# CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD



# Impact of Servant Leadership on Project Performance with Mediating Role of Knowledge Sharing and Knowledge Creation and Moderating Role of Collaborative Culture

by

# Qirat Rehman

A thesis submitted in partial fulfillment for the degree of Master of Science

in the

Faculty of Management & Social Sciences

Department of Management Sciences

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This thesis is dedicated to my beloved mother for her support, love, and care.



#### **CERTIFICATE OF APPROVAL**

# Impact of Servant Leadership on Project Performance with Mediating Role of Knowledge Sharing and Knowledge Creation and Moderating Role of Collaborative Culture

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#### Qirat Rehman

# Abstract

The goal of this study is to find out what factors affect project performance and how servant leadership affects project performance in organizations that are built around delivering projects. Examining the role of knowledge sharing and creation as a link between servant leadership and project performance. It shows that when a leader is creative, he encourages and motivates their employees to add knowledge to the project. Furthermore, the sample was collected through purposive sampling technique. The time horizon of the data is time lag study and the time lag is three weeks which is further split into three time. Data was gathered from 311 project team members out of 400 from the IT sector. The information came from project-based groups in Pakistan's twin cities, Rawalpindi and Islamabad. Using correlation, reliability, and regression analyses, the set of data was looked at through SPSS. The results show that there is a strong and positive link between servant leadership and project success. The link between servant leadership and how well a project turns out is made possible by sharing and creating new knowledge. Also, the results showed that a collaborative culture does not change the relationship between servant leadership and knowledge sharing. Based on the results, we can say that servant leadership, knowledge sharing, and creating knowledge all have a big effect on project performance. In future studies, this link between servant leadership and project performance can be examined by adding other factors like moderators and mediators.

Keywords: Servant Leadership; Project Performance; Knowledge Sharing; Knowledge Creation; Collaborative Culture.

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# Abbreviations

**CC** Collaborative Culture

**KC** Knowledge Creation

**KS** Knowledge Sharing

**LMX** Leader-Member Exchange Theory

**PP** Project Performance

**SL** Servant Leadership

SPSS Statistical Package for Social Sciences

# Chapter 1

## Introduction

#### 1.1 Background of the Study

In the realm of literature, studies on a wide variety of management philosophies and approaches have been carried out as part of research. One of the most important aspects of servant leadership is providing assistance and service to the individuals around you. In addition, (Chiniara & Bentein, 2016) show how servant leadership can improve employee performance by encouraging the creation and sharing of new knowledge. This, in turn, contributes to the overall success of the project. Recent studies have shown that servant leadership boosts employee motivation and has a direct impact on how well employees perform their jobs (Otero-Neira, Varela-Neira, & Bande, 2016). It is well known that knowledge is the ultimate source of motivation for employees, and it is also well known that knowledge motivates employees and boosts an organization's productivity. (Van Dierendonck & Nuijten, 2011) conducted this research in order to find out what encouraging and helpful indicators are. He concluded that servant leadership might have an impact on employee engagement and project success with the help of knowledge.

In the era of innovation knowledge is widely acknowledged as the most essential source of viable advantage and the key to increasing sustained growth. To successfully fulfill an organization's goals, knowledge is considered the most important thing for gaining a competitive edge and the most important thing for promoting

long-term growth (Goswami & Agrawal, 2019). Thus, knowledge can be thought of as the process of coming up with, making, accepting, and using new ideas, procedures, initiatives, and strategies so that an organization can achieve its goals (Al-Husseini & Elbeltagi, 2015). Because of how technology is changing quickly and the market is becoming more global, knowledge management, or KM, has been put forward as a strategy that can be used in highly competitive business situations. There shouldn't be a doubt that knowing things is important in business and society as a whole. Knowledge and familiarity are used more and more in businesses of all kinds today to help streamline operations and make better decisions (Areed, Salloum, & Shaalan, 2021). Because of this, two of the fastestgrowing parts of the business are sharing knowledge and making new knowledge. During the iterative process of making new knowledge, participants talk to each other and work together to develop new ideas and settings (Mohajan et al., 2019). Contrary to this, knowledgeable organizations tend to overlook the importance of people and connections because they put so much emphasis on a competitive spirit and an individualistic way of thinking. The success of a project depends upon the leadership style that puts the needs of the people working on it first. In the context of a project, servant leadership (SL) is appropriate because it requires the leader to put the interests of the team and the people on the team ahead of their own. So, a servant leader is someone who not only helps the team (Greenleaf, 1998) but also gets everyone working together to achieve goals (Hunter et al., 2013).

This focus on putting the demands of their followers first helps them grow and makes it more likely that people will work together. So, a servant leader develops the skills needed to help project teams. He or she also helps followers build their skills, remove obstacles, encourage innovation, and boost creative problemsolving and organizational dynamics with the help of knowledge sharing. Meanwhile, servant leaders also learn the skills they need to help project teams (Lee, Lyubovnikova, Tian, & Knight, 2020). The impact that servant leadership has on team performance can be explained by looking at previous research as well as how the concept of servant leadership has been conceptualized at both the individual and team levels (Eva, Robin, Sendjaya, Van Dierendonck, & Liden, 2019).

When employees share knowledge both inside and outside of their company, they

become better at coming up with new ways to solve problems (Areed et al., 2021). Sharing knowledge has been getting a lot of attention nowadays because it is such an important part of creating new knowledge, encouraging innovation, and improving organizational learning. Finding people learning to share the information they have learned is the key to managing knowledge well. It has been found that practicing servant leadership helps the process of creating and spreading new knowledge (Kipkosgei, Kang, & Choi, 2020). A recent study found that servant leadership creates a collaborative culture that leads to more motivated and knowledgeable employees.

This, in turn, servant leadership has a direct effect on the organization's overall performance (Chiniara & Bentein, 2016). Therefore, servant leadership is an effective strategy for boosting productivity because it promotes the transfer of knowledge and the creation of new knowledge among employees. Meanwhile, Knowledge is a unique and valuable resource that is tied to both the way people think and the way organizations work. The minds of individuals and the structures of institutions are the repositories of knowledge (Ahmad & Karim, 2019). It's possible that this could give them a long-term edge over their competitors.

Serving as a servant leader makes it easier for people to learn new things because it involves giving followers leadership responsibilities, building healthy relationships, and promoting mutual influence and direction. It encourages servant leaders and their followers to talk about their thoughts, ideas, and experiences. Because of this, new knowledge is created. (Jang, Yoo, Lee, & Lee, 2022). Servant leaders know that empowering employees to contribute to the success of the business requires not only giving them information about their jobs but also making it easy for them to share their expertise in areas that aren't related to their jobs and encouraging them to do so.

One of the main ideas that the organization is based on servant leadership is that servant leaders encourage people to share their knowledge. Consequently, employees are more likely to collaborate and share their expertise, resulting in higher quality work. Information sharing has the potential to increase productivity, cut down on mistakes and inefficient processes, lead to better products and services, and help businesses come up with new products and services. The best way for

servant leaders to create knowledge is to share their leadership duties with the people who follow them (Goswami & Agrawal, 2019).

This leads to two-way direction and influence, which helps to build loving relationships. It encourages servant leaders and their followers to talk about their thoughts, ideas, and experiences (Kaltiainen & Hakanen, 2022). Sharing knowledge within projects can help employees do their jobs better and make improvements, which can lead to an overall improvement in the performance of the projects.

#### 1.2 Gap Analysis

There are diverse kinds of leadership styles that exist, some of which include autocratic leadership, despotic leadership, and transformational leadership, amongst many others. More than a few businesses put these models to use in their operations. A wide variety of businesses and organizations have adopted servant leadership. However, when it comes to studies on how leadership styles affect the transfer and creation of knowledge, servant leadership hasn't gotten a lot of attention. Without a doubt, servant leadership is often discussed in leadership texts; however, the effectiveness of this style of leadership in the context of IT organizations has not been thoroughly explored.

As a consequence of this, in order to have a conversation about gap analysis, servant leadership needs to claim that the IT organization put in the effort to implement it. Every day, an IT-based organization faces new projects that involve a great deal of complexity and difficulty. Every project has a need for the most recent updates and information. When it comes to progress, nothing is more important than the exchange of ideas and the generation of new information (Bilal, Siddiquei, Asadullah, Awan, & Asmi, 2020).

Only with the assistance of a servant leadership style within a collaborative culture is it possible to acquire this level of knowledge. In an environment like that, everyone is willing to share what knowledge they have and work together to find solutions. The investigation into the process of creating new knowledge is still in progress.

When we consider the topic of "how to increase knowledge creation," we quickly realize that there is a severe lack of research material that is freely available to the general public. This research highlights the importance of servant leadership in the generation of new knowledge (Pohl & Galletta, 2017).

Furthermore, this helps to fill the gaps in the existing body of research, which will promote and facilitate future work. In the course of this research, a significant focus is placed on the connection that exists between servant leadership and project performance, along with the mediation role of knowledge sharing and knowledge creation (Bilal et al., 2020). Not a lot of research has been done on the link between servant leadership and how well a project turns out.

The primary emphasis of this study is on the role that collaborative culture plays in mediating the direct connection that exists between servant leadership and knowledge sharing. The leaders of a project are responsible for providing direction to their staff members and ensuring that the goals of the project are accomplished.

Followers are encouraged to take on leadership roles and to direct and influence one another in the direction of knowledge sharing and creation when they are led by servant leaders who model these behaviors. Every participant in such a system has an impact on the other participants as well as on the overall knowledge vision. In all these ways, they help to reduce the complexity of the project, and in this way, project performance is increased.

#### 1.3 Problem Statement

Teams needed to participate more in project-based organizations in order to successfully create and share knowledge (San Cristóbal, Carral, Diaz, Fraguela, & Iglesias, 2018). Project-based organizations are currently having issues in knowledge creation, which is preventing advancements and innovations. Organizations do not provide teams with an appropriate and innovative leader (Bjorvatn & Wald, 2018). A lot of research conducted on leadership styles beside this, servant leadership has been less studied. Although research has concentrated on leadership styles, stress, uncertainty, inspiration, and teamwork, particularly power distance.

But servant leadership and its results have received less attention. Contextual elements grow increasingly important as leadership becomes more complex. In IT Organizations the projects are complex and hard in nature they need keen knowledge and supporting leaders. In Pakistani organizations, the style of leadership is not appreciable. It needs a leader who motivates, appreciates and shares the knowledge.

Project based organizations require more participants in a team to achieve their goals efficiently. Nowadays, Project based organizations are lacking knowledge creation as a result of declining knowledge sharing by project leaders. The way technology and technical expertise are moving at an ever increasing pace, it is vital that a project leader puts emphasis on knowledge sharing, which in essence increases knowledge creation. If knowledge creation is not keeping up with current IT innovations project based organizations can easily fall behind. Therefore, the present study attempts to resolve these problems by identifying the significance of knowledge sharing in servant leadership on project performance.

#### 1.4 Research Questions

Taking into consideration the project-based organizations that are prevalent in Pakistan, our research focuses on the question of how servant leadership influences project performance via the moderating effect of collaborative culture and the mediating effect of knowledge sharing and knowledge creation. The following are some of the questions that are suggested to have their answers based on this research:

- 1. Does servant leadership affect project performance in Pakistani project-based organizations?
- 2. Does servant leadership affect the role of knowledge sharing in Pakistani project-based organizations?
- 3. Does knowledge sharing affect project performance in Pakistani project-based organizations?

4. Does servant leadership affect the knowledge creation of Pakistani project-based organizations?

- 5. Does knowledge creation affect project performance in Pakistani project-based organizations?
- 6. Do knowledge sharing and knowledge creation perform the sequential mediate between servant leadership and project performance in Pakistani project-based organizations?
- 7. Do knowledge sharing and knowledge creation perform the sequential mediate between servant leadership and project performance in Pakistani project-based organizations?

#### 1.5 Research Objectives

The utmost goal of this research study is to identify the relationship that exists between servant leadership and project performance by employing the moderating purpose of collaborative culture as well as the mediating functions of knowledge sharing and knowledge creation. The research model includes a discussion of the anticipated relationship between all variables, including the independent variable, the dependent variable, the mediating variable, and the moderating variables. The following aims of the study are going to be investigated and addressed as part of this research. The following is a list of the objectives for the research:

- 1. To study the relationship between servant leadership and project performance.
- 2. To study the relationship between servant leadership and knowledge sharing.
- 3. To study the relationship between knowledge sharing and project performance.
- 4. To study the relationship between servant leadership and knowledge creation.
- 5. To study the relationship between knowledge creation and project performance.

6. To study the relationship of servant leadership on project performance with sequential mediation of knowledge sharing and knowledge creation.

7. To study the moderating role of collaborative culture in the relationship between servant leadership and project performance.

#### 1.6 Significance of the Study

On-site leadership has historically been one of the main topics of interest for scholars because a leader plays such a crucial role in the projects they manage. Companies nowadays are built on projects and need to share information and create new knowledge in order to improve their results and project performances. (Pohl & Galletta, 2017).

This study will be important for Pakistani organizations that practise servant leadership since it will help them in project performance through effective leader participation. Because the current workstation is becoming more and more project-oriented with more challenging projects and the requirement to effectively utilize a variety of teams, including multiple teams, multidisciplinary teams, and even inter-company teams (Egginton, 2012). The primary objective of this research is to ascertain how the servant leadership style influences the overall performance of a project.

The end goal of this study is to enable the more efficient performance of the project, which will be accomplished by investigating the critical aspects that are affecting the performance of the project and reporting the findings of this investigation. As a consequence of this, from a conceptual standpoint, this research provides the opportunity to investigate the connection that exists between servant leadership and project success. The current study helps to fill a gap that was previously present in the relevant academic literature that has been around for a while. This study makes a substantial contribution to the body of knowledge that has already been accumulated regarding project management. The findings of this study will be helpful to practitioners in determining the value of successful

knowledge growth and information exchange among members of a team, as well as better comprehending the complexity of projects. How a project is managed can have a significant influence on whether or not it is completed successfully. This study will give the information technology sector a new direction and improve the method of finishing difficult projects by investigating the significance of knowledge creation, knowledge sharing, and leadership, all of which will affect the performance of the overall project. In addition, this study will improve the method of completing difficult projects. Researchers will be motivated to develop strategies that can be applied to improve the overall performance of projects if they make use of the findings of the study.

#### 1.7 Underpinning Theory

Throughout the world, studies on knowledge management and project-based learning are supported by a variety of theoretical frameworks, which have been developed independently by a variety of researchers. The exchange theory, the knowledge-based theory, the social power theory, and the organizational support theory are some of the theories that fall under this category. On the other hand, the only theory that is capable of explaining all of the variables in this study is the Leader-Member Exchange Theory (LMX).

#### 1.7.1 Leader-Member Exchange Theory (LMX)

The LMX theory is a reciprocal leadership philosophy based on connections. Leadership, according to this notion, is defined by the quality of the sharing and supporting relationships that occur between leaders and their supporters. Knowledge sharing, Knowledge creation, Collaborative Culture and project performance mutually regard the characteristics of high-quality output. According to a recent study based on the LMX (leader-member exchange theory) principle, the supportive nature of the leader helps the employees to have the same effect, i.e., a responsible and supportive attitude. As a result of servant leadership, the entire organization's success increases. Furthermore, it has been found that excellent employee performance contributes to the success of project performance, and one

of the underlying elements for this success and employee performance is knowledge sharing and knowledge creation in a collaborative culture. For example, Blau suggested that the appeal of conversation members' associations influences the process of social exchange, implying that the connection changes the type of interaction. On the other hand, he inferred that a healthy relationship can make a person devoted to another person, implying that regular smooth speech has an effect on the relationship (Blau, 1964). He makes another point: in the above description, the term "exchange" is used to refer to a type of connection or interaction, while the terms "association" and "exchange" have different meanings, but they are linked. This assertion is not perfect; Blau utilized this association as an intervening variable, which is not uncommon in the context of organizations.

# Chapter 2

## Literature Review

#### 2.1 Introduction of Variables

# 2.1.1 Relationship between Servant Leadership and Project Performance

Nauman, Musawir, Malik, and Munir (2022), Servant leadership enhances project success. According to (Noor et al., 2013), the success of a project depends on the project manager's ability to demonstrate the necessary level of leadership and management expertise. Although there is no one optimal approach to project management, there are many viable options (Tripathi, Priyadarshi, Kumar, & Kumar, 2020). Servant leadership has been identified as a model that may help project leaders get through many of the problems they may face (Jang et al., 2022). This remains true although there isn't a single ideal method of leading. As stated by (Redick, Reyna, Schaffer, & Toomey, 2014), it is difficult for the project sponsor to get everyone on the team to work together. This is because the project might fail if the team doesn't work well together. The project manager, or sponsor, is responsible for fostering cohesive teamwork on the project. Nurturing the team over time is essential if it is to establish its own identity and maintain a singular focus on the project's objectives. What constitutes successful project performance has evolved as a result of changes in the way businesses are run (Krog & Govender, 2015). The transformational leadership style has been largely

replaced with models of leadership that emphasizes shared, relational, peoplecentered, ethical, and, most importantly, servant leadership (Jang et al., 2022). Recently, there has been a shift in emphasis from specific tasks to broader work roles, which are less well-defined and more challenging to standardize.

This shift has occurred because broad work roles are easier to define. This is due to the fact that tasks in modern workplaces are becoming more complicated and dependent upon one another. As a result, the emphasis has shifted away from project competence as a metric of success and toward the adoption of more adaptive practices related to project management (Kaltiainen & Hakanen, 2022). According to researchers who have identified the people and environments (Tripathi et al., 2020), they affect the success of a project. In the last decade, research has shown that servant leadership increases productivity and satisfaction in the workplace. According to the findings of several studies, the success of a project is influenced by servant leadership.

To the authors' best knowledge, there has only been one study that has investigated the effects of servant leadership on the outcomes of projects (Otero-Neira et al., 2016), not enough research has been done to understand how servant leadership impacts projects, especially in terms of proactive and adaptive performance (Seligman & Csikszentmihalyi, 2014). To ensure the well-being of employees, leadership based on ethical and compassionate conduct, such as servant leadership, is crucial. In the relationship between leader and subordinate, servant leadership emphasizes altruism.

In 2011, (Van Dierendonck & Nuijten, 2011) published a study regarding this topic. (Hale & Fields, 2007), who share this perspective, define servant leadership as "an understanding and practice of leadership that places the good of those led over the self-interest of the leader, emphasizing leader behaviors that focus on follower development and deemphasizing leader glorification" (p. 397). In this way, servant leaders demonstrate their commitment to the success of the organization and its constituents, including its employees and customers.

According to Yukl's sources, (Greenleaf, 1998) was the first to propose the idea of servant leadership. In later years, it morphed into a leadership theory that prioritized morality and virtuous behavior. Despite the many books and articles

written about servant leadership, researchers agree that more work needs to be done to define it. (Jang et al., 2022). The environment in which a project performs has grown in significance. This is due to the fact that people working on various aspects of the same project frequently contribute to project performance.

 $\mathbf{H}_1$ : Servant leadership is positively related to project performance.

# 2.1.2 Relationship between Servant Leadership and Knowledge Sharing

Leaders who practice servant leadership are forthright and sincere in their efforts to lift their followers up. The most prominent standard, as highlighted by the researchers, of servant leadership is that it focuses on the interests of subordinates before focusing on their self-interest, (Hassannia et al., 2018). Within the last twenty years, studies on servant leadership have developed well as an approach to leadership that is on paper and by performing many experiments, is separate from servant leadership (Eva et al., 2019). SL is based on many affirmative qualities like selflessness, spirituality, ethics, and genuineness. Servant leadership is where leaders are expected to serve first, and self-concept as a steward is furthered because of the honesty and truthfulness of leaders.

As the actions of bosses are found dependable, ethical and selfless by the followers therefore they had greater self-confidence (Brohi, Jantan, Sobia, & Pathan, 2018), higher job contentment & committed appointment (Mohajan et al., 2019). Results in enhanced enactment. There is systematic research into how the success of a project is defined. Originally, time was distinguished as time, cost, and quality of iron triangles (Otero-Neira et al., 2016). Characteristics of a servant leadership style, such as good organizational behavior and encouraging staff to cultivate their sense of service to others, can be recognized. A leadership investigation into the company is also required in order to determine whether or not the poor performance of employees working on a particular project is due to a systemic issue. The goal of this study is to find out how knowledge is created and passed on so that we can answer the question above. Successful project completion is linked to servant leadership because of the sharing of information (Jang et al., 2022). The

project's overall success is ultimately shown to be significantly influenced by the way in which employees share their knowledge. As a result, employees develop an understanding of the procedures being followed and the desired results, creating a context within which to focus their efforts and recognize how their individual efforts contribute to the achievement of organizational objectives (Hassannia et al., 2018).

It is possible to come to the conclusion that employees have a greater sense of agency when they are given a greater stake in their work, when they are better equipped to comprehend the significance of their work, and when they are given clearer pathways to making decisions that support the organization's overall goals (Otero-Neira et al., 2016). To be a servant leader means empowering, developing, and guiding others while simultaneously displaying humility, sincerity, acceptance of others, and responsibility for one's actions (Tang & Martins, 2021). Companies that are founded on the idea of servant leadership place a premium on employee development and satisfaction, community building, the training of future leaders, and community service. Servant leadership encourages collaboration, the sharing of information, and fair treatment within organizations.

In the modern business world, information is power, and for your company to remain competitive in light of the rapid pace of change, every single employee needs to be at the top of their game. It has been said that for a company to be successful, it must cultivate an atmosphere within which its employees can acquire a significant amount of new information (Areed et al., 2021). This is done so that the members of their staff can contribute new points of view and ideas that boost morale and produce more work (Ceesay, 2018). Leadership, which in turn makes it easier for employees to communicate with one another, is one of the most important aspects that go into determining the culture of a company. Greenleaf developed the servant leadership model in 1977, and it has proven to be effective for businesses that place a high value on employee autonomy and input. One issue of Human Relations devoted its entirety to a discussion of Greenleaf's model, which she developed. The servant leader is someone who believes that it is their primary duty to see to the requirements of the individuals whom they are responsible for supervising (Tripathi et al., 2020). One definition of servant leadership is

"relating to a situation in which influence, position, and power are used to help and encourage those in one's sphere of influence." This is an example of a situation in which power, influence, and position are used to help and encourage others.

Knowledge management systems, also known as KMSs, are a subfield of information technology that has garnered a lot of attention recently due to the fact that they can be used to share, manage, and store significant data (Areed et al., 2021). These databases are great for cataloging the ideas and information that people have, but they don't take into account how people work together to create new and exciting opportunities (Tripathi et al., 2020). In order for you to accomplish this objective, you need to be led in a way that makes sense with the idea of servant leadership, which places a significant emphasis on working together and assisting one another.

This study aims to investigate what has already been written about servant leadership (traits of Servant Leadership), and this study aims to look at what has already been written about knowledge-sharing behavior. When they work for a company that has strong leadership, employees are more likely to offer suggestions with confidence. This increases the likelihood that those suggestions will be implemented (Avey, Wernsing, & Palanski, 2012).

In addition, employees went above and beyond to support their coworkers, and they enjoyed what they did, which led to increased productivity (Kalshoven, Den Hartog, & de Hoogh, 2013). The term "knowledge sharing" is used to describe the act of locating the most up-to-date information, disseminating that information, and then applying it to problems in a way that is faster and more efficient than other methods.

Knowledge sharing has as its ultimate objective the more efficient application of previously acquired information, and its method is geared toward achieving this objective to the greatest degree possible (Kim & Shim, 2018). If any of these things are going to take place, then the productivity of the company needs to go up. This study fills in the blanks by providing a new point of view on the organizational structure of various organizations. By demonstrating servant leadership, managers are educated on how to cultivate a more upbeat atmosphere at work and assist

employees in recalling information they are already familiar with. Research into servant leadership is in its infancy, so we don't know much about how its various facets interact with one another. Despite the extensive research that has been done, leadership remains a mystery (Gupta, McDaniel, & Herath, 2005). There are a lot of different leadership theories, each of which still has a lot for us to learn and understand. Some of these leadership theories focus on traits, while others focus on actions. How well an influencer gets along with the people they are trying to lead is a major factor in how successful they are as a leader (Melchar & Bosco, 2010).

We need to enhance and conduct additional research in this area to understand more about servant leadership. According to (Eva et al., 2019), much quantitative and qualitative research on the phenomena of servant leadership is needed to make sense of the various subconcepts, measuring scales, and variable operationalization. The next step in this direction is to try to figure out how to use the variables. Conducting research on a wide range of topics and variables within several different organizations is the most effective way to raise the overall value of the contribution that you make to the body of knowledge (Brewer, 2010). If any of these things are going to take place, then the productivity of the company needs to go up. This study fills in the blanks by providing a new point of view on the organizational structure of various organizations. More study is needed, according to (Wang & Noe, 2010), they say, to determine the nature of the connection between knowledge sharing and factors like leadership qualities in an organizational setting. This connection has been found to be significant. Understanding servant leadership is difficult, which is why we need additional research.

 $H_2$ : Servant leadership has a positive and significant impact on knowledge sharing.

# 2.1.3 Relationship between Project Performance and Knowledge Sharing

There are many benefits to sharing one's knowledge, including better coordination, more effective use of previously acquired information, the creation of new opportunities, and an increased capacity for making wise decisions (Kim & Shim, 2018).

Researchers have found that servant leadership encourages a more adaptable work environment. Employees with strong independent thinking and decision-making skills are highly valued by employers. Because of this, managing organizational tasks and modifying ongoing projects becomes simpler for them (Ceesay, 2018).

A substantial amount of new knowledge has been found as a result of this study, which builds on earlier research. This is an initial investigation into how servant leadership can help with information dissemination (Ali, Musawir, & Ali, 2018). The business world of today is fast-paced, high-stakes, and complex, making it more critical than ever for employees to make decisions that benefit the company as a whole. Employees are expected to exhibit organizational citizenship in today's fiercely competitive workplaces by endorsing and supporting the business, contributing to its efficiency and effectiveness, driving organizational change independently, and taking other similar actions.

The success of the project is then reported as a measure of stakeholder satisfaction and related to plan parts of the organization. Project success includes the genuine yield or consequences of an association as estimated against its expected or wanted outcomes (Kaltiainen & Hakanen, 2022). Studies have recommended that effective organizational practices can help in the improvement of project success. Project success considers the function of leadership within the moral domain as an individualistic variable (Tripathi et al., 2020).

Project success is the calculation of the organization's development that shows the achievement of an organization. The behavior of servant leadership plays a significant role in achieving a competitive edge in project success. Ventures are influential strategic weapons, created to create financial value and reasonable advantage.

Venture success hinges on whether the outcomes of the project are in line with the calculated objectives of the association or not. The strategic objectives can be accomplished with the right range of projects. A leader is a person who leads other people, a project, or a team. The leader must have highly charismatic, transformative, and problem-solving skills. A leader influences and motivates others describes the characteristics of this guide; it must be studied in leadership studies;

it can be a characteristic, a quality, a behavior or power. It is particularly essential because it is your own time to complete, cost, and quality. The project team also received the attention they deserved.

It mainly focuses on trying to describe the best leadership style for different projects; you deserve it. According to (Riaz, Khan, & ud Din, 2022), on Project Performance, it is imperative that the best and correct leadership style, experience, knowledge, and leadership qualities are available to the law. Action needs to be taken quickly, and the best information and people should be used to decide what to do. The success or failure of a project's use of performance governance must be taken into account when making changes to project management and project realization. (Kaltiainen & Hakanen, 2022), These changes were made during the Project management literature, and leadership behavior is always associated with Project management in connection.

Effective leadership convinces people of the essence of change and inspires new things with intellectual and problem-solving techniques and then encourages them to work to realize project ideas together in challenging work environments (Anantatmula, 2010). Leadership also drives people to feed themselves, organize an experience, and at the same time end their project responsibility (Ceesay, 2018).

As relationship management and leadership continue to be used to signal changes in functions and tasks, it is important to note that layers are created. Also, in achieving positive project results, project management involves continuous real address. The study of leadership has largely focused on interpersonal skills. As a friendly, friendly, and interactive presentation that maintains good relationships with everyone. A clear ethical measure is Property of potential, such as B. conforming to bonding, showing admiration, and behaving appropriately and politely (Pless & Maak, 2008). A growing group of Leadership researchers argue that real leadership processes are at the root of activities by executives reflecting on altruistic concerns and trying to find out more about the theory of servant leadership (Schaubroeck, Lam, & Peng, 2011).

By sharing what they know, employees can help their organization run much more smoothly. Understanding comes from learning facts, skills, and general

ideas. Kakabadse, Kakabadse, and Kouzmin (2003) says that knowledge is the "meaningful and organized accumulation of information gained through experience, communication, or inference," with the understanding that knowledge is always changing.

Davenport, Prusak, et al. (1998), say that a person's body of knowledge helps them analyze and integrate new information and experience. Knowledge sharing is the dynamic process of getting information from one person to another. They stress that knowledge sharing goes both ways by defining it as the exchange of information already learned and the creation of new information together.

H<sub>3</sub>: Knowledge sharing is positively related to project performance.

# 2.1.4 Relationship between Servant Leadership and Knowledge Creation

Leader is a person who leads other people, a project, or a team. Leaders should have strong charisma, transformation, and also have problem solving skills. Leader influences and motivates other people. Describes that a leader's traits must be studied in leadership studies; it may be one characteristic, trait, behavior, or power. Leadership in project leadership- is most important in the project because of its own time completion, cost, and quality. The project team also receives the attraction that it deserves (Tripathi et al., 2020), and it is concentrated on trying to describe the best leadership style for the different projects it deserves.

Servant leadership provides employees with clear direction, meaning, and goals. Servant leaders strive to achieve organizational success by motivating their followers and encouraging them to selflessly participate in achieving the same goals (Jang et al., 2022). The servant leader then shares her knowledge and other resources with her followers to benefit the entire organization as a whole (Jang et al., 2022). This strategy is also termed "knowledge creation". Knowledge creation can be defined as an important strategy under servant leadership used by the leader to improve the overall performance of his or her organization. According to (Riaz et al., 2022), for efficient project performance, it is mandatory that the best and

proper types of leadership style, managerial expertise, knowledge, and features be existent in order for the correct decision to be made at the correct time, with the efficient resources allotted at the correct location (Oyemomi, Liu, Neaga, Chen, & Nakpodia, 2019). In view of the outcome of governance enactment on the achievement or letdown of a project, it is vital to realize the alterations between the management of the project and project leadership. The literature on project management has discussed these shifts, and it has been found that leadership qualities in managers correlate strongly with successful projects.

Effective leadership persuades people of the essential need for modification, inspires new techniques of intellectual and emotional resolution, and then inspires them to work collectively in command to achieve project ideas in problematic work surroundings (Anantatmula, 2010). Leadership also leads individuals to nurture organized teams of experts while concurrently finishing their project liability. While the relationships between management and leadership continue to be used to signify altered characteristics and tasks, it is significant to note that overlay happens. Also, in the accomplishment of positive project results, project management continuously demonstrates actual leadership.

Leadership studies have concentrated strongly on relational aptitudes such as presentation, being sympathetic, gentle, interactive, and upholding good relationships with all (Kouzes & Posner, 2007). A clear ethical measurement is characteristic of potential such as conjoining in a compliant way, showing admiration and displaying suitable and polite conduct (Pless & Maak, 2008). An increasing cluster of leadership researchers contends that real leadership procedures originated from leader activities that are thoughtful of unselfish causes, and try to discover this concern according to the servant leadership theory. The knowledge creation process facilitates projects to intensify knowledge embedded internally and puts it into operational activities with project members to improve efficiency, and performance, and create value. Seeking goals that are assumed to be different and challenging makes learning and knowledge creation necessary to meet project performance parameters because specific goals are challenging and uncertain as they require new approaches for the application of strategies to achieve desired outcomes (Sitkin, See, Miller, Lawless, & Carton, 2011). When an employee's motivation is high, it

plays a significant role in performance. Employees with high motivation are more anxious about their performance because the more challenging goals are, the more freedom employees have to perform in accordance with their requirements.

Knowledge is created by integrating information and giving their best because of the skills, abilities, and knowledge they possess (Latham, Seijts, & Crim, 2008). Knowledge creation is not only associated with the creation of new ideas but also actuates the limit of knowledge in the organization, so with challenging goals it investigates issues that hinder project performance (Unegbu, Yawas, & Dan-Asabe, 2020). When a project based organization starts a new project, they need to set expedited and challenging goals with various strategic, decision knowledge spirals that can be used to bind and align new and existing knowledge from different employees in the development of a new product to enhance performance (Singh, Gupta, Busso, & Kamboj, 2021). When a company is able to generate new knowledge quickly and efficiently, it improves its chances of achieving its long-term goals and performing well.

Knowledge creation is a critical aspect as it brings opportunities for projects to boost proficiency and prolong their competitive edge as new knowledge makes them able to introduce new products and improve existing ones in an efficient manner (Charband & Navimipour, 2018). Knowledge creation takes place when management decides to set challenging goals for projects and knowledge creation appears spontaneously to resolve specific problems related to performance and encourage change and innovation, which ultimately caters to high project performance (Von Krogh, 1998). Knowledge creation acts as an analytical enabler for innovation and performance. When organizations have challenging goals, knowledge creation helps to determine how much and in what direction to improve to meet project performance and success parameters.

Knowledge in projects serves as capital, it helps the management to compete with the rivals of the relevant domain (Wang & Noe, 2010). Knowledge creation mediates between challenging goals and project performance, as (Wu et al., 2012) articulate that knowledge creation has a highly positive link with performance through the process of learning, allowing individuals to accumulate goal-related knowledge and experience when they are assigned a goal. Knowledge creation

is well known as skills and novelty in literature and is termed as the ways corporations, different organizations, and projects develop the required concepts to sustain innovation and performance (Unegbu et al., 2020). Challenging goals with a shared vision always carries the element of knowledge creation, as goals boost the mechanism of sharing opinions. Only specific goals force the employees in the organization to hold their ideas in one place to handle prejudiced tasks and achieve the desired product in the shape of a project.

In challenging goal setting, knowledge creation mediates the performance of a project. Distinct and challenging goals tend to rely on employees, and knowledge creation is the key input in this process. It is employed to attach in new and specific ways to provide value to customers and influence the performance of a project. Singh et al. (2021) Most organizations recognize that knowledge is the key to innovation. It also helps to achieve competitive advantage and sustained growth. Knowledge creation is considered a social process. It involves members' engagements and discussions.

It is widely believed that the degree to which people are connected determines the formation of knowledge. Despite this, companies have failed to utilize their internal knowledge pool and have instead focused primarily on tapping external knowledge, including exchanges and discussions among members (Oyemomi et al., 2019). It is widely believed that the degree to which people are related to one another determines the formation of knowledge (Wang & Noe, 2010). The main cause of not utilizing internal knowledge is the deficiency of concern for human relationships and interactions that damage the creation process of knowledge.

 $\mathbf{H}_4$ : Servant leadership has a positive and significant impact on knowledge creation.

# 2.1.5 Knowledge Creation is Positively Related to Project Performance

Knowledge creation is a critical aspect as it brings opportunities for projects to boost proficiency to prolong their competitive edge as new knowledge makes them

introduce new products and improve the existing ones in an efficient manner (Kaltiainen & Hakanen, 2022). Knowledge creation takes place when management decides to set challenging goals for projects and knowledge creation appears spontaneously to resolve specific problems related to performance and encourage change and innovation, which ultimately caters to high project performance (Von Krogh, Nonaka, & Rechsteiner, 2012). Knowledge creation acts as an analytical enabler for innovation and performance. When an organization has challenging goals, knowledge creation helps to determine how much and in what direction to improve to meet project performance and success parameters.

The knowledge creation process facilitates projects to intensify knowledge embedded internally and puts it into operational activities with project members to improve efficiency, and performance, and create value (Kaltiainen & Hakanen, 2022). Seeking goals that are assumed to be different and challenging makes learning and knowledge creation necessary to meet project performance parameters because specific goals are challenging and uncertain as they require new passages for the application of strategies to achieve desired outcomes (Sitkin et al., 2011).

When an employee's motivation is high, it plays a significant role in performance. Employees with high motivation are more anxious about their performance because the more challenging goals are, the more employees have to perform in accordance with their requisite knowledge created by integrating information and giving their best because of the skills, abilities, and knowledge they possess (Ceesay, 2018).

Knowledge creation is not only associated with the organization but also with challenging goals it investigates issues that hinder project performance (Van Dierendonck & Nuijten, 2011). Seeking goals that are assumed to be different and challenging makes learning and knowledge creation. When a project based organization starts a new project, they need to set expedited and challenging goals with various strategic, decision knowledge creation spirals that can be used to bind and align new and existing knowledge from different employees in the development of a new product to enhance performance (Kaltiainen & Hakanen, 2022).

Dynamic knowledge creation can enhance the capability of the firm to meet strategic objectives, and challenging goals and achieve favorable performance through

innovation. The success of the project is then reported as a measure of stake-holder satisfaction and related to plan parts of the organization. Project success includes the genuine yield or consequences of an association as estimated against its expected or wanted outcomes (Kaltiainen & Hakanen, 2022). Studies have recommended that effective organizational practices can help in the improvement of project success. Project success considers the function of leadership within the moral domain as an individualistic variable (Van der Waal, Achterberg, Houtman, De Koster, & Manevska, 2010). Project success is the calculation of the organization's development that shows the achievement of an organization. The behavior of servant leadership plays a significant role in achieving a competitive edge in project success.

Ventures are influential strategic weapons, created to create financial value and reasonable advantage. Venture success hinges on whether the outcomes of the project are in line with the calculated objectives of the association or not. The strategic objectives can be accomplished with the right range of projects. Oyemomi et al. (2019), A leader is a person who leads other people, a project, or a team. The leader must have highly charismatic, transformative, and problem-solving skills. A leader influences and motivates others. Yuki (2013) describes the characteristics of this guide; it must be studied in leadership studies; it can be a characteristic, a quality, a behavior or power. Leadership in the management of the project.

It is particularly important in the project because of your own time to completion, cost and quality. The project team also received the attention it deserves (Braun & Clarke, 2012) and mainly focuses on trying to describe the best leadership style for different projects. According to (Riaz et al., 2022) on project performance, it is imperative that the best and correct leadership style, experience, knowledge, and leadership qualities are available to the law (Kaltiainen & Hakanen, 2022). This decision must be made in a timely manner, using efficient resources and the correct location. It is crucial to make adjustments between the project's management and its actualization, taking into account the success or failure of performance governance adoption.

H<sub>5</sub>: Knowledge creation is positively related to project performance.

# 2.1.6 Impact of Servant Leadership on Project Performance with Sequential Mediation of Knowledge Sharing and Knowledge Creation

Servant leadership is about the honesty and truthfulness of leaders and is committed to enhancing the position of everyone else (Greenleaf, 1998; Ehrhart, 2004). The most prominent standard, as highlighted by the researchers, of servant leadership is that it focuses on the interests of subordinates before focusing on their self-interest (Boyd & Vandenberghe, 2018). Within the last twenty years, the studies on servant leadership have developed well as an approach to leadership that is on paper and by performing many experiments, is separate from Transformational Leadership. SL is based on many affirmative qualities like selflessness, spirituality, ethics, and genuineness (Singh et al., 2021). Servant leadership is where leaders are expected to serve first, and self-concept as a steward, furthermore because of the honesty and truthfulness of their bosses.

As the action of bosses are found dependable, ethical and selfless by the followers, (Sendjaya & Pekerti, 2010), therefore they had greater self-confidence (Searle & Barbuto Jr, 2011), higher job contentment & committed appointment (Tripathi et al., 2020). Results in enhanced enactment. Meanwhile, many different authors have tried to put into operation (Greenleaf, 1998) important workings of servant leadership, while (Van Dierendonck & Nuijten, 2011) literature review depicts solely, gathers part of sanctity, particularly the idea of (Sendjaya & Pekerti, 2010) identified 6 aspects of servant leadership behavior.

Authentic self, a repeated show of modesty, honesty, reliability, surety, and vulnerability by leaders; contractual connection, real and long-lasting leader-follower association distinguished via mutual trust and mutual principles; responsible ethics, having a connected moral liability that confirms the ends and therefore the suggestions that are required by leaders are virtuously made legitimate, ethically justified, and properly reasoned, transcendental spirituality, (Unegbu et al., 2020) that tells about the extent to which leaders promote the way of transcendence, link, which means among the employees and changing the structure of influence; however, the

leaders get a way of the amendment through empowering, (Oyemomi et al., 2019) role modeling, casting vision, trusting, and giving advice to the followers.

The main differences between servant leadership and other designs of leadership are three in total. First, in relation to empowering and transformational leaders, the followers are inspired by the World Health Organization to give their best in order to achieve structured aims. Servant leaders primarily focus on their subordinates interests (Van Dierendonck & Nuijten, 2011). Secondly, servant leaders contain strong issues regarding providing space to supporters, the applicable behaviors and ethical parts, which is a basic declaration of moral, Authentic and moral leadership. Third, there is no opposite leadership design listed which contains all the main characteristics highlighted by (Van Dierendonck & Nuijten, 2011).

Servant leadership is a lot different from other leadership styles. The fundamentals of servant leadership are mainly applicable to organizations (Brownell, Sindelar, Kiely, & Danielson, 2010). Furthermore, as investigation explained, servant leadership might motivate workers through growing member-leader and member-team exchanges. Regardless of these results, none of the lessons has pointed out that servant leadership impacts workers' active facility behaviors; it is gaining popularity for organizational achievement (Chen, Chen, Liu, Liu, & Zhu, 2017). Research reports the gaps by concentrating on operational methods which influence employee output.

While talking about project performance, there is no single definition of project performance; rather, there are subjective measures with relevance to every stakeholder involved in the project (Pollanen, Abdel-Maksoud, Elbanna, & Mahama, 2017). Researchers further corroborated that the performance of the project can be measured next to the cost of time plus scope, also mentioned as "the management triangle", alongside the quality of provision of services (Unegbu et al., 2020). Performance is an outcome of knowledge, competence, capability, and persistence aimed at a particular prescribed behavior. The relationship between performance and managerial leadership style is positive.

Those who are very aware of their surroundings have a natural drive to do well when they are in a leadership position. Researchers have found links between

motivational and behavioral factors and the success of a project (Lin et al., 2013). A project's success can be predicted in part by the team's composition, personalities, and how well they work together. The systems approach has been broadly explained as the interconnection of different parts. Human resources are considered one of the major parts of a system. Humans are involved, so various behavioral and cultural dimensions impact the whole system.

Various social measurements that possibly impact learning sharing have been recognized. Knowledge sharing is the significant means through which representatives can add to performance, and advancement, and eventually attain the competitive edge. Almahamid, Mcadams, and Kalaldeh (2010), Literature shows that knowledge sharing plays an important role in projects, and creating a right platform for knowledge sharing is a fundamental element considered for successful organizational performance (Singh et al., 2021).

"Knowledge" is considered one of the most powerful and significant competitive advantages in most organizations (Areed et al., 2021). Knowledge management is a vital element for an organization and its success. When venture-based organizations share information, it is very important for project partners to have good relationships. In order for an organization to grow and get better, its members must share what they know (Omotayo, 2015). Multinational companies that do business all over the world do well because they share their knowledge. A lot of research has been done previously to understand the importance of knowledge management in an organizational context, which influences behavior, performance, and attitudes in an organization in a positive way.

Knowledge sharing is seen as an exchange of social and cultural relationships; e.g., it involves the exchange of experience, skills, and ideas within departments and organizations (Gharakhani & Mousakhani, 2012). Based on research into the effects of knowledge sharing on project management, concludes that "effective knowledge sharing motivates organizational and individual learning, which in turn affects the outcome."

Research shows that in a volatile environment, sharing knowledge makes people more productive (Rasiah, 2017). In the past 20 years, people have become more

interested in the field of knowledge management. In the modern business world, knowledge is king, and successful companies know that sharing information between employees is key to their long-term success (Charband & Navimipour, 2018). Research from the past shows that "learning" organizations have set up schedules that make it easy for them to make and store data. In addition, they use what they have learned to analyze data from the real world.

Nelson and Winter (1982), were among the first to contend that the interactive environment is the core element that influences performance and that organizational learning would be required to happen when firms create "adaptation routines" that permit the firm to adjust existing schedules in light of new learning (Shenhar & Holzmann, 2017). Different researchers have additionally seen organizational learning as routine-based and history subordinate that has a positive impact on outcomes (Law & Ngai, 2008). Grant presented a learning routine as a regular pattern of interactions among people that allows the exchange, recombination, or making of particular learning. The importance of knowledge sharing has been discussed in literature several times (Omotayo, 2015), but still, there is a requirement to analyze its importance in making projects critical.

In project-based organizations, it is very important to share knowledge. Without an effective knowledge-sharing strategy, a project can suffer from different problems, e.g. coordination issues, unsuccessful collaborations, etc. Knowledge sharing in projects can be a challenging and difficult task (Almahamid et al., 2010). It found that sometimes team members are reluctant to share knowledge because it gives them an edge over others, and sharing may weaken their potential value. Literature shows that a project manager's behavior plays an important role in achieving project success (Scott-Young & Samson, 2008). It has been argued that developing a knowledge-sharing culture and creating the right platform for knowledge-sharing is a fundamental concern for successful organizational performance.

Past research suggests various difficulties related to knowledge sharing in a system setting Dube and Ngulube (2012). The primary difficulty is determining the means by which to arrange individuals to take part in the system and to straightforwardly impart profitable learning to other system individuals (Areed et al.,

2021). The characteristic inclination of individual firms is to ensure expertise is seen as exclusive to anticipate unfortunate learning overflows.

Thus, numerous organizations particularly those with restrictive expertise are hesitant to take part in efficient learning and sharing exercises. Organizations exist since they are superior to anything in the market at exchanging, recombining, and making information (Charband & Navimipour, 2018). A key test for an information sharing system is to inspire individuals to take part and contribute to learning to achieve great outcomes. Sharing knowledge among the team increases motivation and helps in dealing with the complications occurring within the project.

Knowledge creation is critically important for setting challenging goals and project performance in the early stages of learning. Acquiring new knowledge was considered a part of the routine before specifying tasks and automatically capturing every employee's attention, which needs to be the focal point for finding means that lead to outstanding performance (Jang et al., 2022). Putting effort will be an opportunity for them to attain target goals as they share their previous experience and create motivation among themselves. The knowledge creation process facilitates projects to intensify knowledge embedded internally and puts it into operational activities with project members to improve efficiency, and performance, and create value.

Seeking goals that are assumed to be different and challenging makes learning and knowledge creation necessary to meet project performance parameters because specific goals are challenging and uncertain as they require new passages for the application of strategies to achieve desired outcomes (Sitkin et al., 2011). When an employee's motivation is high, it plays a significant role in performance. Employees with high motivation are more anxious about their performance because the more challenging goals are, the more allowed rein employees have to perform in accordance with their requisite knowledge created by integrating information and giving their best because challenging goals cues employees to use skills, abilities and knowledge they possess (Latham et al., 2008).

Challenging goals leads to better project performance when motivation and strategies are strong enough to boost their capacities at the same time challenging

goals also demand the availability of certain tools and techniques. Herculean and challenging goals are deemed to expose more information to find new determinants of specific tasks through knowledge creation and sharing among employees (Charband & Navimipour, 2018). Good management can be only considered when they have a high level of latitude for knowledge creation and learning in projects. Because when organizations have specific goals and require a high demand for innovation, it fosters learning, empowerment, and new opportunities to solve problems as knowledge creation takes place and achieves desired project performance, it also boosts them by enthusiasm and support mechanisms.

Teams in projects always learn from the involvement of previous projects because it helps them develop new strategies, tools, and techniques that can be useful to attain laborious actions or chunks of the project (Oyemomi et al., 2019). Every organization that does projects always varies their strategies, always varying from project to project because every time situation is different and the changing environment helps to create a knowledge creation process more efficient as project challenging goals are divided into chunks among teams to obtain favorable outcomes (Jang et al., 2022). New knowledge is yielded through the formation of knowledge, as knowledge gives an edge in the development of new competence in projects and affects the performance of the project. Knowledge creation is a course of action that depends on an individual's experience and variety of projects. When management works as a cohesive team, they share information about existing issues in similar kinds of projects.

**H**<sub>6</sub>: Impact of servant leadership on project performance with sequential mediation of knowledge sharing and knowledge creation.

# 2.1.7 Collaborative Culture plays a Moderating Role between Leadership and Knowledge Sharing

Lederach (1995), states "culture as the mutual knowledge and patterns generated by an established set of individuals for recognising, inferring, articulating, and retorting to the social certainties around them". In addition, collaboration is a vibrant and active progression between individuals that is commonly focused

towards exploiting and achieving approximately. Collaborative culture, referred to by (Barczak, Lassk, & Mulki, 2010), is demarcated as "the team's collective morals and opinions about the organizations, and provision for flexibility, exposed communication, and inspiration of admiration, cooperation, risk taking and multiplicity." The present study focuses on the intellect and is defined as a collaborative culture.

According to (Schein, 1986), culture is fundamentally about behavior management; thus, controlling processes are concerned with establishing the behavioral norms, values, and beliefs that leaders aim to inculcate in their subordinates. A collaborative culture can be advantageous or disadvantageous to the company. This could indicate which features organizational culture in the knowledge economy should have.

The study's goal is to look into the relationship between knowledge sharing and collaborative organizational culture as well as the relationship between knowledge sharing and servant leadership. Leadership, leadership. This study claims that cultivating a collaborative culture in a workgroup has a significant impact on knowledge sharing (Singh et al., 2021). It also proposes that, in today's knowledge-based economy, managers should act as facilitators and mentors to encourage people to share their knowledge. The collaborative culture establishes the connection between servant leadership and knowledge sharing, (Nauman et al., 2022), which impacts the overall project performance. As two or more persons working together in order to achieve agreed outputs and targets. Peng (2014) established that cultural collaboration enhances the effectiveness of organizational projects through the usage of modern technology involvement. The present study focuses on the intellections and is defined as collaborative culture as two or more persons working together to achieve agreed outputs and targets. Kim and Shim (2018). Furthermore, cultural collaboration elevates and increases the effectiveness of organizational projects through the usage of modern technological skills and its involvement.

H<sub>7</sub>: Collaborative culture plays a moderate role between servant leadership and knowledge sharing. Such as, high collaborative culture strengthens the relationship between servant leadership and knowledge sharing.

## 2.2 Research Model

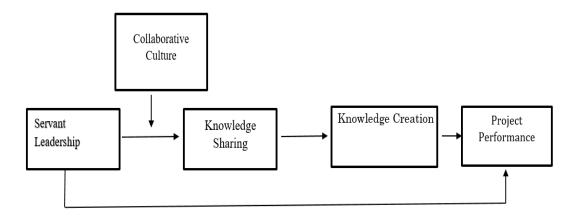


FIGURE 2.1: Research Model

# 2.3 Research Hypotheses

 $\mathbf{H}_1$ : Servant leadership is positively related to project performance.

**H**<sub>2</sub>: Servant leadership has a positive and significant impact on knowledge sharing.

H<sub>3</sub>: Knowledge sharing is positively related to project performance.

**H**<sub>4</sub>: Servant leadership has a positive and significant impact on knowledge creation.

 $H_5$ : Knowledge creation is positively related to project performance.

 $\mathbf{H}_{6}$ : Impact of servant leadership on project performance with sequential mediation of knowledge sharing and knowledge creation.

**H**<sub>7</sub>: Collaborative culture plays a moderate role between servant leadership and knowledge sharing. Such as high collaborative culture strengthens the relationship between servant leadership and knowledge sharing.

# Chapter 3

# Research Methodology

Research is a mindset, an attitude of inquiry, a frame of mind, or a point of view. It does things that have never been done before, such as asking questions that have never been asked before, and then it tries to answer those questions by adopting a pretty precise approach to answering those questions.

"It is not merely speculation; rather, it is an attempt to unearth facts and to confront those facts after they have been compiled" (p.2). The primary focus of this chapter is to define the nature of the connection that exists between servant leadership, the production of new knowledge, the distribution of that new information within collaborative cultures, and the completion of projects.

It takes into account the kind of study, the research design, the sample and the population, the time lag, and the unit of analysis.

# 3.1 Research Design

Research design is a method for analyzing and addressing research questions in the field of business. It has three parts: the study; the time lag; and the analysis unit. Research design is the manner in which a researcher collects information and data using a research questionnaire. For this study, self-administered questionnaires were employed to collect data. "Research design" refers to the process in which we evaluate the data from the different parts of the research model (Kahng, 2018).

### 3.1.1 Type of Study

This is an explanatory type of study. This study's primary objective is to determine the effect of servant leadership on knowledge generation. The respondents were contacted within their organizations and a questionnaire was used to gauge their response in this study. This study is related to IT organizations, so the target population were the employees of private and public project-based organizations in Islamabad and Rawalpindi. The variables in this research study were not manipulated, and the study was not conducted in an artificial context.

### 3.1.2 Research Philosophy

The scientific method of study is known as the hypothetical deductive method. Various tests are carried out in a method to validate and explain the required solution to the problem that is first demonstrated.

This study is based on a hypothetical deductive method that relies on determining reason, in which previous literature was used as the foundation for presenting theories that aid in understanding and supporting the conceptualized hypothesis framework, which was then empirically tested for validity.

# 3.1.3 Unit of Analysis

The unit of analysis is the major element of scientific study. It is a framework that analyzes the main focus of a particular topic. The unit of analysis for this study were project team members (supervisors, managers, employee) of various private project-based IT organizations from Rawalpindi and Islamabad were the units of analysis to investigate the impact of servant leadership on project performance.

## 3.2 Time Horizon

Time lag study was performed in which data was collected in three time lags with the gap of three weeks . In the first time lag the data of demographics and direct variable (Servant leadership) were collected. In the second time lag the data of sequential mediation were collected which is knowledge sharing and knowledge creation. In the third lag the data of moderation (Collaborative Culture) and indirect variable (Project Performance) were collected. Questionnaires are being circulated at various project-based IT organizations in Islamabad and Rawalpindi and organization's managers supervisors and employees filled the questionnaires in order to gather information for this study.

# 3.3 Population and Sample

A population is the group of individuals to whom the researcher wants to apply the study's findings. The current study's population is made up of public and private Pakistani IT-based organizations. One of the most vital elements of any research project is the sample that is used to perform an analysis. That was a group of people who took part in an investigation. It gives researchers the ability to study large groups of people without having to make direct contact with every single member of the group. The way in which participants were chosen for inclusion in the study has an impact on the validity and reliability of the study's findings.

One example of this would be a section or subgroup within a larger population. Personnel from a wide variety of IT organizations contributed to the collection of the sample. One of the aspects of a research project that is considered to be among the most important is the sample that is used for the analysis. Participants who give their informed consent to take part in a study is known as a research sample. The validity and reliability of an investigation's findings are both affected by the size of the sample used. A representative sample of the entire population is referred to as a sample. Personnel from a wide variety of IT organizations contributed to the collection of the samples.

A representative sample is taken from the population at large to examine the impact of servant leadership on the development of new knowledge, with knowledge sharing serving as a mediator and a culture of collaboration acting as a moderator. Purposive sampling was used for the data collection in this investigation. Sampling

is the selection of data units according to predetermined standards or ends. The researcher can pick the sample using any number of methods and parameters. The goal here is to amass as much specific data as possible from the applicable responses.

#### 3.4 Data Collection

Employees filled out the questionnaire in this research, which is a time lag study. Additionally, information was gathered from IT companies in Islamabad and Rawalpindi. The data was gathered using Google Docs and adopted surveys from both physical and internet sources. Current research primarily defined and briefly communicated the research's purpose to respondents. Respondents were informed that their responses would remain confidential, and their information would only be used for research purposes. Personal references and contacts were used to collect data. It requires considerable time and effort to collect data from as many people as possible.

Self-administered questionnaires were created using Google Form and sent via online channels like email, whatsapp, and linkedin to the project team members working in project-based IT organizations in Islamabad and Rawalpindi. The criterion used to choose the respondents was that they work in IT firms, are a part of project teams, and have at least one year of work experience with the chosen company.

As a result, evidence regarding servant leadership and its influence on project performance has been gathered, with knowledge sharing and knowledge creation as the mediating role and a collaborative culture playing the role of moderation The first section was about demographics, and the remaining five sections were used to collect data about servant leadership, knowledge sharing,knowledge creation, collaborative culture and project performance. The sample size was 311 and the total questionnaires that were distributed were 400 handed out to the potential respondents. here were a total of 400 questionnaires handed out to the potential respondents.

### 3.5 Research Instrument

Close-ended questionnaires are used for measuring four variables on a 5 point Likert scale. Questionnaire contains 4 demographic variables, which include information about the respondent's gender, age, qualification, and experience in the organization.

#### 3.5.1 Servant Leadership

Using a 13-item scale created by (Ehrhart, 2004), servant leadership was evaluated. Responses are obtained through a five point likert scale. The scale's item is "Project manager takes the time to cultivate positive relationships with project employees."

### 3.5.2 Project Performance

A six-item scale developed by (Popaitoon & Siengthai, 2014) and adopted by (Ali et al., 2018) was used to assess project performance. The item of the scale is: "Our project is meeting operational specifications."

# 3.5.3 Knowledge Sharing

Park and Lee (2014), used a 6-item scale to evaluate knowledge sharing. The item of the scale is "We always provided technical documents, including manuals, books, and training materials to each other." The scale's item is "We always gave each other technical documents, such as manuals, books, and training materials."

# 3.5.4 Knowledge Creation

Knowledge creation was measured by (Choo, Linderman, & Schroeder, 2007) by using a 3-items scale. The scale item is "The solutions found for this project were clearly original and innovative for the organization."

#### 3.5.5 Collaborative Culture

The collaborative culture was evaluated using an eight-item scale created by (López, Peón, & Ordás, 2004). The factor on the scale is that my team views individuals as assets and strives to continuously appreciate them.

Table 3.1: Scale Summary

Variables	Scales	Items
Servant Leadership	Ehrhart 2004	13
Collaborative Culture	(Popaitoon& Siengthai,2014)adopted byAli , 2018	8
Knowledge Sharing	Park and Lee (2014)	6
Knowledge Creation	Choo,Linderman& Schroeder (2007)	3
Project Performance	Lopez, Peon, and Ordas (2004)	6

# 3.6 Method of Analysis

Statistical analysis of the data was conducted using SPSS (version 20.0). Several tests, such as correlation, regression, mediation, and moderation, were used to analyze the data. The relationship between the independent variable and the dependent variable was found by using a correlation test. Regression was used to figure out how the variables were related to each other. The (Baron & Kenny, 1986) method was used for the mediation and moderation tests.

# 3.7 Analytical Techniques and Tools Used

The data were subjected to reliability tests, descriptive tests, correlation tests, and regression checks. To perform all necessary statistical analyses and calculations, SPSS software version 20.0 was produced. To determine how dependable the scales were on their own, Cronbach's alpha was used. For mediation analysis, the method developed by (Baron & Kenny, 1986) was used.

# 3.8 Sample Characteristics

#### 3.8.1 Gender

Table 3.2: Gender

Gender	Frequency	Percentage
Male	115	37
Female	196	63
Total	311	100

Those involved in the project-based organizations in Rawalpindi and Islamabad were sent questionnaires to fill out. The response rate was 90%, with 311 responses out of a possible 400. Because there are few women working for project-based companies, it's likely that more men than women filled out the survey. The responses included 115 males and 196 females, or 37.0% male and 63.0% female.

# 3.8.2 Age

Table 3.3: Age

Age Group	Frequency	Percentage
20-30	215	69.1
31-40	58	18.6
41-50	23	7.4
51 & above	15	4.8
Total	311	100

## 3.8.3 Qualification

People of different ages took part in this study by filling out questionnaires. There were 215 people in the age range of 20–30, 58 in the age range of 31–40, and 23 in the age range of 41–50. Table 3.2 shows that only 15 of the individuals that responded were 51 or older.

Table 3.4: Qualification

Qualification	Frequency	Percentage
Inter	3	4.4
Bachelors	17	11.5
Masters	95	37.4
MS/M.Phil	148	41.4
PHD	48	5.3
Total	311	100

The survey also shows that the level of education of the people who answered varies. 3 participants had a qualification of inter. The number of respondents who reported holding a bachelor's degree was 17, and the number of those who claimed to hold a master's degree was 95. From the table of qualifications, we can see that 148 of the respondents had an MS/M.Phil. And 48 had a PHD.

# 3.8.4 Experience

Table 3.5: Experience

Experience	Frequency	Percentage
01-03	80	25.5
03-05	100	30
Above 5,	131	45.5
Total	311	100

In addition, the table reveals that 80 respondents had 0–3 years of experience, 100 respondents had 3–5 years of experience, and 131 respondents had more than 5 years of professional experience.

# Chapter 4

# Data Analysis and Discussion

In this chapter, the results of the analysis are shown in both narrative and table format. During this analysis, the concepts of linear mediation and moderation, as well as descriptive statistics, correlations, and reliabilities, came to light. In the next chapter, the study's results were looked at using an IBM SPSS test to see if the hypotheses about the relationships between variables were supported or not.

# 4.1 Descriptive Statistics

The descriptive method organizes the summary statistics for a number of different variables into a single table and computes the average values for those variables. The descriptive statistics provide essential pieces of information such as the size of the sample, the values at their extremes, the values that fall in the middle, and the values that represent the standard deviation.

To examine statistics that characterize the most recent data, look at table 4.1. The sample size for all four variables was 311, according to the table. All characteristics were rated on a five-point the variables are servant leadership, collaborative culture, knowledge sharing, knowledge development, and project performance.

The mean value reveals the answers' concentration. The respondents generally believed that servant leadership was present in project-based organizations in Rawalpindi and Islamabad, as indicated by the average servant leadership value of 3.8402. Collaborative culture received a mean rating of 3.8802. This indicates that a team's collaborative culture is something that most people concur on. The survey respondents believed they knew how well the project team performed because the average score for project performance was 3.9731. The survey respondents agreed, as indicated by the mean value of 3.9378 for sharing information. The survey respondents mostly agreed, as indicated by the study's average score of 3.8312.

Table 4.1: Descriptive Analysis

Descriptive Statistics	Min.	Max.	Mean	S.D
Servant Leadership	1.31	5	3.8402	0.57898
Collaborative Culture	1.63	5	3.8802	0.55515
Knowledge Sharing	1	5	3.9378	0.65806
Knowledge Creation	1	5	3.8312	0.70226
Project Performance	2.17	5	3.9731	0.49918

# 4.2 Correlation Analysis

An analysis of correlation is a way of statistical evaluation that is used to determine the strong points of a link between statistically continuous variables that have been calculated. This method of statistical evaluation is called correlation analysis. The investigation of the correlation also examines the way in which the variables are related to one another.

According to the results of the correlation analysis between servant leadership and collaborative culture (r=0.618, p 0.01), collaborative culture and servant leadership are favorably and significantly connected with one another. The fact that the values of the correlation between servant leadership and knowledge sharing indicate a positive and significant correlation between the two (r=.485, p=0.01) is evidence that servant leadership is associated with knowledge sharing.

According to the values of the correlation between servant leadership and knowledge creation, which anticipate a positive and significant association between the two concepts (r = 0.513, p0.01), knowledge creation was favorably connected with servant leadership. According to the results of the correlation between servant leadership and project performance (r=508, p0.01), servant leadership was favorably and significantly connected with the performance of the project. The results of the correlation between collaborative culture and knowledge sharing suggest that there is a significant and positive relationship between the two concepts (r = 0.636, p 0.01). Based on the results of the correlation between collaborative culture and knowledge creation (r=-0.345, p=.01), it can be stated that there is a positive and significant link between collaborative culture and knowledge creation. It can be derived from the values of the correlation between collaborative culture and project performance (r=0.487, p0.01) that there was a substantial and positive relationship between collaborative culture and project performance.

The correlation between the values of knowledge sharing and knowledge creation (r = .610, p 0.01) suggests that the sharing of knowledge was significantly and favorably associated with the creation of knowledge. Knowledge sharing was strongly and favorably associated with project performance, according to the values of knowledge sharing c and project performance (r = 0.592, p0.01). According to the values of knowledge creation and project performance (r = 0.670, p 0.01), it can be predicted that the knowledge creation was strongly and favorably associated with project performance. **Table 4.2** displays the results of the correlation study performed on the theoretical variables.

Table 4.2: Correlation

	SL	CC	KS	KC	PP
$\mathbf{SL}$	1				
$\mathbf{CC}$	.618**	1			
KS	.485**	.636**	1		
KC	.513**	.575**	.610**	1	
PP	.508**	.487**	.592**	.670**	1

Notes: N=311, \*\*=P<0.001, Servant Leadership (SL), collaborative culture (CC), Knowledge Sharing knowledge Creation(Kc), Project Performance(PP)

# 4.3 Reliability Analysis

Reliability analysis can be done to evaluate the consistency of the scale's items used to assess the variable. Checking a scale's internal consistency is the most common way to determine whether it can be trusted (DeVellis, 2021). For determining scale reliability, the majority of studies use the internal consistency statistics known as Cronbach Alpha. Cronbach's alpha is a statistic that assesses the degree of item connection and is calculated using the average intercorrelations between the scale items (Sekaran and Bougie, 2016). Cronbach's alpha's value can be any amount between 0 and 1. Any scale's Cronbach alpha value must be greater than or equal to 0.7 in order to be considered genuine.

Table 4.3: Reliability Analysis

Variables	Items	Cronbach's Alpha
Servant Leadership	13	0.870
Collaborative Culture	8	0.792
Knowledge Sharing	6	0.817
Knowledge Creation	3	0.700
Project Performance	6	0.758

Table 4.3 presents the results of the Cronbach alpha for the scales. It asserts that the alpha reliability constant of every variable is higher than 0.7. The value of .870 was found to be attained with the Cronbach alpha for servant leadership. .792 is the value for the Cronbach alpha for the Collaborative Culture scale. After carrying out reliability analysis for Knowledge Sharing, the value of the Cronbach alpha for the Knowledge Creation section is .700. The value of 0.758 was found to be the Cronbach alpha for the project's performance. As a result, the alpha reliability

coefficient for each variable falls within a range that is deemed satisfactory given that each variable has a value that is more than 0.7. As a result, the data will be processed further for further examination.

# 4.4 Hypothesis Testing

### 4.4.1 Test of Hypothesis 1

**H1:** The relationship between servant leadership and project performance is positive and significant.

In this particular study, the link from servant leadership to project performance was investigated, and the findings revealed that servant leadership has a positive and substantial relationship with project performance. This indicates that the performance of the project can be changed by 14.59% for every change of 1 unit in servant leadership.

Table 4.4: Direct Effect of SL on PP

Predictor	Coeff	$\mathbf{SE}$	t	p	LLCI	ULCI
SL-> PP	0.1459	0.0411	3.5497	0.0004	0.065	.2267

N=311, \*\*\*p<0.001, LLCI-Lower Limit Confidential Interval (95%), ULCI-Upper Limit Confidential Interval (95%).

# 4.4.2 Test of Hypothesis No.2

**H2:** The relationship between servant leadership and knowledge sharing is positive and significant.

The second possible path that was investigated in this research was one that led from servant leadership to knowledge sharing. The findings of the analysis indicate that servant leadership has a significant and favorable relationship with knowledge sharing. It means that a 1 unit change in servant leadership brings a

54.0.4% change in knowledge sharing. According to the findings, hypothesis 2, which stated that servant leadership has a good link with information sharing, has been supported. This is indicated by the findings.

Table 4.5: Direct Effect of SL on KS

Predictor	Coeff	SE	t	p	LLCI	ULCI
SL->KS	0.5404	0.0567	9.5355	0.000	0.4289	0.6519

 $N=311,\ ***p<0.001,\ LLCI-Lower\ Limit\ Confidential\ Interval\ (95\%),\ ULC-Upper\ Limit\ Confidential\ Interval\ (95\%)$ 

#### 4.4.3 Test of Hypothesis No. 3

**H3:** Knowledge sharing is positively related to project performance.

For the purpose of this study, the pathway from knowledge sharing to project performance was investigated. The findings revealed that servant leadership has a favorable and substantial relationship with the performance of projects. This indicates that the performance of the project will change by 18.93% for every change of one unit in servant leadership. The findings suggest that the third hypothesis, which stated that the sharing of information has a favorable association with project performance, has been supported.

Table 4.6: Direct Effect of KS on PP

Predictor	Coeff	SE	$\mathbf{t}$	p	LLCI	ULCI
KS->PP	0.1893	0.0393	4.8116	0.000	0.1119	0.2667

 $N=311,\ ***p < 0.001,\ LLCI-Lower\ Limit\ Confidential\ Interval\ (95\%),\ ULCI-Upper\ Limit\ Confidential\ Interval\ (95\%)$ 

# 4.4.4 Test of Hypothesis 4

**H4:** Servant leadership has a positive and significant impact on knowledge creation.

In this particular investigation, the route from servant leadership to knowledge creation was under scrutiny, and the findings of the analysis indicate that there is a considerable and favorable connection between the two concepts. It means that a 1 unit change in servant leadership brings a 34.95% change in knowledge creation. The findings suggest that Hypothesis 5, which states that servant leadership has a positive link with knowledge creation, has been supported.

Table 4.7: Direct Effect of SL on KC

Predictor	Coeff	SE	t	p	LLCI	ULCI
SL->KC	0.3495	0.0594	5.8858	0.000	0.2327	0.4664

 $N=311,\ ^{***}p<0.001,\ LLCI-Lower\ Limit\ Confidential\ Interval\ (95\%),\ ULCI-Upper\ Limit\ Confidential\ Interval\ (95\%)$ 

### 4.4.5 Test of Hypothesis 5

**H5:** Knowledge creation is positively related to project performance.

In this study, the path from knowledge creation to project performance was investigated, and the findings of the analysis revealed that knowledge creation has a positive and substantial relationship with project performance. It indicates that there is a correlation between a change of one unit in knowledge development and a change in project performance of 30.71%. As a consequence of this, the findings suggest hypothesis 6, which states that knowledge creation has a positive link with project performance. Specifically, the results indicate that this hypothesis has been supported.

Table 4.8: Direct Effect of PP on KC

Predictor	Coeff	SE	t	p	LLCI	ULCI
PP->KC	0.3071	0.0374	8.2044	0	0.2335	0.3808

#### 4.4.6 Mediation Analysis

In order to investigate the potential mediating role, Model 1 and Model 4 of PROCESS macro were run. of PROCESS macro was run. The indirect relationship between servant leadership and project performance with knowledge sharing and knowledge creation acts as a sequential mediation. According to table 4.10., there is no zero between the values of Boot LLCI and Boot ULCI, having the values of 0.482 and 0.1233, confirming the significant sequential mediation effect of knowledge sharing and knowledge creation between servant leadership and project performance.

The value of bootstrap is positive, which shows no zero holds between the two and the coefficient value is positive, i.e., .0845, hence supporting the seventh hypothesis that knowledge sharing and knowledge creation act as a sequential mediation between servant leadership and project performance.

Table 4.9: Indirect Effect of X on Y

Predictor	Effect	BootSE	BootLLCI	BootULCI
SL->KS-> KC->PP	0.0845	0.0193	0.0482	0.1233

N = 311, \*\*\*p < 0.001,  $CI = Confidence\ Interval;\ UL = Upper\ Limit;\ LL = Lower\ Limit$ 

# 4.4.7 Moderation Analysis

In order to investigate the potential moderating role, Model 1 of the PROCESS macro was run. A 5000 bootstrap was used to run the analysis at a 95% confidence level. According to table 4.11, the interaction term is insignificant as the values of LLCI and ULCI are -2262 and 0000 respectively, hence zero lies in between these two limits. Further, the value of p is 0500, which is greater than 0.01, so the results are insignificant, which does not support the moderating role of leader prototypically. Based on results, hypothesis 6, that is, collaborative culture moderates the relationship between servant leadership and knowledge sharing such that an increase in CC will strengthen the relationship between SL and KS, is not being supported.

Table 4.10: Moderation Analysis

	Effect	SE	t	p	LLCI	ULCI
$SL \times CC$	-0.1131	0.0575	-1.9679	0.05	-0.2262	0.0000
$({ m Int}\_{ m term})$						

# 4.5 Hypothesis Summary

Table 4.11: Summary of hypothesis Results

Hypothesis	Statements	Status
H1	The relationship between servant leader-	Supported
	ship and project performance is positive	
	and significant.	
H2	The relationship between servant lead-	Supported
	ership and knowledge sharing is positive	
	and significant.	
H3	Knowledge sharing is positively related	Supported
	to project performance.	
H4	Servant leadership has a positive and sig-	Supported
	nificant impact on knowledge creation.	
H5	Knowledge creation is positively related	Supported
	to project performance.	
H6	The impact of servant leadership is posi-	Supported
	tively and significantly related to project	
	performance with sequential mediation	
	of knowledge sharing and knowledge cre-	
	ation.	
H7	Collaborative culture does not play a	Not Supported
	moderate role between servant leader-	
	ship and knowledge sharing.	

# Chapter 5

# Discussion and Conclusion

### 5.1 Discussion

This chapter is split up into three major parts, the first of which analyses the outcomes of the hypothesis; the second of which explores the implications for the theory and practitioners, and the third of which discusses the restrictions imposed by the research. The key tenacity in this regard was to discuss the gray area of servant leadership, which still needs to be discussed and researched in the field of project management.

The purpose of this study is to investigate the influence that servant leadership has on project performance, taking into account the moderating function that collaborative culture plays as well as the mediating role that knowledge sharing and knowledge creation play. To steer the execution of a project in the direction of achievement, its leader needs to possess both the necessary skills and the necessary attitudes.

Overall, the purpose of this research was to determine whether or not servant leadership has an effect on the performance of a project, taking into account the moderating role that collaborative culture has, as well as the mediating roles played by knowledge sharing and knowledge generation.

Let's go over each theory in great depth, shall we? A more in-depth analysis of the hypothesis is presented as follows:

### 5.2 Discussion on Results

# 5.2.1 What is the Relationship between Servant Leadership and Project Performance?

Leadership can be considered a significant component in the wellbeing and health of employees, mainly regarding damaging supervisor attitudes. As servant leadership is known as serving employees, it raises the performance of employees (Montano, Reeske, Franke, & Hüffmeier, 2017). Servant leadership enhances project success. According to (Noor et al., 2013), the success of a project depends on the project manager's ability to demonstrate the necessary level of leadership and management expertise. Although there is no one optimal approach to project management, there are many viable options (Tripathi et al., 2020).

Servant leadership has been identified as a model that may help project leaders get through many of the problems they may face (Jang et al., 2022). This remains true although there isn't a single ideal method of leading. As stated by (Redick et al., 2014), it is difficult for the project sponsor to get everyone on the team to work together. This is because the project might fail if the team doesn't work well together. Meanwhile, servant leadership within a business can bring about favorable outcomes for the performance of a project.

This approach was specifically discussed for project-based organizations in Pakistan throughout the deliberation process. The head of an organization is the most iconic emblem of the organization, and this is important for the success and efficiency of the project. To steer the execution of a project in the direction of achievement, its leader needs to possess both the necessary skills and the necessary attitudes. The outcomes of this study turned out to be consistent with the model that had been hypothesized. It was discovered that servant leadership has a strong and beneficial relationship with the overall performance of the project.

The findings of this research indicate that there is a considerable connection to be made between servant leadership and the performance of the project. And my proposed hypothesis is supported. When the leader shares his power among the subordinates, it will increase the knowledge base. Team players will be able to think collectively and involve themselves in knowledge creation to provide effective performance.

Hostility from leaders is highly linked with employee performance rather than violence from some other sources at work. Resources at the workplace that are related to health are very important for employees to remain healthy and to survive work requirements (Bregenzer, Milfelner, Šarotar Žižek, & Jiménez, 2020).

# 5.2.2 What is the Relationship between Servant Leadership and Knowledge Sharing?

A leadership investigation into the company is also required in order to determine whether or not the poor performance of employees working on a particular project is due to a systemic issue. The goal of this study is to find out how knowledge is created and passed on so that we can answer the question above. Successful project completion is linked to servant leadership because of the sharing of information (Jang et al., 2022).

The project's overall success is ultimately shown to be significantly influenced by the way in which employees share their knowledge. Whether or not the poor performance of employees working on a particular project is due to a systemic issue. As a result, employees develop an understanding of the procedures being followed and the desired results, creating a context within which to focus their efforts and recognize how their individual efforts contribute to the achievement of organizational objectives (Vandenberghe, Shin, Vough, Hewlin, & Kim, 2018).

My proposed second hypothesis is to check the link between servant leadership and knowledge sharing. The study shows that the hypothesis developed is supported. Therefore, it is assumed that servant leadership has a positive impact on knowledge sharing. If we see the results in table 4.4.4, the p value is 0004, LLCI 0650, and ULCI is 2267, as there is no zero value among them, which means they are highly

significant to each other. Based on these results, it can be said that in the presence of servant leadership, there is a high possibility of increased knowledge sharing taking place.

# 5.2.3 What is the Relationship between Knowledge Sharing Project Performance?

A substantial amount of new knowledge has been found as a result of this study, which builds on earlier research. This is an initial investigation into how servant leadership can help with information dissemination (Ali et al., 2018). The business world of today is fast-paced, high-stakes, and complex, making it more critical than ever for employees to make decisions that benefit the company as a whole.

Employees are expected to exhibit organizational citizenship in today's fiercely competitive workplaces by endorsing and supporting the business, contributing to its efficiency and effectiveness, driving organizational change independently, and taking other similar actions. The success of the project is then reported as a measure of stakeholder satisfaction and related to plan parts of the organization. Project success includes the genuine yield or consequences of an association as estimated against its expected or wanted outcomes (Kaltiainen & Hakanen, 2022).

Studies have recommended that effective organizational practices can help in the improvement of project success. Project success considers the function of leadership within the moral domain as an individualistic variable (Tripathi et al., 2020). Project success is the calculation of the organization's development that shows the achievement of an organization.

To test my third hypothesis, I will look into whether or not knowledge sharing and project performance are related. The study's results show that the hypothesis that was made was right. Because of this, it is thought that knowledge sharing helps people and project performance increases. If we look at table 4.5, we can see that the p value is 0000, the LLCI is 1119, and the ULCI is 2667. Since none of these three numbers add up to zero, it shows that they are very important to

each other. Based on these results, it is possible to say that when knowledge is shared, there is a good chance that project performance will increase.

# 5.2.4 Is there a Relationship between Servant Leadership and Knowledge Creation?

Servant leadership provides employees with clear direction, meaning, and goals. Servant leaders strive to achieve organizational success by motivating their followers and encouraging them to selflessly participate in achieving the same goals (Jang et al., 2022). The servant leader then shares her knowledge and other resources with her followers to benefit the entire organization as a whole.

This strategy is also termed "knowledge creation". Knowledge creation can be defined as an important strategy under servant leadership used by the leader to improve the overall performance of his or her organization. According to (Riaz et al., 2022), for efficient project performance, it is mandatory that the best and proper types of leadership style, managerial expertise, knowledge, and features be existent in order for the correct decision to be made at the correct time, with the efficient resources allotted at the correct location (Oyemomi et al., 2019).

In view of the outcome of governance enactment on the achievement or letdown of a project, it is vital to realize the alterations between the management of the project and project leadership (Yang, Huang, & Wu, 2011). The literature on project management has discussed these shifts, and it has been found that leadership qualities in managers correlate strongly with successful projects. My proposed fifth hypothesis is to check the link between servant leadership and knowledge creation. The study shows that the hypothesis developed is supported.

Therefore, it is assumed that servant leadership has a positive impact on knowledge creation. If we see the results in table 4.5, the p value is 0004, LLCI.2327, and ULCI is 4664, as there is no zero value among them, which means they are highly significant to each other. Based on these results, it can be said that in the presence of servant leadership, a high possibility of increased knowledge creation may take place.

# 5.2.5 What is the Role of Knowledge Sharing and Knowledge Creation?

The knowledge creation process facilitates projects to intensify knowledge embedded internally and puts it into operational activities with project members to improve efficiency, and performance, and create value (Kaltiainen & Hakanen, 2022). Seeking goals that are assumed to be different and challenging makes learning and knowledge creation necessary to meet project performance parameters because specific goals are challenging and uncertain as they require new passages for the application of strategies to achieve desired outcomes (Sitkin et al., 2011).

When an employee's motivation is high, it plays a significant role in performance. Employees with high motivation are more anxious about their performance because the more challenging goals are, the more employees have to perform in accordance with their requisite knowledge created by integrating information and giving their best because of the skills, abilities, and knowledge they possess (Ceesay, 2018).

Knowledge creation is not only associated with the organization but also with challenging goals it investigates issues that hinder project performance (Van der Waal et al., 2010). When a project based organization starts a new project, they need to set expedited and challenging goals with various strategic, decision knowledge creation spirals that can be used to bind and align new and existing knowledge from different employees in the development of a new product to enhance performance (Kaltiainen & Hakanen, 2022). Dynamic knowledge creation can enhance the capability of the firm to meet strategic objectives, and challenging goals and achieve favorable performance through innovation. To test my sixth hypothesis, I will look into whether or not knowledge sharing and knowledge creation are related. The study's results show that the hypothesis that was made was right. Because of this, it is thought that knowledge sharing helps people create new knowledge. If we look at table 4.7, we can see that the p value is 0000, the LLCI is 2335, and the ULCI is 3808. Since none of these three numbers add up to zero, it shows that they are very important to each other. Based on these results, it is possible to say that when knowledge is shared, there is a good chance that knowledge creation will increase.

# 5.2.6 What is the Role of Sequential Mediation of Knowledge Sharing and Knowledge Creation between Servant Leadership and Project Performance?

Servant leadership is about the honesty and truthfulness of leaders and is committed to enhancing the position of everyone else (Greenleaf, 1998; Ehrhart, 2004). The most prominent standard, as highlighted by the researchers, of servant leadership is that it focuses on the interests of subordinates before focusing on their self-interest (Vandenberghe et al., 2018). Within the last twenty years, the studies on servant leadership have developed well as an approach to leadership that is on paper and by performing many experiments, is separate from Transformational Leadership. SL is based on many affirmative qualities like selflessness, spirituality, ethics, and genuineness (Singh et al., 2021).

Knowledge sharing is seen as an exchange of social and cultural relationships; e.g., it involves the exchange of experience, skills, and ideas within departments and organizations (Gharakhani & Mousakhani, 2012). Based on research into the effects of knowledge sharing on project management, concludes that "effective knowledge sharing motivates organizational and individual learning, which in turn affects the outcome." Within the last twenty years, the studies on servant leadership have developed well as an approach to leadership that is on paper and by performing many experiments. Research shows that in a volatile environment, sharing knowledge makes people more productive (Rasiah, 2017). In the past 20 years, people have become more interested in the field of knowledge management. Servant leadership is where leaders are expected to serve first, and self-concept as a steward, furthermore because of the honesty and truthfulness of their bosses. To test my seventh hypothesis, I will look into whether or not sequential mediation of knowledge sharing and knowledge creation between servant leadership and project performance are related. The study's results show that the hypotheses that were made were right. Because of this, it is thought that knowledge sharing and knowledge creation may significantly mediate the relationship between servant leadership and project success. Based on these results, it is possible to say this presumptive hypothesis is accepted.

# 5.2.7 What Role does Collaborative Culture Play in Moderating the Relationship between Servant Leadership and Knowledge Sharing?

The study's goal is to look into the relationship between knowledge sharing and collaborative organizational culture as well as the relationship between knowledge sharing and servant leadership. Leadership, leadership. This study claims that cultivating a collaborative culture in a workgroup has a significant impact on knowledge sharing (Singh et al., 2021). It also proposes that, in today's knowledge-based economy, managers should act as facilitators and mentors to encourage people to share their knowledge. The collaborative culture establishes the connection between servant leadership and knowledge sharing, (Nauman et al., 2022) which impacts the overall project performance.

As two or more persons/parties working together in order to achieve agreed outputs and targets (Kim & Shim, 2018). Peng et al. (2014) established that cultural collaboration enhances the effectiveness of organizational projects through the usage of modern technology involvement. The present study focuses on the intellections and is defined as collaborative culture as two or more persons/parties working together to achieve agreed outputs and targets (Kim & Shim, 2018). Peng (2012) established that cultural collaboration elevates and increases the effectiveness of organizational projects through the usage of modern technological skills and its involvement.

To test my eight hypotheses, I will look into whether or not collaborative culture plays a role in moderating the relationship between servant leadership and knowledge sharing. The study's results show that the hypotheses that were made were wrong. Based on these results, it is not possible to say this presumptive hypothesis is accepted. This hypothesis is not supported.

# 5.3 Conclusion

The purpose of this research was to investigate the relevance of five different variables in relation to project management. These variables were named as follows:

servant leadership as an independent variable; knowledge sharing and knowledge creation as mediators; project performance as a dependent variable; and collaborative culture as a moderator. Each of these variables was subjected to in-depth research. The findings of the study support the hypothesis that servant leadership has a positive and statistically significant association with project performance and that the relationship between servant leadership and project performance is mediated by knowledge sharing and knowledge creation.

The severe working conditions that organizations are currently experiencing present a challenge to the conventional working tactics, particularly those employed by teams working in project organizations. Therefore, in order for organizations to be successful in overcoming these issues, new strategies need to be implemented at their institutions. The purpose of this study was to investigate the process through which teams develop their collective knowledge. To be more specific, the primary objective of this study was to investigate whether or not servant leadership has an effect on the performance of projects, taking into account the moderating role that a collaborative culture plays as well as the mediating effects of knowledge sharing and knowledge creation.

The leader-member exchange idea served as the foundation for the development of the research model. On the basis of the findings, it was determined that the process of knowledge creation and sharing significantly mediates the connection between servant leadership and project performance, whereas the effect of collaborative culture as a moderator was not supported.

### 5.4 Research Implications

### 5.4.1 Theoretical Implications

This study makes a contribution to the current body of literature on servant leadership, knowledge sharing, knowledge creation, collaborative culture, and the performance of projects. On the topic of the effect of leadership style on project performance, particularly in the context of leader member exchange theory, there is a paucity of published research. This study expands the application of the

leader-member exchange theory in an effort to explain the connection between servant leadership and the execution of projects. Because there haven't been many studies done on the subject of project management before, this research makes a significant contribution to the current body of literature on servant leadership.

The results of this study pave the way for future researchers to widen the research area for project performance in the context of leadership and from the standpoint of leader member exchange. Because of the growth in complexity, the environment has become more uncertain. As a result, the team faces more essential conditions in order to satisfy the demands of the consumer. As a result, they are forced to deal with the negative stresses that the environment presents. The performance of the project will suffer if the team is unable to effectively manage the challenges that it faces. In order to draw comparisons for future studies that will be carried out in different environments, the researchers need to make use of the existing data as a point of reference.

### 5.4.2 Practical Implications

This research will help project-based organizations in some way. It will help to understand how important it is to use servant leadership at the managerial level, so that this style of leadership will be very effective in making the project perform well, since the research shows It seems that servant leadership has a big positive effect on project performance. Companies can use the results of this study to train their team leaders in servant leadership, which will improve the performance of the project.

In the same way, this study emphasizes how important it is to share and create knowledge because it plays a big role in bridging the gap between servant leadership and project performance. Top management needs to think about how important it is for team members to share and create knowledge, which has a positive effect on project performance. Managers We should encourage their participation and let them know that their ideas are important to the organization. This will make employees trust the project manager and the organization more. Next, the top management must give training sessions to the team leaders to help them learn more about how to handle difficult situations.

#### 5.4.3 Limitations and Future Recommendations

This study does have some potential drawbacks. To begin, this is a time lag study. Other research designs can be adopted to increase the credibility of the results. In the future, it is recommended that researchers choose either a longitudinal study or an experimental study design. In the second place, the method of data collection that was used in this investigation was called purposeful sampling. For the purpose of validating the results, either a random or systematic form of sampling will be utilized. Both of these are probability sampling methods, which are employed for drawing robust statistical conclusions. The inability to generalize the findings of this study is yet another shortcoming of the investigation.

The information required to carry out this research came from project-based organizations in Pakistan that are currently active there. Future researchers will replicate the research model used in the current study in a variety of cultural contexts to increase the generalizability of the findings. This is necessary because conducting research in different cultural contexts may result in different findings due to cross-cultural differences. Due to the fact that the data for this study came from project-based organizations working in the IT sector, the scope of this research was limited to just that one industry; consequently, it would be worthwhile to conduct the same study again in order to collect information from other industries, such as the building industry, banking, the biomedical industry, education, and so on.

This study's scope is limited to determining whether or not servant leadership has an effect on project performance, with knowledge sharing and creation serving as sequential mediators, and collaborative culture acting as a moderator. In this regard, it has been recommended to the researchers who will do this work in the future that they use a variety of moderators and mediators. In addition, the effect of other soft skills can also be investigated on the performance of the project, and this can be done with the same mediator and moderator or with different ones.

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Appendix-A

Questionnaire

Dear Respondent

I'm a student in MS programme, and right now I'm doing research on the topic of "The Impact of Servant Leadership on Knowledge Creation Mediating Role of knowledge sharing and Moderating Role of collaborative culture" You are one of the participants I could ask for information, and I want you to take ten minutes out of your busy day to fill out this questionnaire. The data will be kept secret and will only be used for academic purpose.

Sincerely,

Qirat Rehman,

MS Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

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## Section 1: Demographics

Gender

	1	2
Gender	Male	Female

Age

	1	2	3	4	5
Age	18-25	26-33	34-41	42-49	50 above

### Qualification

	1	2	3	4	5	6
Qualification	Matric	Inter	Bachelor	Master	MS/M.Phi	l.PhD

#### Experience

	1	2	3	4	5
Experience	01-03	03-05	Above 5		

## Section 2: Servant Leadership

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Items					
1	Project manager spends the time to form qual-	1	2	3	4	5
	ity relationships with project employees.					
2	Project manager creates a sense of community	1	2	3	4	5
	among Project employees					

3	Project managers decisions are influenced by	1	2	3	4	5
	Project employees input.					
4	Project manager tries to reach consensus among	1	2	3	4	5
	Project employees on important decisions.					
5	Project manager is sensitive to Project employ-	1	2	3	4	5
	ees responsibilities outside the workplace					
6	Project manager makes the personal develop-	1	2	3	4	5
	ment of Project employees a priority					
7	Project manager holds department employees to	1	2	3	4	5
	high ethical Standards.					
8	Project manager does what she or he promises	1	2	3	4	5
	to do.					
9	Project manager balances concern for day-to-	1	2	3	4	5
	day details with projections for the future.					
10	Project manager displays wide-ranging knowl-	1	2	3	4	5
	edge and interests in finding solutions to work					
	problems					
11	Project manager makes employees feel like they	1	2	3	4	5
	work with him, not for him.					
12	Project manager works hard at finding ways to	1	2	3	4	5
	help others by the best they can be					
13	Project manager encourages department em-	1	2	3	4	5
	ployees to be involved in community service and					
	volunteer activities outside work.					

## Section 3: Knowledge Sharing

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

Sr. No Items		
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				_		$\overline{}$
1	We shared the minutes of meetings or discussion	1	2	3	4	5
	records in an effective way.					
2	We always provided technical documents, includ-	1	2	3	4	5
	ing manuals, books, and training materials to					
	each other.					
3	We shared project plans and the project status in	1	2	3	4	5
	an effective way.					
4	We always provided know-where or know-whom	1	2	3	4	5
	information to each other in an effective way.					
5	We tried to share expertise from education or	1	2	3	4	5
	training in an effective way.					
6	We always shared experience or knowhow from	1	2	3	4	5
	work in a responsive and effective way.					

## Section 4: Knowledge Creation

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Items					
1	Employee generated many ideas while doing the	1	2	3	4	5
	projects.					
2	Doing this project enhanced the employee ability	1	2	3	4	5
	and knowledge of the project employee.					
3	The solutions found in this project were clearly	1	2	3	4	5
	unique and innovative to the company					

### Section 5: Collaborative Culture

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Items					
1	We considers change to be natural and necessary	1	2	3	4	5
2	We considers individuals as an asset and tries to appreciate them continuously.	1	2	3	4	5
3	The preservation of different points of view is encouraged.	1	2	3	4	5
4	Everybody's opinions and contributions are respected.	1	2	3	4	5
5	Problems are discussed openly, to avoid finding culprits.	1	2	3	4	5
6	All members are aware of instructor expectations.	1	2	3	4	5
7	Individuals who experiment and take reasonable risks are well-considered by the team even if they are mistaken	1	2	3	4	5

## Section 6: Project Performance

Please tick the relevant choices: 1= strongly disagree, 2= Disagree, 3 = Neutral, 4= Agree, 5= Strongly Agree.

Sr. No	Items					
1	Our project is meeting operational specifications	1	2	3	4	5
2	Our project is meeting technical specifications.	1	2	3	4	5
3	Our project is meeting time goals.	1	2	3	4	5
4	Our project is meeting budget goals.	1	2	3	4	5
5	Our project is fulfilling client needs.	1	2	3	4	5
6	Our client is satisfied with the project's perfor-	1	2	3	4	5
	mance.					