100)	.176 (2.134*)	.070 (1.104)	1.261
Age	-.082 (-.495)	.052 (.504)	-.095 (-.589)	.031 (.300)	.032 (.405)	2.258
Education	-.099 (-.515)	-.065 (-.546)	-.032 (-.717)	-4.000 (.000)	-.065 (-.700)	1.685
Marital Status	.020 (.346)	.018 (.516)	-.017 (.300)	-.018 (-.500)	.029 (1.066)	1.422
TL		.780 (19.530**)		.737 (18.131**)	.324 (6.756**)	2.427
KS					.619 (12.470**)	2.389
R	.094	.787	.056	.762	.878	
R ²	.009	.619	.003	.581	.770	
F	.536	77.399**	.185	66.095**	132.285**	
R ² Δ		.610	.056	.578	.151	
FΔ		381.439**		328.725**	155.496**	

Source: Field Data, (2023)

4.4.1 Effect of Transformational Leadership on Employee Innovativeness

Model 2 in Table 4.9 shows the regression result with employee innovativeness as the dependent variable and transformational leadership as the independent variable. The standard error, R, R square are among the statistics included in this table. The Pearson correlation coefficient for the product moment, or R, indicates how strongly and which way the variables are linearly related. From model 2 column in Table 4.9, a positively strong correlation is seen to exist between transformational leadership and employee innovativeness in Health Training Institution in Ashanti

Region since the R value is .787. Correlation coefficients generally range from -1 to 1, where a value of -1 denotes a perfect negative correlation and a value of 1 denotes a perfect positive correlation, and no association is represented by a value of 0. If the R value is close to 1 (in this case 0.787), there is a strong positive correlation. This suggests that employees in the Health Training Institution will develop innovation with transformation in leadership. The positive sign of the correlation coefficient indicates that employee innovativeness tends to rise when there is a transformation in leadership.

The dependent variable's degree of variation is as influenced by the independent variable is measured by the R square, and it shows that employee innovativeness at Ashanti Region's health training institution varies by 61.9%. This indicates that innovative employee innovativeness in Ashante Region health training institutions has benefited from transformational leadership.

Regarding the effect of transformational leadership and employee innovativeness; the coefficient ($\beta=.780$; $t= 19.530$) shows that transformational leadership has a positive impact on employee innovativeness. The independent variable adequately explains the variation in the dependent variable if the F-statistics significance value is less than 0.05. The p-value in this analysis is less than .05 ($p <.01$).

4.4.2 Effect of Transformational Leadership and Knowledge Sharing

The effect of transformational leadership on knowledge sharing is examined by regression analysis, and presented as model 4 in Table 4.9. With the various relevant statistics represented in the table, R, the degree and course of the linear link among the variables is indicated by the Pearson product moment correlation coefficient. Transformational leadership and knowledge sharing is

.762. From Table 4.9 (model 4), a positively strong association exists between transformational leadership and knowledge sharing in Health Training Institutions in the Ashanti Region.

Regarding the effect of transformation leadership and knowledge sharing; the coefficient ($\beta=.737$; $t=18.131$) shows that transformational leadership has a positive impact on employee innovativeness. When the F-statistics significance value is less than 0.01, it indicates that the independent variable adequately clarifies the difference in the dependent variable. For $F = 66.095$, $p < 0.01$, there is a statistically significant impact of transformation leadership on knowledge sharing in the Health Training Institution in Ashanti Region of Ghana. These findings allow the researcher to present the regression equation below, which forecasts how transformational leadership would affect knowledge sharing at the Ashanti Region's Health Training Institution.

4.4.3 The Mediation Effect

Moreover, the evaluated the role of knowledge sharing (presented in Table 4.9) following Baron and Kenny's (1986) framework. Examining Table 4.9, it was observed a positive and significant impact of transformational leadership on employee innovativeness (Model 2), and similarly, knowledge sharing exhibited a positive and significant influence on employee innovativeness (Model 5). In Model 4, demonstrated a significant and favorable effect on employee innovativeness. At the same time, upon introducing knowledge sharing in Model 5, the impact of transformational leadership on employee innovativeness maintained its level of significance. This outcome supports our Hypothesis 4, indicating the partial mediation of knowledge sharing in the relationship between transformational leadership on employee innovativeness..

4.5 Discussion of Results

Research Objective One: To examine the effect of transformational leadership on employee innovativeness.

Although Chaubey et al. (2019) did not carry out exactly the same study, as part of their study findings, they also found that transformational leadership augments employee innovativeness, which agrees with the findings of this study. Pradhan and Jena (2019) demonstrated that by changing the perception of their work from one of monotony, repetition, and menial labour to one of significance and meaning, transformational leaders inspire their followers to reevaluate their careers. Similar to previous findings, Pradhan and Jena (2019)'s findings supports that of this study which has found that transformational leadership significantly influences employee's innovative work behaviour. For the construction business to grow sustainably, innovation is essential. (Zhang et al., 2018).

By evaluating the cross-level moderating effect of innovativeness as a project requirement and the mediating effect of innovation climate, this study explores the role that transformational leadership plays in influencing workers' innovative behaviour, Zhang et al. (2018) We discovered that innovative behaviours among employees may be stimulated by transformational leaders by cultivating a mutual climate for innovation. Similarly, the findings of this study agrees with that of Suifan et al. (2018) who found that transformational leadership positively affects some dimensions of employees' creativity. Although several factors may affect the level of TL style, several previous studies have highlighted the role positive significant role transformational leadership plays. Also, Al-edenat (2018) examined that transformational leaders had a positive direct impact on both employees' innovativeness and the direct role that TL characteristics play in

fostering innovation in products and services. The findings of this study are supported by the findings of this paper.

These results deepen our understanding of the ways transformational leaders support innovation and highlight the benefits that come from encouraging more TL practises in workers, which in turn encourages more creative outputs. This study's findings are consistent with those of Suifan and Marwa (2017), who looked at the relationship between employees' creativity and transformational leadership in the Jordanian banking industry. They discovered that there was a positive relationship between the two variable. Afsar et al. (2014) investigated the relationship between innovative ideas behaviour and transformational leadership, as well as the moderating effects of job complexity and innovation climate, willingness to learn, and the effect of transformational leadership on employees' innovative work behaviour. The findings supported the findings of this study by demonstrating the positive impact of transformational leadership on workers' innovative work practises.

Research Objective Two: To ascertain the connection between knowledge sharing and transformational leadership.

The study by Al-Husseini and Elbeltagi (2016) demonstrated intellectual stimulation has the biggest impact on knowledge donation and collection out of the four elements of transformational leadership. Knowledge sharing has been seen to significantly affect innovativeness from the study's findings. In a related study by Ullah et al. (2022), they investigated the relationship between knowledge sharing (KS) and innovative performance (IP) through employee creativity's (EC) mediating role, and discovered that KS has a substantial and positive impact on IP. This supports the findings of this research. Research has shown that knowledge sharing improves workers' competencies and fosters greater creativity and perfection (Almulhim, 2020). The study

of Khassawneh et al. (2022) indicated that knowledge sharing significantly and favourably influences employees' creativity, which lends support to the findings of this study. Knowledge sharing gives employees the psychological tools they need to achieve excellence, modernity, and creativity in their work, which has a significant impact on margins, profitability, and customer satisfaction. In a highly competitive market environment, these factors give businesses long-term viability. (Almulhim, 2020).

Research Objective Three: To explore the relationship between knowledge sharing and employee innovativeness.

Abukhait et al. (2019) examined the impact of knowledge sharing and empowerment on innovative behaviour among employees, as well as the examination of gender disparities. The findings unequivocally demonstrate and validate the substantial and positive effects that knowledge sharing and feelings of empowerment have on employees' innovative behaviour. Liao et al. (2018) empirically tested individual, team and multi-level relationships among knowledge sharing (KS), Team innovation (TI), employee creativity (EC), and leader-member exchange (LMX). The study investigates the multi- and lower-level effects of KS on EC through LMX. Higher up, the relationship between creativity and TI was also examined. The results indicated that KS affects team creativity (TC) at the team level. Ologbo et al. (2015) sought to examine the influence of knowledge sharing on employee innovation capabilities. The findings showed that knowledge sharing influences employee innovation capabilities positively. All of these and many other studies supports the findings of this study.

It has been recognised that transformational leadership plays a significant role in innovation and knowledge management systems in various industries (Al-Husseini et al., 2021). The results in

this section are somewhat consistent with other research on the subject that has been done by academics in the past.

Research Objective Four: To assess the mediatory role of knowledge sharing on the relationship between transformational leadership and employee innovativeness.

Al-Husseini et al. (2021) discovered a direct positive relationship between innovation, knowledge sharing, and transformational leadership. Furthermore, it was shown that a key mediator of the relationship between transformational leadership and innovation is knowledge sharing. Suhana et al. (2019) demonstrated that researchers have concentrated on investigating problems pertaining to innovative behaviour (IB). The outcomes of their investigation demonstrated that TL has a significant effect on knowledge exchange and creative behaviour, which is consistent with the findings of this study. Bednall et al. (2018) investigated how innovative employee behaviour is affected by transformational leadership. They looked at whether knowledge exchange within and between teams mediated the relationship between innovative behaviour and transformational leadership. The results of their study also showed that information sharing acts as a mediator in the relationship between innovative behavior and transformational leadership. This validates the study's findings.

These findings strengthen the assumptions of transformational leadership theory where the relationship between transformational leadership and employee innovativeness is rooted in how these leaders motivate, challenge, assist, and empower their followers. By employing a visionary strategy, nurturing creativity, stimulating intellectual curiosity, and providing individualized assistance, transformational leaders establish an atmosphere that nurtures innovation among employees. This leadership approach cultivates a culture centered on ongoing enhancement,

exploration of fresh concepts, and a readiness to undertake measured risks, thereby elevating the innovative capacity of employees within an organization.

Again, in fostering innovation via knowledge sharing, leaders may employ diverse strategies based on the type of innovation, team dynamics, and the prevalent knowledge-sharing ethos within the organization. Utilizing the Path-Goal Theory, leaders can inspire and steer employees toward innovative conduct by means of sharing knowledge. This theory emphasizes the pivotal role of leaders in establishing a supportive and conducive atmosphere that promotes the open exchange of knowledge, thereby sparking the creation of fresh ideas and inventive solutions. Leaders adept at implementing the principles of the Path-Goal Theory can shape the organizational culture, endorsing knowledge sharing as a pathway to attain innovative results.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This part presents the concise wrap-up, closing remarks and suggestions to aid industry of practice and academia. The focus of the study was to analyze the effect of transformational leadership on employee innovativeness as mediated by knowledge sharing in Health Training Institutions in the Ashanti Region of Ghana. The investigation was guided by these specific objectives, in the following order; (1) to determine the relationship between transformational leadership and employee innovativeness, (2) to determine the relationship between transformational leadership and knowledge sharing, (3) to explore the relationship between knowledge sharing and employee innovativeness, and (4) to assess the mediatory role of knowledge sharing on the relationship between transformational leadership and employee innovativeness. The objectives and the conclusions and recommendations that follow are based on the analysis and interpretations.

5.2 Summary of Findings

The study sought to find the effect of transformational leadership on employee innovativeness in HTI in the Ashanti Region. It was discovered that, there was a statistically significant positive effect of transformational leadership on employee innovativeness ($\beta=.780$; $t= 19.530$).

The effect of transformational leadership on knowledge sharing was examined by regression analysis. Transformational leadership was seen to positively and significantly affect knowledge sharing as shown by the regression output ($\beta=.737$; $t=18.131$). This suggests that transformational leadership tends to boost knowledge sharing amongst staff of HTI in the Ashanti Region.

The effect of knowledge sharing on employee innovativeness was examined by regression analysis. The effect of knowledge sharing on employee innovativeness was positively significant

($\beta=.324$; $t=6.756$). This suggests that knowledge sharing tends to boost the innovativeness of HTI employees in the Ashanti Region.

The mediatory role of knowledge sharing on the relationship between transformational leadership and employee innovativeness was assessed. It was found that knowledge sharing partially mediated the relationship between transformational leadership style and employee innovativeness ($\beta=.619$; $t=12.470$). However, the mediation is seen to be partial since the effect of transformational leadership style on employee innovativeness reduced (from .780 in model 1 to .619 in model 2) in the regression analysis.

5.3 Conclusion

The primary goal of the study was ascertaining how knowledge sharing functions as a mediator in the relationship between transformative leadership and employee innovativeness in Health Training Institutions in Ashanti Region. The study sampled 244 employees of Health Training Institutions in Ashanti Region. Convenience sampling technique was also employed for the study. From the findings, it can be concluded that leaders who apply transformational leadership style inspire some level of innovativeness in their employees. Therefore, an organization's transformational leadership climate may be linked to employees with higher levels of innovativeness. Employee innovation is increased in a work environment that values transformational leadership and knowledge sharing. In conclusion, the discovery that knowledge sharing acts as a mediator in the relationship between employee innovativeness and transformational leadership highlights the significance of teamwork and communication in fostering innovation inside a company. To maximise the positive effects of transformational leadership on employee innovativeness, organisations should actively support and encourage knowledge sharing initiatives as a key element of their overall innovation strategy. Positive

association has been found between knowledge sharing and employee innovation, highlighting the need of encouraging staff members to communicate openly and learn from one another. By implementing these findings, organisations can harness the power of information sharing to promote innovation and preserve competitiveness in a business environment that is changing quickly.

5.4 Recommendations

Following are some recommendations that are made in light of the study's findings:

1. Management of Health Training Institutions in the Ashanti Region and Ghana in general should consider breeding transformational leadership climate where innovation thrives and leads to purposeful knowledge exchanges.
2. Institutions should as well put in place schemes that supports employees continuous learning which horns their innovation inclination.
3. The correlation between knowledge sharing and employee innovation is favorable, which emphasizes the significance of fostering a culture of open communication and peer learning among staff members. Organizations can use the power of information sharing to spur innovation and maintain competitiveness in a business environment that is rapidly changing by acting on these findings.

5.5 Theoretical Contribution

The research advances knowledge about transformational leadership's effects in the particular setting of healthcare education. It clarifies how employee innovative might be impacted by leadership styles in organizations that train healthcare practitioners. The study advances our theoretical understanding of the processes through which different leadership philosophies may

impact organizational results by highlighting knowledge sharing as a mediator in the relationship between employee innovativeness and transformational leadership. This emphasizes how crucial it is to establish a setting that promotes knowledge exchange in order to stimulate innovation. The study adds to the body of knowledge regarding employee innovation in the workplace, especially as it relates to healthcare training. This may hold significance not only for Health Training Institutions in Ghana but also for other establishments worldwide, offering perspectives on elements that foster creativity among faculty members.

5.6 Managerial Implications

The study abstract has important management ramifications because it provides information that might help Health Training Institutions in Ghana's Ashanti Region make strategic plans and decision-making decisions. Organizations should think about developing leadership teams through transformational leadership skills-focused programs. This may be especially important for managers since the study indicates a positive relationship between these leadership philosophies and workers' innovativeness. A culture of information sharing within the company can be actively promoted by managers and other leaders. This could entail developing venues, rewards, or organizational frameworks that encourage staff members to share ideas and knowledge. Creating a culture where information is openly exchanged can help people become more innovative. The study draws attention to the possibility that bureaucratic processes could impede innovation. In order to minimize the amount of time that employee ideas take to execute, managers might need to examine and streamline these processes. To guarantee a more effective decision-making system, this may entail reviewing procedures, policies, and communication routes.

5.7 Suggestions for Further Research

A study on effect of transformational leadership on employee innovativeness in other Health Training Institutions in other regions of the country as mediated by other constructs. The goal of the comprehensive investigation across regions will be to offer a contextually rich and nuanced understanding of how transformational leadership practices appear in health training institutions and how these practices, in turn, help or hinder an innovative culture among staff members.

A study on effect of transformational leadership on employee innovativeness in other institutions in the country as mediated by Knowledge Sharing and Grit. Using an interdisciplinary approach, this study will aim to identify the underlying mechanisms that Knowledge Sharing and Grit facilitate as well as to experimentally prove the relationship between employee innovativeness and transformational leadership. The results of this research could be extremely beneficial for scholarly research and real-world leadership tactics since they provide a more complex understanding of how organizational leaders can foster and maintain innovation in their organizations.

A comparative study of the effect of transformational leadership on employee innovativeness in Private and Public Sector Institution in Ghana: The mediating role of Knowledge Sharing and Grit. The goal of this research will be to perform a thorough comparative study that explores the influential field of leadership dynamics in the distinctive settings of Ghanaian public and private sector institutions. The study's specific goal is to examine and assess how transformational leadership influences worker innovation in these various industries. Furthermore, the study will not only examine the immediate impact but also decipher the many subtleties that underlie this leadership approach.

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APPENDICES

APPENDIX 1: QUESTIONNAIRE

AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND

ENTERPRENEURIAL DEVELOPMENT

DEPARTMENT OF MANAGEMENT STUDIES

Dear Sir/Madam,

I am a student pursuing Master degree in Management Studies at the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. The focus of my research is to examine the Effect of Transformational Leadership on Employee Innovativeness in Health Training Institutions in Ashanti Region, with Knowledge Sharing and Grit playing the mediating roles. Your cooperation and opinions are very important to the success of the study and will be kept confidential. The information obtained from the questionnaire will in no way reflect the identities of the individual participating.

Section A: Demographic Characteristics

Kindly provide the appropriate response and tick [] the box that correctly describes you.

1. Sex: Male, Female
2. Age: 21 - 31 years, 32 - 41 years, 42 - 51 years, above 52 years
3. Marital Status: Single, Married, Divorced, Widowed

4. Educational Qualification: Never been to school, JHS, SHS/O level/ A level, Diploma, Bachelors, Master's, PhD, Other

Section B: Transformational Leadership

The table below shows statements with respect to your own feelings about your employer's leadership style. Please indicate your agreement with each statement by ticking (√) the most appropriate column: where 1 represent a least agreement whilst 5 represent the highest agreement (i.e., 1 – Strong Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree).

Section B: Transformational Leadership	1	2	3	4	5
Vision					
Leadership paints an interesting picture of the future					
Leadership clarifies work and goal boundaries					
Leadership communicates a clear and positive vision of the future					
Leadership is clear about his/her values and practices what he/she preaches					
The leaders inspire me by sharing their plans for the future					
Inspirational					
The leaders express positive message about the organization					
Leadership expresses statements that build motivation and confidence					
The leaders foster trust, involvement and cooperation among workers					

The leaders instill pride and respect in others and inspires me by being highly competent					
Leadership helps me find meaning in my work					
The leaders lead by “doing,” rather than simply by telling					
Supportive – The Leaders:					
Express genuine concern for workers					
Take account of individual needs of workers					
Make others feel good to be around him/her					
Help others develop themselves					
Always seek new opportunities for the organization					
Intellectual – The Leaders:					
Enhance employees’ awareness of problems					
Enhance employees’ interest in problem solving					
Increase employee’s ability to think about problems in new ways					
Encourage critical and strategic thinking					
Enable others to think about old problems in new way					
Provide others with new ways of looking at puzzling things					
Get others to rethink ideas that they had never questioned					
Ask questions that prompt me to think					
Have ideas that challenge me to reexamine some of my basic assumptions about work					
Personal Recognition – The leaders:					

Provide rewards such as praise and acknowledgement for achievement of goals					
Give personal attention to others who seem rejected					

Adapted from Carless et al. (2000)

Section C: Employee's Innovativeness

Section C: Employee's Innovativeness	1	2	3	4	5
I have opportunities to try new approaches to problems					
My supervisor gives me useful feedback regarding my creative ideas					
My supervisor gives me opportunities to learn from my mistakes					
The people I work with perceive me to be a creative problem solver					
I make time to pursue my own ideas or projects					
I am constantly thinking of new ideas to improve my workplace					
My performance appraisal is related to my own creativity in the workplace					
At work I demonstrate originality					
I work in teams to solve complex problems					
We work in teams to solve complex problems					
My team has the freedom to make decisions without the need to ask for permission					
My team feels a strong sense of membership					
Amongst my colleagues I am the first one to try new ideas					
Our ability to function creatively is respected by the leadership					

Around here, people are allowed to try to solve the same problems in different ways					
In this organization, we stick to tried and true ways					
I have mastered the skills necessary for my job					
This place seems to be more concerned with the status quo than with change					
This organization publicly recognize those who are innovative					

Adapted from Hurt et al. (1977); Pallister and Foxall (1998).

Section D: Knowledge Sharing

Knowledge Sharing Frequency					
a. I frequently share my knowledge with my colleagues.					
b. I often engage in knowledge sharing activities at work.					
c. I actively contribute to knowledge sharing platforms in my organization.					
Knowledge Sharing Willingness					
a. I am willing to share my expertise and knowledge with colleagues.					
b. I feel motivated to share my knowledge for the benefit of the institution.					
c. I believe in the importance of sharing knowledge to enhance collective learning.					

Knowledge Sharing Norms					
<p>a. Knowledge sharing is encouraged and recognized in my organization.</p> <p>b. Colleagues in my organization actively promote knowledge sharing among each other.</p> <p>c. There are clear guidelines and expectations regarding knowledge sharing in my organization.</p>					
Knowledge Sharing Barriers					
<p>a. Lack of time and workload pressures hinder my knowledge sharing activities.</p> <p>b. Fear of losing personal expertise or competitive advantage discourages me from sharing knowledge.</p> <p>c. The absence of a supportive organizational culture impedes knowledge sharing.</p>					
Knowledge Sharing Technology					
<p>a. I have access to effective communication and collaboration tools that facilitate knowledge sharing.</p> <p>b. Technology platforms in my organization enable seamless sharing and retrieval of knowledge.</p> <p>c. I find it easy to use technology tools for sharing and accessing knowledge.</p>					

Adapted from Hooff & Ridder (2004)