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Impact of Shared Leadership on Project Team Performance with Mediation of Team Innovation and Moderation of Task Uncertainty

by

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I want to dedicate this thesis to my parents, respected teachers and friends for their love, support and care.

CERTIFICATE OF APPROVAL

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Abstract

The purpose of this research study is to empirically test the impact of shared leadership on project team performance with team innovation as a mediator and task uncertainty as a moderator. The sample was drawn using a simple random sampling technique. The data was collected from project-based organizations of twin cities of Pakistan i.e. Rawalpindi and Islamabad. The data set was analyzed using CFA, correlation, reliability, and regression analyses. For data analysis, SPSS, Process macro, and AMOS has been used. The findings suggest that there is a positive and significant relationship between shared leadership and project team performance. Innovation mediates the relationship between shared leadership and project team performance. Furthermore, results indicated that task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low. The study has practical implications on an organizational level, presenting certain guidelines to understand how shared leadership affects the project team performance within the organization. From the results, it is concluded that shared leadership and team innovation has a significant impact on team performance. Future studies can examine the impact of shared leadership on project team performance by incorporating other variables as mediators and moderators in this relationship.

Keywords: Shared Leadership, Project Team Performance, Team Innovation, Task Uncertainty

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Abbreviations

PTP	Project Team Performance
SE	Standard Error
SL	Shared Leadership

Chapter 1

Introduction

1.1 Theoretical Background

The shared leadership area has emerged in leadership literature, as a result of organizational decentralization (Balogun & Johnson, 2004) and the dissemination of self-managed teams (Solansky, 2008). It changes the trend of leadership from the individual or leader centric view to a group based collaborative leadership phenomenon (Pearce, 2004). In the recent past, literature has evident disorganization in the conceptualization of leadership such as team leadership (Zaccaro, Rittman, & Marks, 2001), peer leadership (Price & Weiss, 2013), distributed leadership (Tian, Risku, & Collin, 2016), and collective leadership. All these conceptualizations progress towards explaining how leadership can be shared between the members of the team (Morgeson, DeRue, & Karam, 2010). DeRue (2011) attempts to define the boundaries of shared leadership through adaptive leadership theory. He also emphasized that to understand shared leadership interaction among team members is significant.

With the progression of research on shared leadership, the basic question regarding the definition and conceptualization has emerged. Numerous researchers effort to define it as a situation where team members are mutually involved in management, decision-making, and accountability for consequences (Day, Gronn, & Salas, 2004; Neck, Bligh, Pearce, & Kohles, 2006). Pearce, Conger, and Locke

(2007) defined it as a joint inuence process that is accepted by the team members on the way to the achievement of goals under each others supervision. Rather than only a few team members, it is mostly described by the dispersion of leadership to various members. Ensley, Hmieleski, and Pearce (2006) explained that the process of the team where leadership is collectively conducted and not exclusively by a single elected individual, known as shared leadership. Carson, Tesluk, and Marrone (2007) said that through the distribution of administrative resources among team members to attain complex tasks, mutual inuence from others, and in the partaking of information, the shared leadership can be modest advantage to organizations.

According to, Morgeson et al. (2010) all team members characterize shared leadership as casual inner team leadership behavior. They argued that team members are informally involved in various internal team leadership behaviors such as establishment and dening a mutual task, creating a compassionate climate, organizing the team mission, providing feedback, and problem-solving. They also discussed that providing capital and inspiring team self-management, are vital functions of internal informal leadership. Shared leadership is a procedure of cooperative team management that involves a strong collective impact between specific cluster fellows intended at achieving mutual team objectives (Bergman, Rentsch, Small, Davenport, & Bergman, 2012; Carson et al., 2007). So, by demonstrating participative behaviors even if a boss can offer the crew with the chance to demonstrate shared management, whether shared leadership is achieved or not depend upon the team characteristics (Chiu, Owens, & Tesluk, 2016).

Although numerous researches have evident the formation of shared leadership, they also have reported exploring the antecedents, consequences, and underlying mechanisms of shared leadership (Q. Wu, Cormican, & Chen, 2020). In the last two decades, the trend of adapting shared leadership has been grown, resulting in the enhanced performance of team members. Within different phases of the life cycle of a project, in shared leadership different team members are involved and work with each other under each other supervision (Hoegl & Muethel, 2007). They also discussed that international firms, previously based on leader centric approach,

gain benefit from this collective leadership approach using two aspects namely a greater level of shared leadership among expert team members and shared decision-making power among them. Shared leadership is beneficial when top management have difficulties to have a deep thoughtful of skills, abilities, and knowledge to lead all facets of work (Fletcher & Kaufer, 2003).

Certainly, numerous researches have verified that shared leadership leads to superior team performance (Klein, Ziegert, Knight, & Xiao, 2006). This distributed leadership could affect the performance of team members. Bowers and Seashore (1966) contradict this, which doubted that shared leadership could result in the superior performance of the teams. Fascinatingly, a close investigation of shared leadership definitions and conceptualization emphasized that this phenomenon may impact team performance (Ensley et al., 2006). This fact motivates us to assess the consequence of shared leadership on the performance of the team in project-based organizational settings.

Project taken under project teams is always unique or done the first time to survive in today's competitive world. They might dont instigate the first time but still, something new or creative lies in that project or might be the settings in which project is taken is unique. Many proactive approaches are used like complex, knowledge-based work, and agility is widely used in organizations (Paiva, Roth, & Fensterseifer, 2008). And the most important thing to remain competitive is innovation which is essential to long term survival and success (Urbancova, 2013). This emphasizes that to compete in a rapidly changing environment the core competency of the project team is innovation (Gann & Salter, 1998).

Team innovation is defined as new useful ideas, new creations, and the implication of those ideas in any organizational context by a group of people (M. A. West & Anderson, 1996). Studies have found that innovation is a complex process in any organization comprises of two steps namely the idea generation or creations and implementation of innovation in the organization (Hlsheger, Anderson, & Salgado, 2009). Ishikawa (2012) argued that leadership provides support for innovation and this support results in team innovative. Hoch (2013) found a positive association among shared supervision and team with innovative behavior. In the presence

of innovative teams, organizations tend to achieve better performance levels and a higher success rate (Balkin, Tremblay, & Westerman, 2001). Therefore, the current study efforts to explore the effect of team innovation as mediation with the association of shared supervision and project team performance.

Task uncertainty makes the project team flexible to adopt all the environmental factors (Tatikonda and Rosenthal (2000). Furthermore, changes caused by environmental factors can enforce the project team to make fast changes accordingly. The team - focused interrelations help in making decisions as many viewpoints are considered and integrated for better results (Fong, 2003). Procedures of work and routine related decisions can therefore be taken faster and more accurately on a broader and current information base. When the team is more experienced in detecting what actions to take, in the light of task uncertainty, the shared supervision appears more significant for the betterment of team performance to focus and resolve the problems. Srivastava, Bartol, and Locke (2006) explained that in the presence of high uncertainty, empowerment helps to enhance performance. It indicates that in the presence of high uncertainty, empowering, or sharing power with employees leads to better performance. Based on these current study efforts, to explore the task uncertainty as moderator in the association of shared supervision and performance of employees in teams.

1.2 Gap Analysis

Nowadays marketplace is becoming project-centric more increasingly (Schoper, Wald, Ingason, & Fridgeirsson, 2018) with more complicated projects (Bjorvatn & Wald, 2018). In this scenario, the need to market is the consumption of diverse team forms including a team with multiple disciplines, several teams, and even new inter-firm teams to effectively achieve the team project goals (Gemnden, Lehner, & Kock, 2018). It is very exceptional that a few sole people would have all the requisite skills and expertise to lead or carry out the success of the entire project team (Gann & Salter, 2000). Modern organizations now understand that in their domain each person is a leader (Singh & Jampel, 2010) and that shared supervision

is a powerful tool to handle complex environments (Sweeney, Clarke, & Higgs, 2019).

Shared supervision is grounded on the assumption that distributed leadership, rather than a single individual, is essentially a position and collection of behaviors (Lord, Day, Zaccaro, Avolio, & Eagly, 2017). The shared supervision can be distributed at different points of time amongst different team members (Wang, Waldman, & Zhang, 2014). Given the existence of a specific task spearhead, all the members of the team can execute leadership behaviors at various moments and can be regarded as leaders by team members (Gann & Salter, 2000). As, SL is a comparatively innovative field of research on leadership (Ensley et al., 2006), the form of information is feast across different domains. Most studies are conducted in management and organizational behavior literature (Gravina et al., 2018). While SL studies are limited and underdeveloped relative to other fields of leadership research (Carson et al., 2007). Work on SL is less frequent in the field of project management, and awareness is even poorer (Muethel & Hoegl, 2016). Researches have argued that shared supervision solely harvests larger performance of the team against vertical leadership (Ensley, Pearson, & Pearce, 2003). Todays workplaces also need innovation in the team to enhance the project team's performance by avoiding task uncertainty.

The present study is addressing several theoretical and contextual gaps in the literature of shared leadership, innovation, task uncertainty, and project team performance. Due to the fast-paced temporary nature of project-based organizations, shared supervision is important for all team members to achieve the projects performance. Still, there is room to find out the underlying mechanism in the association among shared supervision and performance of the project team. The present study will fill this gap by exploring the association of shared supervision with the performance of the team in project-based organizations. Our study will bring a novel perspective for contemplative how and when shared leadership may benefit the team performance in projects.

The current study will also contribute to the literature that how innovation affects the performance of project-based teams. It will help the managers to understand

that shared leadership results in greater innovative behavior of employees which results in higher team performance in project-based organizations. It will also add in the literature of uncertainty and leadership by exploring that in the presence of task uncertainty how shared leadership impacts team performance of project-based organizations.

1.3 Problem Statement

Project-based organizations required more participation of team members to efficiently and effectively achieve their goals. Nowadays, project-based organizations are facing problems in enhancing their team performance. Teams in their organizations are not getting a supportive and creative environment. The role of group leaders is very significant, who raise their self-confidence and readiness to do their work by building creative ideas. In project-based organizations, teams also face numerous challenges and uncertainty in their task as each project has some unique features which are innovative and have never been done before. These uncertainties also affect the performance of project teams. Therefore, the present study efforts to resolve these problems by identifying the significance of shared leadership in the project-based organization. Additionally, by answering that in the presence of shared leadership team performance could be enhanced even though uncertainty is high.

1.4 Research Questions

To answer the problems of industry, research conduct studies in different contexts. Research questions are written to provide the solution to problems faced in the corporate sector. To resolve the problems of the practical world both qualitative and quantitative studies required research questions. The problem statement of the current study provides the basis, to develop the following questions. Based on the analysis, using software, the current study effort to answer the subsequent questions:

Research Question 1

Does shared leadership affect the performance of the project team?

Research Question 2

Does innovation mediate the association among shared leadership and the performance of the project team?

Research Question 3

Does uncertainty moderate the association among shared leadership and the performance of the project team?

1.5 Objectives of the Study

The chief impartial of our research is to test and instigate an idea to observe the association among shared supervision and the performance of the project team. Also, to explore the mediating role of innovation and the moderating role of task uncertainty in the relationship of shared leadership with the performance of the team. This study shows the relationship between the independent, mediator, moderator, and dependent variables. Subsequent are the objectives of the study.

Research objective 1

To examine the association between shared leadership and the performance of the project team.

Research objective 2

To find out the mediating /indirect impact of team innovation in the relationship of shared leadership and the performance of the project team.

Research objective 3

To find out the moderating role of uncertainty in the association of shared leadership and the performance of the project team.

1.6 Significance of the study

On-site leadership always has been a key area of concern for researchers because a leader plays a significant role in projects. In this era, projects based organizations need team works to enhance their outcomes and performances. To ensure team performance in projects through successful leader participation, this research will carry significance for organizations to take shared leadership in Pakistan. Because today's workstation is fetching progressively project-oriented Egginton (2012) with increasingly complex tasks and necessitating the usage of several diverse categories of teams, counting multiple teams and multidisciplinary teams Gemnden et al. (2018) and even inter-company teams (Fuchs et al., 2001) to achieve project goals effectively.

Our study will fulfill the defined theoretical gap in the previous literature because the research on shared leadership in the field of project management has not been ample. Shared leadership leads to an increase in the level of performance in projects. This research intends to empirically test a new model to determine the direct relationship of shared supervision on project team performance in the presence of team innovation and moderation role of task uncertainty. Therefore, in the Pakistani context, it will bring a novel view. Research on the effect of shared supervision on project team success is a much-needed area to be researched in our culture where the employees need a shared leadership style that should include timely completion of the mission and within the resources allocated. This research will also reveal the positive effect of performance in the project through shared leadership under uncertainty to check the above-discussed objectives.

1.7 Supporting Theory

1.7.1 Regulatory Focus Theory

The theory of regulatory focus was established by expanding the idea of "pleasure approaching and pain escaping" derived from the principle of psychological hedonistic or pleasure (Brockner & Higgins, 2001). RFT theory was presented by a

Columbian professor Higgins (1997) and the theory focuses on the attainment of gaols (Cesario, Higgins, & Scholer, 2008). His theory scrutinizes the association of way of gaol attainment and individuals motivation (Higgins, 1997). Regulatory focus is a motivational interpretation that is social cognitive and includes deliberate attention of requirements, objectives, and outcomes.

Self-regulation functions in a different way as it specifically meets various needs, such as nursing and safety criteria. Shared leadership itself is a powerful motivational force in this research. Under each other's guidance, inspire each other in all leaders to achieve the goals, and improve team performance. By using the preventive focuses all team members reduce task uncertainty to make the performance stronger. Individuals with a different accent are targeted at various target groups. Promotion is associated with nurturance and principles, and preclusion is connected to the goals and objectives of safety and obligations.

Focusing on promotion includes successes, growth, development, and the existence or lack of optimistic consequences. Individuals can also be directed to activate each according to expected results and specific conditions because campaign and avoidance focus is not reciprocally exclusive (Crowe & Higgins, 1997). Increasing regulatory attention results in different reasoning, executive, and feelings for the actions and success of individuals because of numerous behaviors of treating pleasure and preventing pain. Emphasis on individuals seek progress and accomplishment and discover chances for creativeness and innovation (Higgins, 1997). In recent years, the regulatory concentration hypothesis has gained significant interest in research. Regulatory focus can be influenced not solitary by persona or initial life capability (Shah, Higgins, & Friedman, 1998).

But also in a psychological state which situational indications can elicit. Signals that highlight food needs, goals, and benefits tend to focus on growth, while situation indicators that stress-protective needs, commitments, and setbacks tend to focus on avoidance (Shah et al., 1998). Some research examines regulatory focus at work and studies how workers' preventive and promotional facilities affect their behaviors. Sue-Chan, Wood, and Latham (2012) further suggest that employees should simultaneously leverage all categories to achieve advanced value effort and

improved job performance, as well as highpoint the main parts of administrative alignment in productivity optimization by encouraging regulatory focus for employees. Kark and Van Dijk (2007) suggested that designed situational parameter focuses also affect different perceptions and attitudes, in addition to work behaviors.

While most studies are directed at a singular level on regulatory focus theory, current researches have begun to put on the concept of avoidance advertising effort to a team level concept (Brockner & Higgins, 2001). Recent researchers started applying the theory of regulatory focus to certain methods of collections and groups. Group culture is a role of collective regulatory focus (Shin et al. 2016). It is also formed through interdependence in the outcome. Collective regulatory effects generate within a collection afterward a period in group discussion contented and consequent decisions (Brockner & Higgins, 2001).

The individual who progressively effort collected the above period shared a regulatory focus on problem-solving strategy. Van Dijk, Kark, Matta, and Johnson (2020) also demonstrated that the effect of regulatory focuses on creativity is mediated through processes of synchronization. Memmert et al. (2015) explained that performance is essential to regulatory collective fit. Nevertheless, while some attempts have been made to clarify regulatory focus at the group level, it rests undecided how dissimilar regulatory focal points at the same level of uncertainty are linked to performance. Several previous types of research, besides, analyzed regulatory focus with the use of quantitative methodology and designed the participants for promotion or prevention.

The possibility of the team being promo-focus is high as the leader illustrates good consequences to be achieved and motivates others to achieve by motivation. Conversely, supporters prefer to concentrate on prevention, as members stress the value of avoiding dissatisfaction or negative effects (Lockwood, Jordan, & Kunda, 2002). Through processes of self-regulation, members of the project team may adjust and match their attitudes and actions with the project leaders' anticipations (Higgins, 1998). The latest studies have analyzed the members as social influences

impacting the orientation and efficiency of workplace regulations (Lai & Hsu, 2013).

In specific, the transactional supervisor can guide the followers to focus on prevention. It is claimed that project leaders' power to manage plunders or penalty pushes participants to meet the leader's standards, making the leaders even more powerful as role models (Trevio, Brown, & Hartman, 2003). Nevertheless, specified that previous researches vision transformative and transactional leadership styles only as a construct of second-order, it is unclear if all sub-dimensions of one leadership style produce the preferred inspiring group's members (Lai, Hsu, & Li, 2018). As the outcome is a behavioral function, therefore, performance is associated with the regulatory focus. The literature on project management describes project performance as meeting predefined goals within budget and timeline Bryde (2005). Current researches categorized project performance into two dimensions of efficiency and effectiveness (Wallace, Keil, & Rai, 2004). We argue in the following about the impacts of regulatory focus on the various dimensions of the project outcome.

Chapter 2

Literature Review

2.1 Shared Leadership and Project Team Performance

The awareness of shared leadership is about spreading the leadership among different people in the team. Several people cooperate towards a common goal (S. Liu, Hu, Li, Wang, & Lin, 2014). DeRue (2011) explained that shared leaderships nature leads to adaptive leadership. It is human psychology to work both as leader and follower. It is a way of social collaboration among the members of society to help each other to achieve a common goal (Chiu et al., 2016). In shared leadership, no one alone can be the leader of the whole team always, but different people have their roles, which may involve as a leader or a follower. The authority of leadership and its liabilities are distributed so the people recognize the importance of the combined task (C.-M. Wu & Chen, 2018).

In the recent past, literature has evident disorganization in the conceptualization of leadership such as team leadership (Zaccaro et al., 2001) peer leadership (Price & Weiss, 2013), distributed leadership (Tian et al., 2016), and collective leadership (Ospina, 2017). All these conceptualizations progress towards the explanation of how leadership can be shared among the members of the team. Team leadership is an essential tool to get maximum output from the teams (Pearce, Yoo, & Alavi, 2003). It is a common practice that almost every project has completed

teamwork, so ignoring the team leadership is inappropriate (Scott-Young, Georgy, & Grisinger, 2019). Cooperative and distinctive management is better for team goals rather than formal leadership. Shared leadership which is a type of team leadership has more control over the individuals of the team (Carson et al., 2007). It motivates them to fight for a common goal, to gain knowledge (S. Liu et al., 2014), to perform well (Perry, Pearce, & Sims Jr, 1999), and to improve vision and modernization.

In the prospect of social learning theory, participative leadership fosters the concept of shared leadership among the team members. It empowers the idea of collective supports from all the individuals towards the mission of the team which creates an emotional attachment among the leaders and the followers (Armenakis, Harris, & Mossholder, 1993). Implementing participatory leadership brings more clarification to followers, help, and attachment with the problem-solving process by the execution of the participative leadership (Lam, Huang, & Chan, 2015). This form of leadership designs a mechanism where workers value each others abilities and thoughts and make decisions efficiently which is a key trait for a successful model of shared leadership. When a top horse depicts the joint venture and the common efforts as the core ethics of a team, shared leadership becomes visible as a system of the entire team (Guttman, 2004).

In this practice, the participative manners of the leader make a way to split the leadership with other members, which nurtures the leadership abilities among the team members. The confidence level of the members rises when they contribute to major activities and bear important responsibilities, so they become ready for working as a leader in different tasks. Leaders act as role models and they are also seen as a tender of all the hopes (Carmeli & Schaubroeck, 2007). These expectations produce the required behavior in the followers. Participative leadership suggests a required set of expectations from the followers when they will work as a team. Considering all the aspects, participative leadership is very helpful and useful to stimulate shared leadership.

Although there are some positive prospects there are some drawbacks that have been found in the literature of shared leadership (Zhu, Liao, Yam, & Johnson,

2018). One of the major problems is a partial understanding of the shared leadership concept and vague identification of the factors which limit its success. Shared leadership relates with the formal leadership in a way that it comes out from the formal leadership (Hoch & Kozlowski, 2014). The shared leadership comes forth when the members of the team agree to play a role as a leader and also accept the leadership of the other members. (DeRue & Ashford, 2010). The results of social learning theory Bandura and Walters (1977) reveal that being a leader and accepting others as a leader is more favorable in teams rather than accepting only one person as a leader. This method of leadership makes a model which is called participative leadership. This approach engages the group members in the leadership actions and provides them the power of influence. This is a way of eradicating the issues within the team and moving towards the team objectives (Armenakis et al., 1993).

The principle of several members goes backward as best to the claim of (Follett, 1924) that individual should aspect for supervision on the base of the experience in the condition actually by individuals but just not especially to the appointed member. Gibb, Lindzey, and Aronson (1954) later identified shared leadership with teams consisting of members that implement different roles in the community. Study of this area remained largely static until around the late 1980s and early 1990s, despite these early works. Although there were a few empirical advances in shared leadership, during that time, very few scientific findings occurred.

Avolio, Jung, Murry, and Sivasbramaniam (1996) however, renewed attention also in topic also showed a significant correlation among shared leadership and team performance. While comparatively limited group of scholars have empirically advanced this subject, there have also been dozens of descriptive research, around hundreds of conceptual perspectives, as well as a range of existing literature, along with growing emphasis across conventional scholarly resources (Goldsmith, 2010). Research defined the importance of shared leadership is uncertain, despite its increasing popularity.

Although most common leadership researchers say it contributes significantly to the outcome of the team, a closer review of the literature shows contradictory

findings that could simply be the product of variations in theory and interpretation. Shared leadership research have also been identified positive aspects so that it is significantly linked to group outcome (Avolio et al., 1996; Hoch & Kozlowski, 2014). In addition, a positive link between shared leadership behaviors, regardless of their origin, and team performance was found by (Taggar, Hackew, & Saha, 1999).

Recently, Gupta, Huang, and Niranjan (2010) showed evidence for the significant impact of shared leadership on team success using a larger sample. These research as well as others collectively suggest significant connexions among shared leadership and performance improvements. Leadership, regardless of its source, is a vital driver of team performance (Morgeson et al., 2010), and we conclude that shared leadership will probably be positively related to team performance. Katz and Kahn (1978)suggested that, as team members have leadership, they would bring more energy to the project, share more expertise, and have greater contact with the team. Collectively, these results can lead to higher team success levels.

In addition, as team members gain control or are sensitive to the control of others, it may establish higher levels of team functioning in terms of respect and trust. Teams which show these characteristics have also demonstrated greater performance levels (Day et al., 2004; Marks, Mathieu, & Zaccaro, 2001).As a group-level structure and a group resource (Carson et al., 2007)shared leadership can have positive impacts, not only for individuals (Avolio et al., 1996), but particularly for teams as well. In particular, either from the appointed leader or from the peer-management of the team (Dumaine, 1994),the empowerment and self-control of participants with mutual leadership can be obtained. Members of the team will therefore become more satisfied and responsible for the decision-making process (Hoch & Dulebohn, 2013).Shared leadership, for instance, contributes to teamwork, mutual agreement and engagement by encouraging the sharing of knowledge between leaders and can inspire people to take responsibility (Bergman et al., 2012).

Furthermore, as stated by Day et al. (2004)shared leadership will increase team performance by group information-processing and learning by growing team social

resources, including awareness, skills , and abilities. We use Yukl (1989)definition of leadership as "processes of control involving determination of the goals of the group or organization, encouraging task actions in pursuit of these goals, and influencing group maintenance and culture" to further develop the idea of how leadership is shared among team members. We suggest that shared leadership originates with individual team members engaged in activities affecting the team and other team members in areas related to guidance , motivation and support (Yukl, 1989)and through the sequence of interactions between team members involving negotiation and support (Yukl, 1989),within line with the concept of collective constructs (Morgeson & Hofmann, 1999).The resulting collective structure can be called a leadership network that affects and forms both team and individual activities and outcomes. Leadership may be conceptualized in relation to either the degree of influence (i.e. its accuracy or efficacy) or the source of impact (i.e. individual vs various teams).

Building on these distributed control concepts and relying on the original conceptualization of Gibb et al. (1954), it conclude that shared leadership can be constructed across a continuum depending on the number of leadership sources (i.e. team members) based on a high degree of power in a team. Furthermore, at the high end of the shared leadership continuum are teams in which most, if not everything, team members give leadership authority to each other. Here, the source of leadership power is distributed among team members rather than concentrating or focusing on a single entity. Team leaders both lead and follow each other in such teams in such a way that members both provide leadership at a given time for certain aspects of team functioning and also respond to the leadership provided by other team members in different areas.

Members with high levels of shared leadership can also change and/or change leadership over time, so that many members provide leadership at different points. Shared leadership represents a situation where collective decision-making and shared understanding for performance are characterized by different members of team engaging in shared leadership. Carson et al. (2007)characterized shared leadership as "an evolving team property arising from the distribution of leadership

power through multiple team members." It was described as a collective control mechanism carried out by team members who guide each other to accomplish goals (Day et al., 2004) and it was described as a "leadership team mechanism."

Carson et al. (2007) in this regard reported that "shared leadership can provide organizations with a competitive advantage by sharing information (Carson et al., 2007)." It is fair to infer, based on previous literature, that team members will be more likely to contribute their particular ideas to the team under higher levels of shared leadership and promote their own ideas to the team. In particular, a key component of high levels of decision-making performance, innovation, and creative problem solutions has been argued to be the sharing of non-redundant and non-overlapping ideas and information, which are important components of high team success (Dahlin, Weingart, & Hinds, 2005; Stasser, Stewart, & Wittenbaum, 1995).

Analysis has shown that in support of this, shared leadership leads to innovation, creative problem solving, and decision making (Hoch, 2013).Teams usually spend less time initially analyzing distributed (unshared) data than shared data (Stasser & Titus, 1985). Stasser and Titus (1985)selective knowledge sampling model found that communities are more inclined than unshared information (i.e. information held uniquely by one group member) to discuss the knowledge they actually possess (i.e. information already known by all members of the community). Stasser and Titus (1985) believed that most teams would accept the sharing of exclusive and uncorrelated information (i.e. data held by only either one few of team members of the group).

Leadership in project groups can commonly be described as inducing people's arrogance and actions and consequently the engagement inside and among organizations to achieve goals (Bass & Stogdill, 1990). Team members offer different types of leadership qualities which are a kind of interest for the new researchers. These qualities are more useful in the case of distributed tasks (Hoegl & Muethel, 2007). Earlier theories state that shared leadership is more useful when a high level of knowledge and more independence is required for the workers, for example, a team that is at different places physically (Klein et al., 2006; Pearce &

Manz, 2005). Currently, more research has been conducted on the teams which are closely located physically and work in some kind of routines (Merry, 1994; Perry et al., 1999).

As an illustration, Perry et al. (1999) found that shared authority was a valuable indicator of team success when evaluated by clients. Sivasubramaniam, Murry, Avolio, and Jung (2002) narrated that collective authority behaviors among group individuals were emphatically related to group strength and in this way with team success. Also, Pearce and Sims Jr (2002) were able to discover noteworthy prove that shared leadership had a more grounded relationship to group execution than conventional vertical (top-down) administration. Carson et al. (2007) determined a superb effect on group overall performance from the impact of shared management. In general, the impact of shared authority in most settings has been found to exceed the effect of progressive authority in predicting group and organizational outcomes (Carson et al., 2007). Therefore, it is hypothesized that in the project team performance increases in the presence of shared leadership. By the above information and discussion, the first hypothesis is established as follows:

H1: Shared leadership is positively and significantly related to project team performance.

2.2 Shared Leadership and Team Innovation

Innovation is a major element of employers' ability to access a sustainable competitive advantage(Kim, Min, & Cha, 1999). Innovation is here understood as "intentional implementation and application within a function, group or organization of concepts, methods, products or procedures, new to the particular adoption unit, intended to benefit the person, group, organization or wider society in a significant way" (M. A. West & Farr, 1989). Creativity, or "the creation of new and useful ideas" (Amabile, 1988) is an aspect of creativity, but creativity often involves innovative ideas being put into action. Adaption to quickly altering surroundings and make the imperative organizational modifications are vital for any company to remain within the competition. Many proactive strategies are used

like complex, information-based work, and agility is broadly utilized in organizations(Tallon, Queiroz, Coltman, & Sharma, 2019). Therefore, the hugest element to continue to be competitive is an innovation that is critical for success and future survival(Amabile, 1996). Innovative teams and employers tend to reap better overall performance degrees and higher success rates. Studies have located that innovation could be a complicated method in any organization contains. It has two steps, specifically the creativity and its implementation within the organization.

Team innovation is viewed as an important competitive advantage for both technology and enterprise, high-cost products, facilities, processes, networks, capital assets, and infrastructures are developed in limited amounts and adjusted to satisfy the unique requirements of the client, including project strategies, project skills, project management methods and techniques, and project-based organization (Davies, It may be considered that project management offices PMOs) or other project-based organizations play an important role in the management of novelty projects (Artto, Kulvik, Poskela, & Turkulainen, 2011).

Innovation is a major element in organizations struggle to transcend the challenge of emerging technology and knowledge and to produce a significant competitive advantage (Eisenbeiss, Van Knippenberg, & Boerner, 2008; Gu, Wang, & Wang, 2013).To evolve and adapt to evolving and demanding conditions, organizations increasingly depend on teams, the common building foundations of modern business organizations(Hoch & Dulebohn, 2013). Innovation in the team refers to the implementation or development within a team of innovations, methods, or mechanisms that are new and beneficial to the team (Gu et al., 2013; West, 1990). After that, whenever the team is working under a shared and collaborative objective, and when the team is working towards shared interests, internal informal leadership by group members designed to promote the specific concepts of each other is very probably (Carson et al., 2007; Morgeson et al., 2010).

Shared leadership Morgeson et al. (2010) could therefore also be beneficial in creating a social support environment and common task. The proposals of one another are much more likely to be promoted by teams that are greater in mutual effectiveness and team power (Solansky, 2008). Such roles can be represented based

on Morgeson et al. (2010)like solving problems and service provision, as well as creating an environment of mutual respect and encouragement. The realization of concepts requires the translation of creative ideas into practical implementations in the larger enterprise (Janssen, Van de Vliert, & West, 2004). Mutual objectives Kouzes and Posner (2009) are more probable to be accomplished if the objectives are followed together by a single team, instead of a team of many distributed people, instead of each following their objectives (Pearce, Conger, & Locke, 2008).

The team, on the whole, would be more successful if the team works together and shares resources (Morgeson et al., 2010). In terms of the realization of ideas, it is anticipated that it would be beneficial to provide one another with input and tools, to train and improve and promote the self-development of the groups. Learning, growth, and motivating members of the team to try to solve challenges and achieve the shared goal are also essential roles of internal leadership (Morgeson et al., 2010). The realization of innovations explored by a community is more able to win than just an idea possessed by a single individual since the team is more likely to have a higher network of impact.

Zaccaro et al. (2001) indicated factors that are crucial to team performance: first, the willingness of members of the team to combine their activities efficiently, and secondly, their ability to function dynamically while organizing their activities. They concluded, furthermore, that team leadership, the third element, was very important for performance. The degree to which the leader identifies a common goal and organizes the team to make sure success in achieving these goals greatly contributes to team performance. The impact made by a single member has been the subject of most of the study on shared leadership.

After all, any or even more members that are either officially named to the position or arise from within the group may also provide leadership. Innovation means that structured procedures and processes are, to some degree, not widely accessible within such a team to fix, for instance, unpredictable developments, recently found results or newly discovered issues. It needs the active and urgent involvement of all team members to resolve these problems. If the problems which become evident to specific group members are relevant to the tasks of many other team members

(and with what respect) need to be rapidly determined. Leadership plays a role here (even if it is not shared), for example, in terms of good accordance with the organization team priorities and goals and management of problem-solving operations.

To that of the degree that it is unknown who comes out on top, and who takes the lead for what specific mission, throughout the case of shared leadership, accountability for the development of technologies is spread as well as the risk of just not resolving related issues is strong. Most precisely, we suggest that the absence of clarification of leadership is negatively correlated with innovation-relevant group performance (Anderson & West, 1994). There are many clear reasons for believing that there will be significantly higher levels of team innovation when team leaders promote participation. Developing an efficient defined function is the primary challenge for team leaders to discuss that they create and sustain innovative teams.

The shared leader thus has a vital part to play in maintaining that members of the team are informed on their common goals and that input mostly on the accomplishment of these goals is given and also that mechanisms are in place inside the team to ensure that all members can exchange information and ideas and lead to decision-making. The leader must ensure that the organization focuses on quality so that members of the team can question and discuss the thoughts of one another and provide functional and support networks for the advancement of innovation. If leadership isn't really visible to the team, his / her actions will be hindered or not accepted by team members, regardless of how talented or competent the individual is who has had this position. Interconnected work can be seriously compromised by disagreement over leadership, so members of the team are likely to be swayed by disagreement and confused about priorities because of discrepancies in priorities for those who are in dispute.

Leadership is a vital portion of innovative organizational performance for a minimum of two purposes. First, leaders build environments that encourage creativity and innovation at the end (Nijstad, Berger-Selman, & De Dreu, 2014). Secondly, in the course of a top-down process, leaders manipulate the strategic innovation

dreams and things to do for their corporations. Leaders can change the individual and team targets by evaluating the potential of the innovation, for this they can provide awards and encourage them by providing work independence (Hemlin, 2006; Hunter, Bedell, & Mumford, 2007). So, the leaders perform two duties, they help and facilitate the teams and individuals to achieve innovation in their work, on the other hand, they also manage the goals of the organization focused to achieve innovation (Hemlin, 2006).

Shared leadership behavior is more important for team composition while predicting team innovation. External team members have been seen to be able to fuel creativity by either incorporating or developing an atmosphere that encourages growth and fosters innovative ideas (Choi & Chang, 2009; Edmondson, 1999) or by being indirectly supportive of those who carry out new ideas with organizations attention, rather than their own individual goals.

Not just to expressed in members of the team to share authority and influence, the term "shared" of shared leadership, but it also expressed as in process of cooperation, such that, by providing data, supporting and believing members of the team to understand sharing leadership. Lin and Yan (2011)argued that by permission and coordination, shared leadership strengthened the morale of members of the team, established a trustworthy relationship with team members of the team, stimulated the excitement of team members, and encouraged the information sharing of teammates. Shared leadership provided a forum of innovation and empowerment for skilled professionals related to team effectiveness, and encouraged collaboration between members of the team.

Furthermore, when shared leadership members of the team exhibited leadership style actions, the behavior of promoting information sharing will have a beneficial impact on the information sharing of the entire organization(Lin & Yan, 2011). Hui-ying and Jian-peng (2013)compared structured leader and instructional leadership sources of power, then described that shared leaders affected other members of the team through their key expertise and efficiency. Amabile (1988)found out that the actions of shared leadership could motivate the commitment of members of the team to function to achieve a high degree of innovation. Jung, Chow, and

Wu (2003)found out that mission inspiring leadership skills might strengthen the motivation of the members of the team, the identification of the company, the aim of even more concrete innovation and strong innovation. Besides, the leader encouraged innovation and the ability to share the brunt of inferior, enhanced members innovative engagement and encouraged.

Shared leadership can be a strong and probably effective type of leadership, especially in cross-functional teams that need centralized control, or to have a strong central leader who's highly dependent on the specific skills, abilities, and histories of the members of the team. Contemporary research, moreover, is only starting to investigate the context and implications of shared leadership. The shared leadership of scholars and scientists has received much interest. Likewise, Pearce (2004) indicates that shared leadership is the expression of fully established team empowerment, in which members of the team participate in mechanisms of concurrent, continuous, and reciprocal impact. A need to change the focus of leadership from a single leader involved in predominantly nonlinear systems of impact to multiple leaders involved in much more complex shared and more competitive systems of impact is specifically discussed by these researchers.

It is argued that members of the team can build the intermediary behaviors and requirements required to participate in rising amounts of shared leadership through the impact of self-leadership, resulting in a much more successful formation of team knowledge. Alan Seers, Keller, and Wilkerson (2003) pointed out that ongoing study has been "usually quiet on theoretical explanations why power must be exerted and consummated through various people of work teams in some continuous or patterned way." Comparably, Fletcher and Kaufer (2003) indicate that in leadership literature, the micro-processes within social interactions have been largely overlooked. In organizational literature, the need for the multilevel study has been frequently expressed (House & Rousseau, 1992) and several researchers have indicated that greater emphasis on level activities would facilitate the creation and analysis of organizational theory (Klein, Dansereau, & Hall, 1994).

It is argued that these intermediate frameworks can experience a change in rates over time; hence, for instance, self-leadership skills can allow people who originally

have individual working attitudes like faith, determination, and willingness to converge over time in these attributes, creating a more cohesive team unified by these common attitudes. The growth of collective attitudes and work values, in effect, is expected to become more conducive to the growth of shared leadership.

Shared leadership can be described as an evolving team resource that arises from the sharing of the power of leadership across several members of the team. It represents a shared impact state encoded in the relationships between team members (Carson et al., 2007). Diverse, collaborative processes of control between as well as among entities in teams are involved (Pearce & Conger, 2003). As a team-level concept, it also defines leadership experience where practices are practiced by several people instead of simply by those at the top or informal leadership positions. Furthermore, shared leadership focuses on leadership as a social mechanism, or "a complex, multidimensional, collaborative operation that is rooted in the context in which it happens, like all individual behavior and cognitive sense-making" (Fletcher & Kaufer, 2003).

The concept of shared leadership, according to Fletcher and Kaufer (2003) promotes a more specific emphasis on the democratic, cooperative, collectively implemented, and less complex nature of interactions between leaders and followers. Usually, members of the team experience greater diversity, input, task importance, and task identity in shared leadership, but the most significant aspect is the greater mutual control that people have over their operations (Williams & Sternthal, 2010). Shared leadership gives team members the power and ability to more effectively handle their requirements (variances).

Shared leadership has a potential wide effect on team innovations appropriate and organizational features. It defines that many group members perform serious shared management purposes, solving problems, and taking concern for team objectives collectively. Wu and Cormican (2016) found that in engineering design teams the density of a shared leadership network is positively related to team innovation. Past researchers have identified many environmental factors favorable to creativity: highly cooperative teams, teams capable of self-determining task performance strategies, organizations that have developed a framework for the active

sharing of views, and so on (Amabile, 2012). Shared leadership within a team, such as autonomy for team members, support for collaboration among members with different expertise, and a team environment that promotes communication, fulfills precisely these criteria.

Collectively it is anticipated that higher levels of team innovation will result from shared leadership. In comparison, lower joint leadership rates would end up in smaller growth teams. P. Liu and Wei (2009) described shared leadership as a collaborative, engaging community influence mechanism that promoted team members and received input, and accomplished aim through ongoing contact and ongoing process intervention." This style of engagement and mutual motivation process may help improve team performance. Amabile (1988) discovered that transformational leadership behavior might inspire the motivation of the team members to work to urge a high level of creativity. Jung et al. (2003) discovered that the inspiring vision of transformative leadership could strengthen the enthusiasm of the team members, the identity of the organization, a more concrete growth target, and vigorous growth; however, the transformative leader offered incentives for creativity, thereby increasing the creative commitment of the participants. Howell and Hall-Merenda (1999) have confirmed that leadership behavior was the primary predictor forecasting success in innovation.

H2: Shared leadership positively and significantly related to team innovation.

2.3 Team Innovation Mediates the Relationship between Shared Leadership and Team Performance

The implementation of new and better ways of working at the workplace is innovation. It is a mechanism that is different from the creativity that includes the mechanisms based on new and appreciated thoughts being produced. A broader,

more clear incremental innovation is the deliberate implementation and development of concepts, methods, goods, or processes within such a job, work team, or organization that are unique to that job, work team, or organization and is intended to support the task, work team, or organization. Different processes and goods may be known as innovations.

These involve technological innovations, like new models, but it may also involve new manufacturing processes, the introduction of advanced production technologies, or the launch of innovative organizational computer support systems. Innovations are also known to be organizational modifications. Both examples of administrative developments within organizations are modern human resource management (HRM) techniques, corporate health, and safety policies, or the implementation of coordination. Novelty means innovation, but not always total novelty (West, 1990).

The performance of the team (including innovation) is defined by a broad variety of factors: the makeup of the team (size, expertise, experience, and uniqueness), the role of the team, the organizational context, team processes, the role's level of commitment, the reasonableness of the team's strategies and the team's assets (Hackman, 1990; West, 2002). The team leader's conduct has the potential to affect all the factors contributing to team innovation, though specifically the team processes mentioned earlier (clarifying goals and fostering engagement, dedication to performance, and encouragement for innovation) (Lee, Gillespie, Mann, & Wearing, 2010). The leader provides the team with task experience, skills, and attitudes that affect group structure and team expectations (Hackman, 1990) and strengthens these mechanisms via supervision, input, and training, helping the team to accomplish its activities and innovate (McIntyre & Salas, 1995).

As companies shift towards glamorous, increasingly dynamic ways of organizing and are required to seek innovative and creative solutions challenges, a study on team innovation and performance is becoming highly relevant. More precisely, various opportunities have been generated by the introduction of shared leadership in team members, especially in organizations that have historically valued team leadership and team innovation and performance. The analysis of team leadership

and performance is becoming important and as more companies shift to team strategies in both nonprofit and for-profit domains (Pearce, 2004). In specific, the growing focus on team-based knowledge work, or work requiring substantial cognitive investment capital by a team of trained professionals, forces us to extend our conventional leadership models, as embodied in one person, to include other dynamic leadership models which include ideas such as self- and shared leadership (Houghton, Neck, & Manz, 2003).

The introduction of team-based information work, furthermore, is sometimes not related to improved performance Ashley (1992) and teams frequently struggle to live up to its expectations because of their unwillingness to organize the activities of members of the team efficiently and the absence of meaningful leadership to direct this cycle (Burke, Fiore, & Salas, 2003). As a result, it is important to establish team leadership models that are more reflective of effective performance, such as the development of information and efficiency. The building of shared leadership is a positive trend in the field of team leadership. "A complex, collaborative process of control between members of a team for which the goal is to direct each other to the attainment of the team and organizational objectives or even both" is characterized as shared leadership (Pearce & Conger, 2003). An important difference between shared leadership and more conventional models of leadership would be that, concerning upward and downward centralized management systems, the control processes involved can also include peer or directional impact.

Innovation studies support leaders as innovation initiators during their initial stages by developing an organizational environment to encourage innovation (Mumford, 2000). Leaders build mutual knowledge of organizational innovation strategies, policies, and processes, allow innovative efforts to identify and define issues worth pursuing. To ensure that viable ideas are likely to be implemented in the industry, create a background that allows multiple actors to work together in creating viable ideas and managing the process of concept creation and its implementation (Jung et al., 2003; Smith, Busi, Ball, & Van der Meer, 2008). By encouraging and supporting the exchange of ideas, and strengthening interest, taking risks, and

experience different things, they also encourage the success of innovation by the team (Mumford, 2000; Slater, Mohr, & Sengupta, 2014).

We propose that both of these concepts fall within the wide boundaries of 'shared leadership' Pearce and Conger (2003)within which tactical leadership positions are shared, with each leader of a 'leadership constellation' playing a separate function and operating harmoniously with all members. Shared leadership brings together the requisite set of skills, experience, and sources of power and credibility, taking into consideration the analysis of the limit on the ability of any person driving innovation in a complex organization (Denis, Langley, & Sergi, 2012). First, shared leadership re-envisions the 'who' of leadership, with leadership reflecting a collection of behaviors that could and must be adopted at all stages by participants, rather than a collection of individual features and qualities found in top managers. Second, through its focus on social experiences around leadership power, which is, shared leadership, a community trend of supporters plays a role in shaping and developing leadership, it re-envisions the 'what' of leadership.

Finally, by reflecting on the abilities and capabilities needed to establish environments in which collaborative learning will occur, shared leadership re-envisions the 'how' of leadership (Pearce & Conger, 2003).In centralized contexts, there is a specific need for shared leadership (Denis et al., 2012), particularly to promote innovation. Leadership power may be extracted from multiple and even contradictory tools, i.e. professional rank and managerial responsibility, in such environments (Currie & Lockett, 2011). As a result, shared leadership is likely to compete with leader emergence, with numerous teams adopting distinctive functions and practices of leadership to disperse innovation (Holm & Fairhurst, 2018).

From a system point of view, performance is an organizations ability to deal with all basic organizational processes compared to its goal-seeking actions (interfaces, outcomes, transitions, and feedback mechanisms) (Evan, 1976). A high-performing organization can effectively perform its primary tasks and effectively perform its roles of organization-maintaining and organization-adapting (Miles, 1980). The company-adapting system takes that the organizational system or processes undergo adjustments to accommodate the current environmental requirements as

the climate changes. Everything needs to be achieved by successful organizations. Not only can they respond to changes in the environment, but they also use their knowledge and capabilities to establish new environmental environments, such as by implementing new products or services that have never been provided before. Innovation is a means of bringing about these internal or external improvements and is, thus, a means of sustaining or enhancing the efficiency of the company.

Very few observational studies have identified the positive performance effects of innovation. Every improvement in an organizations technological framework imposes certain limits and criteria for an organizations social structure. Innovations are implemented to increase efficiency or to remove avoid inefficiency which may be triggered by changes in the environment, such as changes in the organizations demand for production (Downs, 1967).

The style of leadership has been highlighted as among the most significant individual effects on company innovation, as leaders may personally choose to incorporate fresh concepts into an enterprise, set clear targets, and promote hierarchical innovation (Harborne & Johne, 2003). Leaders play an important role in influencing the ability of companies to produce innovations by fostering an acceptable atmosphere and making choices that facilitate efficient information development and implementation (Kanter, 1983). It is important to stress that the expectations of leaders about their positions in their organizations have a significant impact on their ability to facilitate this form of leadership in an organization. Few past studies have shown that certain features of innovation are positively related to organizational success, not innovation itself (Danneels, 2002; Gopalakrishnan & Bierly, 2001).

In any case, a large number of prior studies conclude that efficiency is positively influenced by innovation. Hurley and Hult (1998) showed positive relationships between creativity, business orientation, and organizational learning and demonstrated that the capacity for successful performance was affected by all these factors. In innovation and in developing an environment that promotes the skills and practices necessary to facilitate it, the leader plays an important role (Kanter, 1983). In this manner, if we identify the impact of innovative behavior, it'll become

obvious that leadership features (e.g. expertise, lot of decades in the position) and style of leadership are important to foster this innovation potential.

The notion that a positive, cooperative, and interactive leadership style is more likely to foster innovation (academic and procedural innovation) inside the company than relational leadership styles is generally commonly understood ((Kanter, 1983). By putting together teams of creative individuals, fostering mutual understanding, risk-taking, minimizing official communications expenses or common vision, these leaders establish the optimal conditions for innovation. Innovation will, in general, not only make maximum use of available resources, enhance productivity and future profit, but also introduce new current resources into the business. As time-based innovation has become a major concern for modern business organizations, many and more businesses have realized that their rivals' rapid reaction to new consumer creation presents a crucial competitive challenge and are thus attempting to launch new goods, services or processes much faster (Boyd & Bresser, 2008).

The implementation of new and better ways to do things at work is innovation. It is a system that is different from creativity, which includes the mechanisms of access to different and valued ideas being produced. A broader, more clear definition of innovation is "... the deliberate implementation and application of concepts, methods, goods, or procedures within a job, work team, or organization that is unique to that job, work team, or organization and are intended to support the job, work team, or organization (West & Farr, 1990). Different methods and items can be known as innovations.

These involve technological developments, such as new models, but it may also involve new manufacturing processes, the implementation of advanced manufacturing processes, or the launch of innovative organizational computer support systems. The performance of the team (including innovation) is determined by a broad variety of factors: the makeup of the team (length, expertise, experience, and variety), the role of the team, the organizational context, work teams, the role's level of commitment, the acceptability of the task's strategies and the team's

resources (Hackman, 1990). The team leader's conduct has the potential to impact all the factors contributing to team innovation, but specifically the teamwork skills mentioned earlier (trying to clarify goals and fostering engagement, dedication to performance, and encouragement for innovation) (Tannenbaum, Salas, & Cannon-Bowers, 1996).

The leader provides the team with task experience, skills, and attitudes that affect group structure and group expectations (Hackman, 1990)and strengthens these mechanisms by supervision, input, and training, helping the team to accomplish its tasks and innovate (McIntyre & Salas, 1995). The leader also helps to recognize work processes and to ensure the team has job performance (Tesluk & Mathieu, 1999). Zaccaro et al. (2001) indicated that three aspects are important for successful team performance: first, the willingness of members of the team to incorporate their activities effectively, and secondly, their willingness to organize their behavior dynamically. They concluded, furthermore, that team leadership, the third element, is most important for performance.

The degree to which the leader identifies team goals and organizes the team to make sure progress towards achieving these goals greatly contributes to team performance. However, one or even more people who are either officially named to the position or arise from inside the team can also provide leadership. Except in self-managed teams, leadership is critical, influencing both organizational variables, such as the procurement of team resources and the actions of team members, like enabling the team to take charge of its tasks (Nygren & Levine, 1996). Leadership transparency relates to the mutual views of group members about the degree to which leadership positions within the team are evident.

Leaders that maintain consistency of team goals are likely to promote innovation in the sense of group growth by allowing concentrated creation of new ideas that can be processed with greater accuracy than if team goals are vague. There are clear reasons for believing that there would be a significantly higher level of team innovation when team members encourage participation. The cross-fertilization of experiences, that can foster imagination and innovation, Mumford and Gustafson

(1988), is much more likely to happen to the degree that knowledge and control over decision-making are exchanged within teams and there is a high level of engagement between members of the team. Where the leader structures and supports encouragement for innovation and where he or she encourages rather than persecutes creative attempts, creativity is more likely to happen in teams (Kanter, 1983).

Normally, supportive leadership or an environment of encouragement within teams is required to foster creative and innovative ideas (e.g. Amabile, 1988). Besides, the case of innovative and inventive concepts will also indicate a relationship of evident self-efficacy (e.g. Bandura & Walters, 1977) because it requires a vital expression of the "status quo" inside the squad. Team creativity is also likely to be promoted by shared and unified team permission. While the team performs under a common vision and while the team strives for shared goals, the internal collective leadership of team members seeks to enhance the individual conceptions of each other (Fletcher & Kaufer, 2003).

Generally speaking, creativity can not only transform the use of current resources, improve productivity and potential value, but also bring in new intangible assets. More creative businesses should be more effective in adapting to the needs of consumers and creating new technologies that will allow them to achieve improved results or higher profitability (Calantone, Cavusgil, & Zhao, 2002; Sadikoglu & Zehir, 2010). Innovation is critical for improving organizational efficiency in addition to increasing the standard of service (Hsueh & Tu, 2004; Parasuraman, 2010). In different aspects of innovation, many scholars have found team outcomes.

Burpitt and Bigoness (1997) found that leader empowering behavior results in the creation of innovation in subordinates behavior. Hoch (2013) evident that innovation can be ensured among team members by introducing shared leadership within the organization. When organizations effort to enhance the innovation of team members they could enjoy better team performance (Bain, Mann, & Pirola-Merlo, 2001; Bouncken, Brem, & Kraus, 2016).In light of the foregoing, current research efforts to discuss the theoretical relationships among shared leadership and team performance in the occurrence of innovation.

Murphy, Trailer, and Hill (1996) believed that firm success was a multidimensional term, and three metrics may be development, financing, or marketing (Sohn, Joo, & Han, 2007) or results like growth and income (Wolff & Pett, 2006). Innovative success is the sum of cumulative corporate milestones arising from transformation and enhancement activities performed taking into account different facets of business growth, such as procedures, products, marketing, organizational structure, etc.

Following Crossan and Apaydin (2010), we started by defining innovation as the development or acceptance, assimilation, and utilization of economic and social benefit-added innovations; the regeneration and extension of products, facilities and markets; the implementation of innovative forms of production; and the creation of new leadership mechanisms.

We further limit the term to concentrate on technical innovations like "products, processes, and technologies used to produce products or render services related to an organization's basic work activity" (Gopalakrishnan & Bierly, 2001). Our definition of innovation, therefore, excludes organizational activities such as market expansions or improvement in administrative structures or strategies. The dynamics literature provides the theoretical relationship between innovation and performance. The literature on dynamic capabilities provides an organization the ability to "integrate, build and reconfigure internal and external skills to address rapidly changing environments" (Teece, Pisano, & Shuen, 1997). But dynamic skills are likely to only have an indirect impact on firm performance (Zott, 2003).

Subsequently, they require an intermediate process or outcome (Danneels, 2008) like sustainability (Dving & Gooderham, 2008), agreement (Kale & Singh, 2007), or innovation(Eisenhardt & Martin, 2000) to impact performance (Barreto, 2010). That is, creativity is a tool for exploiting superior production on firm capital (Lawson & Samson, 2001; Teece, 1986). Innovation is likewise a critical element of the competitive scope of a firm. Research shows companies with more nuanced repertoires (Miller & Chen, 1996) or competitive repertoires (Chen, 2010)can defeat competitors and attain better performance (Ferrier, Smith, & Grimm, 1999). In contrast, no innovative firms are likely to fail (Christensen & Bower, 1996). These

findings highlight the contribution of innovation to organization productivity and eventually performance (Eisenhardt & Martin, 2000; Helfat et al., 2009).

H3: Team innovation mediates the relationship between shared leadership and team performance

2.4 Task Uncertainty as Moderator

In general, projects are assumed to realize three major parameters like time, cost, and performance. These parameters classify project-based activities distinct from day to day routine activities. The key challenges faced by project managers in the era are to deal with uncertainty in several functions. The uncertainties can surround the projects in some ways like time estimations, cost, and resource deployment. These uncertainties sometimes are controllable and sometimes the uncertainties are unknown and uncontrollable to the project managers. Such uncertainties affect the progress of the project and will also hinder the project outcomes (Hubbard, 2009).

Managers must watch these risks, assess, and identify contingency plans to mitigate them effectively (Hillson, 2002). Task uncertainty has received attention in studies related to project management, (Meredith & Mantel Jr, 2010), and authors have reported different approaches to handle this issue (Harris & Woolley, 2009). In project management, task uncertainty refers to the factors associated with several sorts of risks associated and studies even have been published to differentiate risk and uncertainty (Perminova, Gustafsson, & Wikstrm, 2008; Sanderson, 2012). Another factor will be observed at the managerial position, where the kind and magnificence of the manager in command of the project can produce uncertainty (Madsen & Pries-Heje, 2009).

Leadership approaches addressing task uncertainty that commonly interacts with leadership functions (Zaccaro et al., 2001). These emphasized the significance of task uncertainty as a potential impediment to teamwork performance (Hackman,

Walton, & Goodman, 1986; Zaccaro et al., 2001). After a team leadership perspective, the main task of the project leader is to resolve the problems which threaten the team during the task. (Fleishman et al., 1991).

As such, leaders are responsible for (a) identifying problems that would potentially impede task accomplishment, (b) generating appropriate solutions, and (c) implementing those (Burke, Stagl, Salas, Pierce, & Kendall, 2006). Functional leadership has historically been assigned only to the project leader, whose role has been seen as analyzing and defining critical tasks and environmental incidents for the team (Zaccaro et al., 2001). However, as argued above, integrating all team members in these tasks is probably going to boost team performance (Morgeson et al., 2010).

Within the meantime observing other members and their work the project team makes their work visible (Kellogg, Orlikowski, & Yates, 2006), the interdependencies of the tasks will help to uncover any gaps within the work package of anyone (M. West, 1996)whether these interdependencies are self-created or somebody else direction caused these, while project members are trying to find some variety of negotiations on technical interfaces between their contribution (Hoegl, Weinkauf, & Gemuenden, 2004). This sort of increased task-related coordination can improve the quality of the product, by better communication and a higher individual contribution towards the integrated work. So, the shared leadership will have a positive impact on project performance under the conditions of task uncertainty.

Furthermore, changes caused by environmental factors can make the project team be more flexible and make fast changes accordingly. The team - focused interrelations help in making decisions as many viewpoints are considered and integrated for better results (Brodbeck, Kerschreiter, Mojzisch, & Schulz-Hardt, 2007). Work procedures and routine related decisions will be thus taken more quickly and accurately within the current and broader information basis (Seers, Petty, & Cashman, 1995). Duimering, Ran, Derbentseva, and Poile (2006) associate task uncertainty with laws that are understood but must be described as unfolding the project;

difficulty with the number of separate tasks to be carried out; and inconsistency, lack of understanding of the variables, and laws related to project requirements.

The lack of information regarding requirements is uncertainty (Daft & Lengel, 1986). Therefore, ambiguity grows as the volume of information decreases or as the demands for information rise. Comstock and Scott (1977) argued for the importance of specifying the type of uncertainty at issue, given the possibility that such types will have different impacts on the effectiveness of organizational structures, the uncertainty of the task is uncertainty as to the performance of the task (Galbraith, 1973; Mohr, 1971; Schoonhoven, 1981; Van de Ven, Delbecq, & Koenig Jr, 1976). As uncertainty varies across tasks, the completeness of task knowledge' is likely to vary as well.

The uncertainty of the task could be described as a lack of accuracy correlated mostly with inputs, processes and outcomes of the wider technical framework in which the task is performed out (Griffin, Neal, & Parker, 2007). Aspects like variance in the supply and accessibility of tools and facilities, inaccuracy of production technologies, rising consumer expectations or varying economic environment can affect these uncertainty (Wall, Cordery, & Clegg, 2002).

Task uncertainty expresses itself at the team level in relation to the degree to which a group can predict can tasks must be carried out, where, how and to what impact (Griffin et al., 2007). Likewise, task uncertainty can highlight the fact that this is tough to anticipate if but when a team may need a variety of complex task approach. After this, the differentiation acknowledges that, while the task uncertainty is complicated and complex, the task of a team can be structured in such a way as to be streamlined and ritualized.

In these circumstances, the team may well be balanced from the intrinsic uncertainty in the task environment (e.g. by scientific and organizational experts) and may actually refuse to adapt to unprogrammed incidents when they arise. It is stated that task uncertainty had been an important pre-requisite for the deployment of this unique job conceptual structure while examining the research mostly on efficacy of self-regulating (self-managing) work groups.

It is indicated that the presence of task uncertainty,' the extent to which the next phase of the development process is unknown,' created a requirement for non-routine group-level decision-making (Pearce III & Ravlin, 1987).Instead of referring to a more distant organizational level or place, independence, it is stated, provides the ability for leaders of a project team to make such decisions together. It will lead in quicker and much more successful reactions to certain unplanned events, assuming that the necessary expertise and capacity to take those actions remains within the community.

it is also indicated that the congruity of task uncertainty is also likely to generate motivational benefits within a collective job role, in which members of the team will involves stronger novelty and difficulty, and feel more actively engaged in process management. With such an emphasis on group decision-making and efficiency, team performance at group or team level has also been researched (Levine & Moreland, 1998).To team decision-making, studies discovered that the more members of the team exchange information, the higher the quality of group decision-making, and the more members of the group are told about the knowledge within each member, the more information is shared (Stasser et al., 1995).

Researchers find that team performance is correlated with the level of ability of members and the relationship between abilities and tasks (Hackman, 1987), communication and encouragement (Steiner, 1972).setting of team objectives (O'Leary-Kelly, Martocchio, & Frink, 1994), and work features and cooperation (Campion, Medsker, & Higgs, 1993).The profitability or efficiency of the team is, in turn, defined as the quality or quantity of performance (Guzzo & Dickson, 1996). After all, studies prefer to select one of the team outputs or combine those outputs into an aggregate measure of efficiency.

It suggest that corporate performance could be evaluated in numerous aspects, and duration, expense, and performance are the most important aspects of performance in project management research field (Jayaram, Droge, & Vickery, 1999; Ward, McCreery, Ritzman, & Sharma, 1998).Three main performance factors for a project management team may be the time of the project, the expenses incurred during the project, and the nature of the final outcome (Jin & Levitt, 1996). The

uncertainty of the task is described as the variation between the availability of data needed for the task to be carried out and the amount of data already collected (Galbraith, 1973).

Such conceptual frameworks of task uncertainty contributes to the core principle of the production of data. Galbraith (1973)concludes if the task is very well known before it is done, it is possible to pre-plan most of the operation." If this is not known, then more information is learned during the specific execution of the project, that causes a change in developed the idea, timelines, and objectives. During task performance, these all changes involve the processing of information. Hence, the amount of data managers use for decision-making is probably to be a factor of their task uncertainty.

Leaders working in conditions of high task uncertainty doesn't have all the data available to execute the task. To cope with the condition, they will have to acquire and analyze extra information. Before making their decisions, innovative knowledge can enable researchers to identify their tasks more clearly. The current literature tends to support a possible moderating impact of task uncertainty on the scope of the use of leadership and performance relationships. Better data is needed at the stage of execution of tasks in a stronger task uncertainty scenario (Fry & Slocum Jr, 1984).Managers working in such circumstances do not have all the data necessary to execute the task; if they are to enhance their actual performance, they might need to acquire and analyze more knowledge to explain the task more precisely.

On either hand, it is possible to establish and implement defined guidelines, procedures, and expectations for the performance of a task in conditions of low task uncertainty (Tushman & Nadler, 1978). Managers working in such situations may only be able to execute the role by understanding the laws, regulations, and standards prescribed. In particular, repetitive (low-uncertainty) tasks provide more opportunities to develop knowledge about tasks than non-repetitive (high-uncertainty) tasks. Task uncertainty is conceptualized as a contextual condition in which the success rate of a project cannot be estimated because of the difference between the amount of information currently available to the organization

and the amount of information needed to complete the project (Perminova et al., 2008; Tatikonda & Rosenthal, 2000).

A high degree of task uncertainty indicates high instability and ambiguity in the exact methods and procedures for the successful completion of the project (Tatikonda & Rosenthal, 2000). Therefore, task uncertainty would be expected to lead to more systematic and innovative processing of knowledge, problem-solving, development, new ideas, and decision-making, and so on. Akgn, Byrne, Keskin, Lynn, and Imamoglu (2005), argue that uncertain tasks call for more cooperation and coordination among team members.

Besides, if the task is uncertain, teams need to be involved in further learning activities to accomplish the task with one another. But different identities in a new product development team would create conflicts or lack of mutual trust and cooperatively that would hurt effective team members communication. This would be worse when there is high task certainty, as non-routine information processing and large search tend to mean more chances of dispute and clash between team members. Uncertainty is caused by failure to clarify the real requirement at the early stage and changes occurring in the process of system development (S. Nidumolu, 1995; S. R. Nidumolu, 1996).

Task uncertainty is high when a large-scale project, with great technical complexity, is carried out by an inexperienced team or even lacks client or user support (Jun, Qiuzhen, & Qingguo, 2011). Uncertainty increases the difficulty of achieving the predefined goal, such as delay, budget overrun, or unforeseen work (Korhonen, Laine, & Martinsuo, 2014). Keeping changing requirements from an efficiency perspective increases the challenges of the project team in implementing a high-quality system. In addition to recognizing the direct adverse project impact, past studies concentrate mainly on finding ways of reducing the effect of uncertainty.

In current working environments, confusion is increasing. Such growth is motivated by flexibility, pressure to perform, uncertain external factors, as well as the importance of information and dispersed abilities (Navarro Cid, Quijano de Arana, Berger, & Meneses, 2011). As a consequence, organizations ought to encourage their employees to deal with uncertainties and build the necessary efficiencies to

improve. Consequently, we investigated the role of leadership as regard to task uncertainty, taking into consideration relational and systemic communication processes and discussing prior studies restrictions.

The common features around meanings are ambiguous goals, a lack of awareness of the techniques necessary to attain the aim, or an undefined relation among process and performance. It supports Navarro Cid et al. (2011) function of task uncertainty. Group leaders with unclear roles. Research shows that whenever the organization culture is unpredictable, shared leadership is much more productive Bass and Riggio (2006)and the same may refer to uncertain tasks. there's really indication that shared leadership is more probable and much more successful whenever the climate is dynamic, chaotic, uncertain or volatile (Bass & Riggio, 2006).

Leaders communicate data that could be used by members of the team to create an environment of meaning and importance. Leaders have to contend with insufficient knowledge about mission whenever a team is dealing with unclear tasks. They will also have a greater need for powerful everyone to manage critical social knowledge, like shared leaders (Lau & Liden, 2008). Group members with simple team responsibilities, on the other hand, can experience a high degree of autonomy and self-sufficiency (Lau & Liden, 2008).

On the other hand, with higher levels of task uncertainty, task methods leading to task outcomes can only be described in very general terms and employees do not know exactly what outcomes can be expected; their knowledge of the task concerning the causal-effect relationships is limited. When task uncertainty is minimal, information on the results of a task is assumed to be acceptable for effort and/or task strategies to be intentionally modified, as employees are well aware of the cause and effect relationships in the task; in such cases, employees know precisely the behavioral direction through which a task can be performed. This traditional focus on task outcomes, however, is unlikely to necessarily compensate for the conditions needed when managing employee performance in highly uncertain tasks.

Uncertainty of the task is caused during the development process by unclear requirements or modifications. In comparison, when a project has monotonous objectives and responsibilities, it is relatively slightly less important to be oriented towards promotion. When the specifications are simple and certain, or when the technology involved is mature and set, improvements are minimal.

The project will progress as long as the project manager complies with current and existing procedures. Although being centered on promotion is still relevant in such a situation, it is not as crucial as the extremely unpredictable setting. Hence, when uncertainty is high the level of project team performance will be declined. When the team is seasoned in detecting what actions to require, the shared leadership becomes more important for the project performance to focus and solve the issues in light of task uncertainty. Therefore, it could be hypothesized that in the presence of high uncertainty shared leadership will enhance team performance.

H4: Task uncertainty moderates the relationship of shared leadership with performance such as the relationship of shared leadership with performance will be stronger when task uncertainty is low.

2.5 Hypotheses of the Study

Based on a comprehensive literature review, to remove the identified gap and resolve the problem discussed above, the following hypotheses have been developed:

H1: Shared leadership is positively and significantly related to project team performance.

H2: Shared leadership positively and significantly related to team innovation.

H3: Team innovation mediates the relationship between shared leadership and team performance.

H4: Task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low.

2.6 Research Model

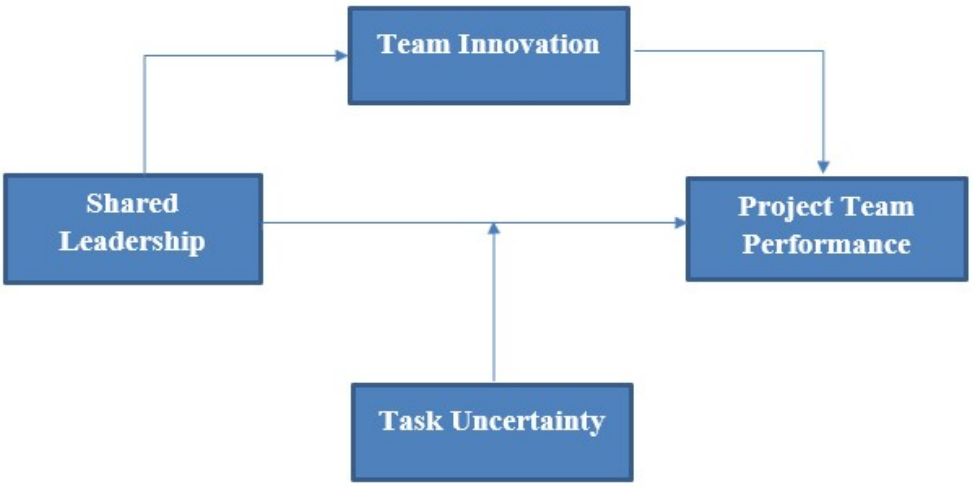

FIGURE 2.1: Research Model

Chapter 3

Research Methodology

3.1 Research Method and Design

This current study aims to discover the fundamental relationship in Project-based Organizations between the impact of shared leadership and project team performance. Furthermore, this study also explores the probability of potential-dependent and independent variables such as project team shared leadership, team innovation, task uncertainty, and project team's performance. For this study, the data were collected in two months, as it is cross-sectional the data was collected at one time. Individuals working in a project-based organization in twin cities of Pakistan i.e. Islamabad and Rawalpindi were the unit of analysis of the present study.

3.2 Population and Sampling

The population of the study includes public and private sector organizations of the Capital city i.e. Islamabad and its twin city i.e. Rawalpindi. Shared leadership and innovation may vary across organizations in the public and private sectors, as well as across different sectors explicitly the manufacturing and services sectors. For the current study, project-based organizations located in Islamabad, the capital city, were targeted for data collection to capture maximum variance,

as mostly all organizations (located in different areas of Pakistan) prefer to have their headquarters in Islamabad. Due to time constraints, the data was collected using a simple random sampling process. The companies were first contacted with a reference person and the respondents were requested to take part in a survey. Moreover, to ensure the precision of the information, the participants were guaranteed for the condentiality of their replies. To ensure the privacy of their answers, the answers were received as anonymous no identity or personal information was required for this study.

3.3 Data Collection

Questionnaires were used for data collection regarding the presence of shared leadership in the project-based organization and its impact on team performance in the presence of innovation as mediator and task uncertainty as moderator. The period spends in data collection was two months. The data were collected at one time as discussed above, which depicts that the research design of this study was cross-sectional. The questionnaires were adapted from previous studies and the data was collected from project-based organizations of Pakistan in Rawalpindi and Islamabad cities. 250 questionnaires were distributed out of which only 227 were properly filled for further investigation.

3.4 Instruments

Adopted questionnaires were selected from prior experimental studies and were used to collect data. All the items were based on a 5-points scale where 1 stands for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. Questionnaires also contain the few demographic variables which include information about the respondents. Those demographic variables contain respondent age, experience, gender, and qualication.

3.4.1 Shared Leadership

Shared leadership is the variable which is considered an independent variable and a 5-point Likert scale was used to gather responses. We have measured Shared leadership using a 20-item scale developed by (Grille & Kauffeld, 2015). Many other researchers used this scale to measure the presence of shared leadership within organizations (Grille, Schulte, & Kauffeld, 2015; Han, Lee, Beyerlein, & Kolb, 2018; Scott-Young, Georgy, & Grisinger, 2019). A scale was developed to observe the leader's behavior. Sample items include As a team, we assign tasks, As a team, we communicate our expectations, As a team, we ensure that everyone knows their tasks, As a team, we monitor goal achievement, and As a team, we provide each other with work-relevant information.

3.4.2 Team Innovation

A four-item scale of innovation developed by (N. R. Anderson & West, 1998) was used to measure team innovation. Many other researchers used this scale to measure innovation (De Dreu & West, 2001; Eisenbeiss, Van Knippenberg & Boerner, 2008). Innovation is the variable which is considered a mediator and a 5-point Likert scale was used to gather responses. Sample items include Team members often implement new ideas to improve the quality of our products and services, This team gives little consideration to new and alternative methods and procedures for doing their work, and Team members often produce new services, methods or procedures.

3.4.3 Project Team Performance

Project team performance represents the dependent variable in this research. It includes 8 item scale and the questions are designed on a 5-point Likert scale. These items has been used to measure project team Performance. Those questionnaires were developed by (Barrick, Stewart, Neubert, & Mount, 1998). The sample item includes Team members have Knowledge of tasks, Team members

always do quality work, Team members do a good quantity of work, and Team members take Initiative for tasks.

3.4.4 Task Uncertainty

Task Uncertainty represents as a moderator variable in this research. It is measured with the questions developed by (Withey, Daft, & Cooper, 1983). It includes 9 item scale and the questions are designed on a 5-point Likert scale. Numerous other scholars used this scale to measure task uncertainty (i.e. Hartmann, 2005; Hartmann, & Slapniar, 2012). Sample items include There is a known way to do the major types of tasks I normally encounter, There is a clearly defined body of knowledge of subject matter which can guide me when doing my job, There is an understandable sequence of steps that can be followed when doing my work, and To do my work, I can rely on established procedures and practices.

3.5 Data Analysis Tools

In this study for data analysis, two tools were used namely AMOS and SPSS. The AMOS software is used for an analysis of the confirmatory factor. The fitness of the model was also tested and developed to support this research by using confirmatory factor analysis. The correlation analysis was conducted to check the overall relationship between variables, and the significance level.

A phase of regression analysis was introduced to predict the effects of the dependent variable over the independent variable. The IBM SPSS was used to assess the reliability and correlation testing. Moreover, the effect of the controlled variable was tested by ANOVA in IBM SPSS. Process macro has been used to check the mediating effect of team innovation and moderating effect of task uncertainty among the relationship of shared leadership and project team performance.

3.6 Sample Characteristics

Diversity exists in each organization and mostly diversity leads toward creativity. Also, project-based organizations required innovation and creativity to efficiently and effectively complete the project. The following descriptive analysis depicts the diversity of organizations based on gender, age, qualification, and experience, etc.

Table 3.1: Gender

Gender	**Frequency**	**Percentage**
Male	120	52.9
Female	107	47.1
Total	227	100

Questionnaires were distributed among the project-based organization of Rawalpindi and Islamabad to collect the data. We have received 227 responses out of a total of 250 questionnaires with a 90% response rate. As estimated the numbers of male respondents are higher than females due to the lack of females in the sector of project-based organizations. There were 120 males and 107 females among the respondents, which shows 52.9% male and 47.1% female respectively.

Table 3.2: Age

Age Group	**Frequency**	**Percentage**
18-25	74	32.6
26-33	98	43.2
34-41	42	18.5
42-49	11	4.8
50 & above	2	0.9
Total	227	100

In this study with different age groups, respondents filled the questionnaires. Respondents age groups are between 18 to 25-year age was 74, the respondent between 26 to 33-year age was 98, the respondent between 34 to 41-year age were 42,

while the respondent between 42 to 49-year age was 11 whereas there were only 2 respondents between the age of 50 & above as shown in the table 3.2.

Table 3.3: Qualification

Qualication	**Frequency**	**Percentage**
Matric	10	4.4
Inter	26	11.5
Bachelors	85	37.4
Masters	94	41.4
MS/M.Phil.	12	5.3
Total	227	100

The education level also varies among respondents according to the survey. 10 respondents were working the qualication of matric, the education level of respondents having inter was 26 and some other respondents reported for bachelors degree were 85. Respondents having masters degree were 94 and the remaining 12 respondents were having the degree of the MS/M.Phil. as shown in the table of qualification.

Table 3.4: Experience

Experience	**Frequency**	**Percentage**
0-5	133	58.6
06-10	51	22.5
11-16	33	14.5
17-22	7	3.1
23-28	2	0.9
29 & Above	1	0.4
Total	227	100

And the respondent having experience ranges from 0 to 5 years were 113, respondents with experience of 6-10 years were 51, 11-16-year experience respondents were 33, 17-22-year experiences respondents were 7 where 23-28 experience respondents were 2 and only 1 respondents were having professional experience of 29 more than 29 years as shown in table.

Chapter 4

Results

4.1 Data Analysis

This chapter is composed of the results of the analysis in both narrative form and tabular form. Descriptive statistics, correlations, reliabilities, and the effects of linear mediated and moderated regression analysis are identified. Inside the following section, the study findings were considered in light of different tests to verify the significance and relationship of the selected variables using software called IBM SPSS and AMOS.

4.1.1 Descriptive Statistics

The descriptive technique deals with summary statistics in a single table for different variables and calculates their uniform values. The descriptive statistics include basic information such as sample size, minimum and maximum values, mean values, and standard deviation values. Sight table 4.1 for descriptive statistics of the current data. The table indicates the sample size was 227 for all four variables. All variables including shared leadership, team innovation, task uncertainty, and project team performance were graded on a Likert scale of five points, such as 1 representing "Strongly Disagree" and 5 representing "Strongly Agree". Mean values reflect the concentration of responses. The mean shared leadership value was 3.4073 which indicates the respondent agreed to share leadership presence

in project-based organizations of Rawalpindi and Islamabad. The mean value of team innovation was 3.5529 which means that respondents agreed that innovation in the team is necessary. The mean value of the performance of the project team was 3.5920, suggesting that the respondents believed they had the performance of the project team. The mean value of task uncertainty was 2.0724, which indicates that the respondents agreed.

TABLE 4.1: Descriptive Statistics

Descriptive Statistics	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Shared Leadership	1.00	4.95	3.4073	0.85616
Team Innovation	1.00	5.00	3.5529	0.84793
Project Team Performance	1.00	5.00	3.5920	0.82490
Task Uncertainty	1.00	4.33	2.0724	0.41214

4.2 Correlation Analysis

Analysis of correlation is a method of statistical evaluation, which is used to define the strong points of a relationship between statistically continuous which calculated variables. Analysis of the correlation also tests the path of variables about their relationship. The values of correlation of shared leadership and team innovation ($r = 0.364$, $p < 0.01$) predict that shared leadership was positively and significantly correlated with team innovation. The values of correlation of shared leadership and project team performance ($r = 0.406$, $p < 0.01$) predict that shared leadership was positively and significantly correlated with the performance of the project team.

The values of correlation of shared leadership and task uncertainty ($r = -0.227$, $p < 0.01$) predict that shared leadership was positively and significantly correlated with task uncertainty. The values of correlation of team innovation and project team performance ($r = 0.467$, $p < 0.01$) predict that team innovation was positively and significantly correlated with the performance of the project team.

Table 4.2: Correlation

	Shared Leadership	Team Innovation	Project Team Performance	Task Uncertainty
Shared Leadership	1			
Team Innovation	.364**	1		
Project Team Performance	.406**	.467**	1	
Task Uncertainty	-.227**	-.343**	-.345**	1

Notes: *N=227, **=P<0.001, Shared Leadership (SL), Team Innovation (TI), Project Team Performance (PTT), Task Uncertainty (TU)*

The values of correlation of team innovation and task uncertainty (r= -0.343, p<0.01) predict that team innovation was significantly and positively related to task uncertainty. The values of correlation of project team performance and task uncertainty (r= -0.345, p<.01) predicts that task uncertainty was positive and significant correlated with project team performance. The correlation analysis of theoretical variables is presented in Table 4.2.

4.3 Reliability Analysis

The Kaiser Meyer Olkin (KMO) is a measure of sampling adequacy, results showed that it was satisfactory. Additionally, Bartlett‘s test of sphericity test was also significant at p<0.00, Cronbach‘s alpha values indicate substantial reliability for all variables, specifically all values are greater than 0.7, which shows that the data is reliable for further analysis. The Cronbach‘s Alpha values which depict the reliability of each scale are given below in table 4.3.

Table 4.3: Reliability Analysis

Variable	Items	Cronbachs Alpha
Shared Leadership	20	0.954
Team Innovation	4	0.782
Project Team Performance	8	0.89
Task Uncertainty	9	0.751

4.4 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) was used to justify the measurement model (J. C. Anderson & Gerbing, 1988) which consisted of four (4) latent variables: shared leadership, team innovation, task uncertainty, and project team performance. The combination of various fit indexes: chi-square scale, Incremental Fit Index (IFI), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and root mean square error of approximation (RMSEA) was used to test the fit model. The measurement model provided a suitable fit for the data over the alternative models shown in the table 4.4 (DF=773, TLI=0.910; CFI=0.915; IFI=0.916, RMSEA=0.046; SRMR=0.05). The results of these CFAs suggested that the model had satisfactorily discriminating validity.

Table 4.4: Confirmatory Factor Analysis of the Measurement Model

	CMIN/DF	RMSEA	IFI	TLI	SRMS	CFI
Default Model	1.476	0.49	0.916	0.910	0.05	0.915

The below figure disclosed the results for the model fit, where for getting model fit certain changes were deployed like linking error terms. Fortunately, the above table revealed all the values that meet the threshold values which are suggested by Hair et al, hence overall results of four-factor model values are good enough for representing model fit.

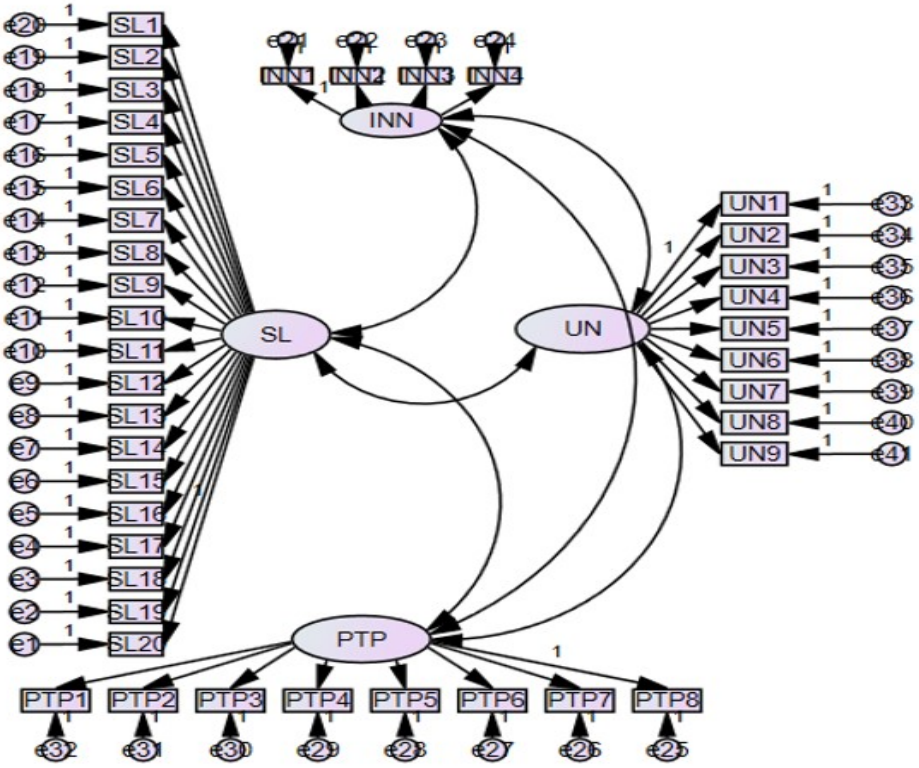

FIGURE 4.1: Confirmatory Factor Analysis

4.5 Hypotheses Testing

4.5.1 Test of Hypothesis 1

H1: Shared leadership is positively and significantly related to project team performance.

The path tested in this study was from shared leadership to project team performance, which showed that shared leadership is positively and significantly related

FIGURE 4.2: Direct Path

to project team performance. It means that a 1% change in shared leadership brings a 40.6% change in project team performance.

TABLE 4.5: Standardized Coefficients for Structural Paths

Structural Path	**B**	**SE**	**T**	**P-value**
SL->PTP	0.406***	0.059	6.656	0.000

****=P<0.001, β =standardized regression coefficients, S>E=Standard Error*

Hence, hypothesis H1 proposed that shared leadership has a positive relationship with project team performance is accepted as shown in the table.

4.5.2 Test of Hypothesis 2

H2: Shared leadership positively and significantly related to team innovation.

FIGURE 4.3: Single Path

The second path tested in this study was from shared leadership to team innovation and the results of the analysis show that shared leadership is significantly and positively related to team innovation.

TABLE 4.6: Standardized Coefficients for Structural Paths

Structural Path	**B**	**SE**	**T**	**P-value**
SL->TI	0.364***	0.061	5.867	0.000

****=P<0.001, β =standardized regression coefficients, S>E=Standard Error*

It means that a 1% change in shared leadership brings a 36.4% change in team innovation. Hence, results indicate that hypothesis 2 which proposed that shared leadership has a positive relationship with team innovation, has been supported.

4.5.3 Test of Hypothesis 3

H3: Team innovation mediates the relationship between shared leadership and team performance.

Mediation analysis is performed to test the impact of the mediation variable (team innovation) among shared leadership and Project team performance. For mediation analysis, model 4 has been used in SPSS Process macro. The analysis is conducted at 5000 bootstraps and a 95% confidence interval.

4.5.3.1 Total Effect

As shown in Table 4.7, the total effect shows the effect of shared leadership on project team performance in the presence of team innovation. The results show that the total effect of shared leadership on team performance is β=.390**, p<0.005. The bootstrap results showed that ULCI and LLCI results do not contain zero, which indicates the significance of results.

4.5.3.2 Direct Effect

As shown in Table 4.7, the direct effect shows the effect of shared leadership on project team performance. The results show that the total effect of shared leadership on team performance is β=.261**, p<0.005. The bootstrap results

showed that ULCI and LLCI results do not contain zero, which indicates the significance of results.

4.5.3.3 Indirect Effect

As shown in Table 4.7, the indirect effect shows the effect of shared leadership on innovation and the effect of innovation on project team performance.

TABLE 4.7: Standardized Coefficients for Structural Paths

BC 95% CI						
SL->TI->PTP	**Effect**	**SE**	**T**	**P**	**LLCI**	**ULCI**
Total effect	.3908**	0.0587	6.6558	0.000	0.2751	0.5065
Direct effect	.2614**	0.0586	4.4639	0.000	0.1460	0.3768
Bootstrapping Result for Indirect effect	.1294**	0.0423			0.0570	0.2224

****=P<0.001; **=P<0.05; β =standardized regression coefficients, S>E=Standard Error*

The results show that the total effect of shared leadership on team performance is β=.129**, p<0.005. The bootstrap results showed that ULCI and LLCI results do not contain zero, which indicates the significance of results.

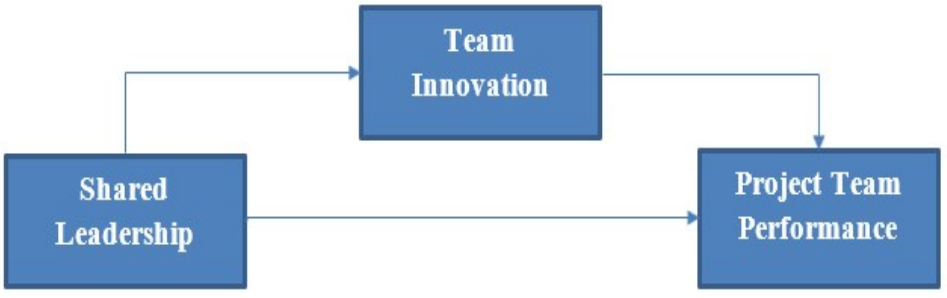

FIGURE 4.4: Mediation Path

Based on total, direct, and indirect effect results it could be concluded that the mediation of team innovation exists in the relationship of shared leadership and team performance. Therefore, Hypothesis 3 is supported.

4.5.4 Test of Hypothesis 4

H4: Task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low.

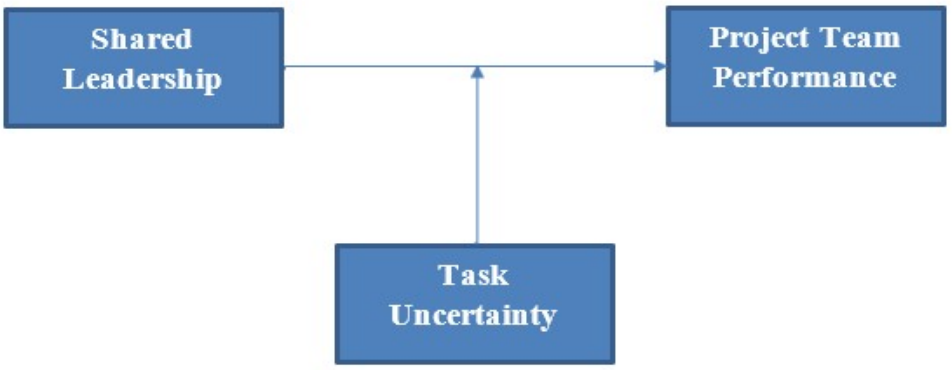

FIGURE 4.5: Moderation Path

To test the moderating effect of task uncertainty in the relationship of shared leadership and team performance, Model 1 of Preacher and Hayes has been conducted using the SPSS process macro. Table 4.8 results showed that the interaction effect is $\beta = 0.4086$, p <0.005, indicating that the task uncertainty moderates the relationship.

TABLE 4.8: Moderation Analysis

Structural Path	Coeff	SE	T	P	LLCI	ULCI
INC(SL*TU)->PTP	0.4086	0.1444	2.8303	0.0051	0.1241	0.6932

****=P<0.001; **=P<0.05; β =standardized regression coefficients, S>E=Standard Error*

The values of ULCI and LLCI are also in the same direction which means significant moderation exists. The results showed that task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low. Hence hypothesis 4 is accepted as shown in the table.

4.6 Summary of Hypothesis

Using AMOS and SPSS software packages data has been processed to examine the hypotheses. The present study model contains 4 hypotheses, predicting the relationship of shared leadership with team performance in the presence of task uncertainty as moderator and team innovation as mediator. The interpretation of results depicts that all the four hypotheses of the present study have been supported.

Hypothesis	**Statements**	**Status**
H1	Shared leadership is positively and significantly related to project team performance.	**Supported**
H2	Shared leadership positively and significantly related to team innovation.	**Supported**
H3	Team innovation mediates the relationship of shared leadership and team performance.	**Supported**
H4	Task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low.	**Supported**

Chapter 5

Discussion, Conclusion, Recommendations and Future Directions

5.1 Discussion

This chapter is divided into three major sections where section 1 discusses the results of the hypothesis, the second section discusses the implications to the theory and practitioners and the last portion discusses the limitations. The key tenacity in this regard was to discuss the gray area of shared leadership which still needs to be discussed and researched in the field of project management. This study focuses on the effect of shared leadership on project team performance with team innovation's mediating role, and task uncertainty's moderating role.

The results supported the first hypothesis which is shared leadership is positively and significantly related to project team performance. By increasing shared leadership in project-based organizations, the probability of projects team performance also rises. Project managers of the project-based organizations should have shared leadership with their subordinates. They should also support members of different departments to collaborate with other team members to generate new information by team innovation.

The results of this research show that project team performance can be obtained by strengthening shared leadership in the organization. This model was explicitly deliberated for the project-based organizations in Pakistan. For the success and effectiveness of the project, the leader is the most iconic symbol of an organization. The leader must have the essential competencies and dispositions to lead the performance of a project toward success. The findings of this study came out to be comparable to the postulated model. Respectively, it was figured out that shared leadership is significantly and positively related to the project team performance.

Similarly, the other postulated relationship counting mediation presented the significant results. This indicates the impact of team innovation between shared leadership and project team performance. As projected, the findings of this research were in accord with the postulated model. Besides, the impact of the moderator was also seen to be significantly linked between the suggested dependent variable and the independent variable. On the whole, the objective of this study was to discover the impact of shared leadership on project team performance with the mediating role of team innovation and the moderating effect of task uncertainty.

Lets discuss each hypothesis in detail. A detailed discussion of the hypothesis is as below:

5.1.1 Shared Leadership and Project Team Performance

H1: Shared leadership is positively and significantly related to project team performance.

The results of this study show that there is a significant relation between shared leadership and project team performance. When the leader will share his power among the subordinate, it will increase the sense of responsibility, team players will be able to think collectively and involve themselves in decision making to provide effective performance.

Although numerous researches have evident the formation of shared leadership, they also have reported exploring the antecedents, consequences, and underlying mechanisms of shared leadership (Q. Wu et al., 2020). In the last two decades,

the trend of adapting shared leadership has been grown, resulting in the enhanced performance of team members. Across the different phases of a project life cycle, different team members are involved in shared leadership and work together under each other supervision (Muethel & Hoegl, 2016).

They also discussed that international firms, previously based on leader centric approach, gain benefit from this collective leadership approach using two aspects namely a greater level of shared leadership among expert team members and shared decision-making power among them. Shared leadership is beneficial as it is difficult for top management to have a deep thoughtful of skills, abilities, and knowledge to lead all facets of work (Pearce & Manz, 2005). As mentioned by Day et al. (2004) shared leadership increases the social capital of teams by allowing better use of the essential resources, information, and prociency of varied team fellows, which resultantly endorses team performance Shared leadership also nurtures a shared distinctiveness among members of the team and improves the level of commitment and involvement with the team, which helps to improves the performance of the team and shows that the shared leadership can support public insertion and contribute to consistency in team, which can consecutively, provides the team effectiveness.

5.1.2 Team Innovation as the Mediator between the Relationship of Shared Leadership and Project Team Performance

H2: Shared leadership positively and significantly related to team innovation.

H3: Team innovation mediates the relationship between shared leadership and team performance.

Results from this research show that team innovation positively and significantly mediates the relationship between shared leadership and project team performance. Shared leadership allows employees to take initiative and perform tasks that possibly will be productive for the team players as well as the organization.

Besides, shared leadership impacts on project team methods and results, initiate a progressive effect of shared leadership over project team performance. The research established that shared leadership is a signicant analyst of team effectiveness, shared incorporation, problem resolving ability, and observed efficiency.

Besides, shared leadership gives rise to greater levels of innovation and initiative between members of the team, their conduct that have been related to team performance. Much of the leading research focuses on crucial management actions and possibilities that promote the bottom-up technique of innovation. Leaders provide essential enthusiasm (Avolio, Bass, & Jung, 1999), help to solve the issues (Tierney, Farmer, & Graen, 1999) make a good team environment (N. R. Anderson & West, 1998), and create a good understanding among the individuals of the team (Olsson et al., 2008; (Scott & Bruce, 1994). They can change the individual and team targets by evaluating the potential of the innovation, for this they can provide awards and encourage them by providing work independence(Hemlin, 2006; Hunter et al., 2007). So, the leaders perform two duties, they help and facilitate the teams and individuals to achieve innovation in their work, on the other hand, they also manage the goals of the organization focused to achieve innovation (Hemlin, 2006).

5.1.3 Task Uncertainty as a Moderator between the Relationship of Shared Leadership and Project Team Performance

H4: Task uncertainty moderates the relationship such as the relationship of shared leadership with performance will be stronger when task uncertainty is low.

This hypothesis also showed the relation of task uncertainty as a moderator between shared leadership and project team performance. Results showed that if a leader distributes his authority among the team members within the leadership standard and rule and provide them a similar environment for work, it influences the proactive behavior of the employees and that eventually leads toward effective project team performance. The literature does not show any research on

task uncertainty as a moderator between shared leadership and project team performance in the project management contexts. For lower task uncertainty rates, workers know in great detail which task methods to use and which results to predict. In other words, they have very full information about the relationships of cause and effect within the task.

On the other hand, with higher levels of task uncertainty, task methods leading to task results can only be described in very general terms and employees do not know exactly what results can be expected; their knowledge of the task concerning the relationships between cause and effect is limited. In other words, they have very complete data on the relationships between cause and effect within the task.

When task uncertainty is minimal, data on the results of a task is expected to be acceptable to intentionally modify effort and/or task strategies, because managers are well aware of the cause and effect relationships in the task; in such cases, employees know precisely the behavioral direction through which a task can be performed. However, this conventional emphasis on task outcomes is unlikely to necessarily provide for the required conditions when it comes to managing employee performance in highly uncertain tasks.

With greater task uncertainty, the emphasis should be transferred to task processes rather than task outcomes. Hirst (1987) was one of the first to suggest that when task uncertainty is high, concentrating on the outcomes with performance management could impede performance due to inadequate knowledge of the task's cause and effect relationships.

5.2 Conclusion

In this study, four variables were deeply studied to check out their significance in the project management, named as, shared leadership as an independent variable, team innovation as a mediator, project team performance as a dependent, and task uncertainty as moderator. The results of the hypothesis show that shared leadership is positively and significantly related to project team performance and

team innovation mediates the relationship of shared leadership and project team performance.

Correspondingly, task uncertainty moderates the relationship among shared leadership and team performance such as the relationship of shared leadership and project team performance will be stronger when task uncertainty is low. Based on the above-discussed results, this study concluded that the performance of project-based teams could be enhanced if shared leadership is promoted within the organizations as shared leadership can make the members feel free to perform their activities and allow the individuals to select their techniques to do them effectively.

Also, when team members are innovative and they share leadership responsibilities then they will put more effort to achieve their targeted goals, which are depicted by their enhanced performance. Moreover, based on results, it could also be concluded that when teams are familiar with the task and less uncertainty exists they can better perform as a team while practicing shared leadership in their organization.

5.3 Recommendations

5.3.1 Theoretical Implications

The current study has many contributions to the project management domain of Shared leadership and project team performance. In the previous literature, Shared leadership has rarely been studied in the project management context, any single individual will rarely possess all the knowledge and skills necessary to direct or carry the entire project team's performance (Pearce & Manz, 2005). Only current research mainly shows a shared leaders impact on project team performance whereas team innovation was a new variable that hasnt studied before in the context of shared leadership and project team performance. The present research confirmed that shared leadership is positively associated with project steam performance. The mediating role of team innovation between shared leadership and project team performance was also conceptualized so it was revealed that innovation partially mediates this relationship. The finding of the current study also

shows that the task uncertainty moderates between shared leadership and project team performance.

5.3.2 Practical Implications

This study is important not only for the leaders, but also for the subordinates, since Pakistan faces a high level of failure to achieve the success of the project team. It is suggested that project managers in different project-based organizations should share leadership with their team members. Managers should also ensure that this shared leadership will not be misused in or out of the organization. This sharing of leadership and innovative behavior of the managers ultimately leads to performance.

Successful implementation of project activities consequently enables the organization to achieve the desired objective of a particular project. Managers can do this by empowering their subordinates by respecting their ideas and efforts. Therefore, employees can identify the impact of their efforts and work on the success of different project team performance. Managers can also empower their employees by training to improve their skills which will enable them to perform their roles more efficiently, effectively, and confidently.

In the context of project management literature, this study will help scholars to understand the underpinning situation that may be effecting project team performance and shared behavior of a leader specifically shows the team innovative attitude that helps teams to be more focused and energized for achieving their goals, where success is combining effort from individual, teams and of a leader. This research opens a new perspective for researchers to assess project team performance with innovating ideas and the possibility of low task uncertainty.

5.4 Limitations

Similar to any other research method, systematic literature reviews are prone to certain limitations (Denyer & Tranfield, 2009). This study aimed to introduce

Shared Leadership into the project management domain by developing a new conceptual model. There are some limitations, which future researchers should be aware of. Firstly, due to time constraints, the data were collected once. Future researchers can use time lag for data collection. Secondly, in this study, there is a small sample size as data were collected from only two cities of Pakistan. The 227 participants might not be considered as a complete representation of the data. This research was only performed in Pakistan, which could raise the problem of cultural impact. Thus, future researchers in other cultures or countries with a large sample size can examine these relationships.

5.5 Future Directions

There are always some gaps because, in the competitive world, work is never a finished thing that provides us with a way for future directions. The current study was carried out to test the effect of shared leadership on project team performance with team innovation as a mediator to create stronger links between them. This study has some future directions as well, which are discussed here. This study has a small sample size of 227 respondents. So, future studies should have a large sample size to see the effectiveness of all variables and hypotheses.

This study has collected data from just two cities. Future studies should conduct this research on project-based organizations with different fields and from different regions. Because shared leadership has very rare research in the field of project management. Future studies should conduct on shared leadership with different mediators and moderators. The current study used a cross-sectional research design. By utilizing other research designs such as longitude, different studies could be conducted in the future.

Bibliography

Akgn, A. E., Byrne, J., Keskin, H., Lynn, G. S., & Imamoglu, S. Z. (2005). Knowledge networks in new product development projects: A transactive memory perspective. *Information & management*, 42(8), 1105-1120.

Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167.

Amabile, T. M. (1996). Creativity and innovation in organizations.

Amabile, T. M. (2012). Componential theory of creativity. *Harvard Business School*, 12(96), 1-10.

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.

Anderson, N., & West, M. A. (1994). *Team climate inventory: Manual and user's guide.*

Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: development and validation of the team climate inventory. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 19(3), 235-258.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human relations*, 46(6), 681-703.

Artto, K., Kulvik, I., Poskela, J., & Turkulainen, V. (2011). The integrative role of the project management office in the front end of innovation. *International Journal of Project Management*, 29(4), 408-421.

Ashley, S. (1992). US quality improves but Japan still leads. *Mechanical Engineering-CIME*, 114(12), 24-26.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Reexamining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of Occupational and Organizational Psychology*, 72(4), 441-462.

Avolio, B. J., Jung, D. I., Murry, W., & Sivasbramaniam, N. (1996). Building highly developed teams: Focusing on shared leadership process, efficacy, trust, and performance.

Babalola, M. T., Stouten, J., Euwema, M. C., & Ovadje, F. (2018). The relation between ethical leadership and workplace conflicts: The mediating role of employee resolution efficacy. *Journal of management*, 44(5), 2037-2063.

Bain, P. G., Mann, L., & Pirola-Merlo, A. (2001). The innovation imperative: The relationships between team climate, innovation, and performance in research and development teams. *Small group research*, 32(1), 55-73.

Balkin, D. B., Tremblay, M., & Westerman, J. (2001). Workplace innovations in large, unionized Canadian organizations. *Journal of Business and Psychology*, 15(3), 439-448.

Balogun, J., & Johnson, G. (2004). Organizational restructuring and middle manager sensemaking. *Academy of management journal*, 47(4), 523-549.

Bandura, A., & Walters, R. H. (1977). Social learning theory (Vol. 1): Prentice-hall Englewood Cliffs, NJ.

Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of management*, 36(1), 256-280.

Barrick, M. R., Stewart, G. L., Neubert, M. J., & Mount, M. K. (1998). Relating member ability and personality to work-team processes and team effectiveness. *Journal of Applied Psychology*, 83(3), 377.

Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64-76.

Bass, B. M., & Riggio, R. E. (2006). Transformational leadership: Psychology press.

Bass, B. M., & Stogdill, R. M. (1990). Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications: Simon and Schuster.

Bergman, J. Z., Rentsch, J. R., Small, E. E., Davenport, S. W., & Bergman, S. M. (2012). The shared leadership process in decision-making teams. *The Journal of social psychology*, 152(1), 17-42.

Bilton, C., & Cummings, S. (2009). Creative strategy: From innovation to sustainable advantage: John Wiley & Sons.

Bjorvatn, T., & Wald, A. (2018). Project complexity and team-level absorptive capacity as drivers of project management performance. *International Journal of Project Management*, 36(6), 876-888.

Bouncken, R., Brem, A., & Kraus, S. (2016). Multi-cultural teams as sources for creativity and innovation: The role of cultural diversity on team performance. *International Journal of Innovation Management*, 20(01), 1650012.

Boyd, J. L., & Bresser, R. K. (2008). Performance implications of delayed competitive responses: Evidence from the US retail industry. *Strategic management journal*, 29(10), 1077-1096.

Brockner, J., & Higgins, E. T. (2001). Regulatory focus theory: Implications for the study of emotions at work. *Organizational behavior and human decision processes*, 86(1), 35-66.

Brodbeck, F. C., Kerschreiter, R., Mojzisch, A., & Schulz-Hardt, S. (2007). Group decision making under conditions of distributed knowledge: The information asymmetries model. *Academy of Management Review*, 32(2), 459-479.

Bryde, D. J. (2005). Methods for managing different perspectives of project success. British Journal of Management, 16(2), 119-131. Burke, C. S., Stagl, K. C., Salas, E., Pierce, L., & Kendall, D. (2006). Understanding team adaptation: A conceptual analysis and model. *Journal of Applied Psychology*, 91(6), 1189.

Burke, C. S., Fiore, S. M., & Salas, E. (2003). The role of shared cognition in enabling shared leadership and team adaptability. Shared leadership: Reframing the hows and whys of leadership, 103.

Burke, C. S., Stagl, K. C., Salas, E., Pierce, L., & Kendall, D. (2006). Understanding team adaptation: A conceptual analysis and model. *Journal of Applied Psychology*, 91(6), 1189.

Burpitt, W. J., & Bigoness, W. J. (1997). Leadership and innovation among teams: The impact of empowerment. *Small group research*, 28(3), 414-423.

Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial marketing management*, 31(6), 515-524.

Campion, M. A., Medsker, G. J., & Higgs, A. C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology*, 46(4), 823-847.

Carmeli, A., & Schaubroeck, J. (2007). The influence of leaders' and other referents' normative expectations on individual involvement in creative work. *The leadership quarterly*, 18(1), 35-48.

Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of management journal*, 50(5), 1217-1234.

Chen, M.-J. (2010). Reflecting on the process: Building competitive dynamics research. *Asia Pacific Journal of Management*, 27(1), 9-24.

Chiu, C.-Y. C., Owens, B. P., & Tesluk, P. E. (2016). Initiating and utilizing shared leadership in teams: The role of leader humility, team proactive personality, and team performance capability. *Journal of Applied Psychology*, 101(12), 1705.

Choi, J. N., & Chang, J. Y. (2009). Innovation implementation in the public sector: An integration of institutional and collective dynamics. *Journal of Applied Psychology*, 94(1), 245.

Christensen, C. M., & Bower, J. L. (1996). Customer power, strategic investment, and the failure of leading firms. *Strategic management journal*, 17(3), 197-218.

Clifton, N., Keast, R., Pickernell, D., & Senior, M. (2010). Network structure, knowledge governance, and firm performance: Evidence from innovation networks and SMEs in the UK. *Growth and Change*, 41(3), 337-373.

Comstock, D. E., & Scott, W. R. (1977). Technology and the structure of subunits: Distinguishing individual and workgroup effects. *Administrative science quarterly*, 177-202.

Crossan, M. M., & Apaydin, M. (2010). A multidimensional framework of organizational innovation: A systematic review of the literature. *Journal of management studies*, 47(6), 1154-1191.

Crowe, E., & Higgins, E. T. (1997). Regulatory focus and strategic inclinations: Promotion and prevention in decision-making. *Organizational behavior and human decision processes*, 69(2), 117-132.

Currie, G., & Lockett, A. (2011). Distributing leadership in health and social care: concertive, conjoint or collective? *International Journal of Management Reviews*, 13(3), 286-300.

Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management science*, 32(5), 554-571.

Dahlin, K. B., Weingart, L. R., & Hinds, P. J. (2005). Team diversity and information use. *Academy of management journal*, 48(6), 1107-1123.

Danneels, E. (2002). The dynamics of product innovation and firm competences. *Strategic management journal*, 23(12), 1095-1121.

Danneels, E. (2008). Organizational antecedents of secondorder competences. *Strategic management journal*, 29(5), 519-543.

De Dreu, C. K., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, 86(6), 1191.

Denis, J.-L., Langley, A., & Sergi, V. (2012). Leadership in the plural. *Academy of Management Annals*, 6(1), 211-283.

Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of knowledge management.*

Day, D. V., Gronn, P., & Salas, E. (2004). Leadership capacity in teams. *The leadership quarterly*, 15(6), 857-880.

Denyer, D., & Tranfield, D. (2009). Producing a systematic review.

DeRue, D. S. (2011). Adaptive leadership theory: Leading and following as a complex adaptive process. *Research in organizational behavior*, 31, 125-150.

DeRue, D. S., & Ashford, S. J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, 35(4), 627-647.

Dving, E., & Gooderham, P. N. (2008). Dynamic capabilities as antecedents of the scope of related diversification: the case of small firm accountancy practices. *Strategic management journal*, 29(8), 841-857.

Downs, A. (1967). Inside Bureaucracy Boston. *MA: Little Brown.*

Drazin, R., Glynn, M. A., & Kazanjian, R. K. (1999). Multilevel theorizing about creativity in organizations: A sensemaking perspective. *Academy of Management Review*, 24(2), 286-307.

Duimering, P. R., Ran, B., Derbentseva, N., & Poile, C. (2006). The effects of ambiguity on project task structure in new product development. *Knowledge and Process Management*, 13(4), 239-251.

Dumaine, B. (1994). The trouble with teams. Fortune, 130(5), 86.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative science quarterly*, 44(2), 350-383.

Egginton, B. (2012). Realising the benefits of investment in project management training: Evidence supporting the need for a more strategic approach. *International Journal of Managing Projects in Business*, 5(3), 508-527.

Eisenbeiss, S. A., Van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: Integrating team climate principles. *Journal of Applied Psychology*, 93(6), 1438.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic management journal*, 21(1011), 1105-1121.

Ensley, M. D., Hmieleski, K. M., & Pearce, C. L. (2006). The importance of vertical and shared leadership within new venture top management teams: Implications for the performance of startups. *The leadership quarterly*, 17(3), 217-231.

Ensley, M. D., Pearson, A., & Pearce, C. L. (2003). Top management team process, shared leadership, and new venture performance: A theoretical model and research agenda. *Human resource management review*, 13(2), 329-346.

Evan, W. M. (1976). Organization theory and organizational effectiveness: An exploratory analysis. *Organization and Administrative Sciences*, 7(1), 15-28.

Ferrier, W. J., Smith, K. G., & Grimm, C. M. (1999). The role of competitive action in market share erosion and industry dethronement: A study of industry leaders and challengers. *Academy of management journal*, 42(4), 372-388.

Fleishman, E. A., Mumford, M. D., Zaccaro, S. J., Levin, K. Y., Korotkin, A. L., & Hein, M. B. (1991). Taxonomic efforts in the description of leader behavior: A synthesis and functional interpretation. *The leadership quarterly*, 2(4), 245-287.

Fletcher, J. K., & Kaufer, K. (2003). Shared leadership. Shared leadership: Reframing the hows and whys of leadership, 21-47.

Follett, M. (1924). (1951). Creative experience. New York: Peter Smith.

Fong, P. S. (2003). Knowledge creation in multidisciplinary project teams: an empirical study of the processes and their dynamic interrelationships. *International Journal of Project Management*, 21(7), 479-486.

Fry, L. W., & Slocum Jr, J. W. (1984). Technology, structure, and workgroup effectiveness: A test of a contingency model. *Academy of management journal*, 27(2), 221-246.

Fuchs, L., Geyer, W., Richter, H., Poltrock, S., Frauenhofer, T., & Daijavad, S. (2001). Enabling inter-company team collaboration. Paper presented at the Proceedings Tenth IEEE International Workshop on Enabling Technologies: Infrastructure for Collaborative Enterprises. WET ICE 2001.

Galbraith, J. R. (1973). Designing complex organizations: Addison-Wesley Longman Publishing Co., Inc.

Gann, D. M., & Salter, A. (1998). Learning and innovation management in project-based, service-enhanced firms. *International Journal of Innovation Management*, 2(04), 431-454.

Gann, D. M., & Salter, A. J. (2000). Innovation in project-based, service-enhanced firms: the construction of complex products and systems. *Research policy*, 29(7-8), 955-972.

Gemnden, H. G., Lehner, P., & Kock, A. (2018). The project-oriented organization and its contribution to innovation. *International Journal of Project Management*, 36(1), 147-160.

Gopalakrishnan, S., & Bierly, P. (2001). Analyzing innovation adoption using a knowledge-based approach. *Journal of Engineering and Technology management*, 18(2), 107-130.

Gibb, C. A., Lindzey, G., & Aronson, E. (1954). Handbook of social psychology. Cambridge, MA: Addison Wesley. Goldring, L.(2002). The power of school culture. *Leadership*, 32(2), 32-35.

Goldsmith, M. (2010). Sharing leadership to maximize talent. *Harvard business review.*

Gopalakrishnan, S., & Bierly, P. (2001). Analyzing innovation adoption using a knowledge-based approach. *Journal of Engineering and Technology management*, 18(2), 107-130.

Gravina, N., Villacorta, J., Albert, K., Clark, R., Curry, S., & Wilder, D. (2018). A literature review of organizational behavior management interventions in human service settings from 1990 to 2016. *Journal of Organizational Behavior Management*, 38(2-3), 191-224.

Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2), 327-347.

Grille, A., & Kauffeld, S. (2015). Development and preliminary validation of the shared professional leadership inventory for teams (SPLIT). *Psychology*, 6(01), 75.

Gu, Q., Wang, G. G., & Wang, L. (2013). Social capital and innovation in R&D teams: the mediating roles of psychological safety and learning from mistakes. *R&d Management*, 43(2), 89-102.

Gupta, V. K., Huang, R., & Niranjan, S. (2010). A longitudinal examination of the relationship between team leadership and performance. *Journal of Leadership & Organizational Studies*, 17(4), 335-350.

Guttman, H. M. (2004). The leader's role in managing conflict. *Leader to Leader*, 2004(31), 48-53.

Guzzo, R. A., & Dickson, M. W. (1996). Teams in organizations: Recent research on performance and effectiveness. *Annual review of psychology*, 47(1), 307-338.

Hackman, J. R. (1990). Groups that work and those that don't: Jossey-Bass.

Hackman, J. R., Walton, R. E., & Goodman, P. (1986). Leading groups in organizations. Designing effective work groups.

Han, S. J., Lee, Y., Beyerlein, M., & Kolb, J. (2018). Shared leadership in teams. *Team Performance Management: An International Journal.*

Harborne, P., & Johne, A. (2003). Creating a project climate for successful product innovation. *European Journal of innovation management.*

Harris, E., & Woolley, R. (2009). Facilitating innovation through cognitive mapping of uncertainty. *International Studies of Management & Organization*, 39(1), 70-100.

Hartmann, F. (2005). The effects of tolerance for ambiguity and uncertainty on the appropriateness of accounting performance measures. *Abacus*, 41(3), 241-264.

Hartmann, F., & Slapniar, S. (2012). The perceived fairness of performance evaluation: The role of uncertainty. *Management Accounting Research*, 23(1), 17-33.

Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2009). Dynamic capabilities: Understanding strategic change in organizations: John Wiley & Sons.

Hemlin, S. (2006). Managing Creativity in Academic Research. *Science Studies*, 19(1).

Higgins, E. T. (1997). Beyond pleasure and pain. American psychologist, 52(12), 1280.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in experimental social psychology*, 30, 1-46.

Hillson, D. (2002). Extending the risk process to manage opportunities. *International Journal of Project Management*, 20(3), 235-240.

Hirst, M. K. (1987). The effects of setting budget goals and task uncertainty on performance: A theoretical analysis. *Accounting Review*, 774-784.

Hoch, J. E. (2013). Shared leadership and innovation: The role of vertical leadership and employee integrity. *Journal of Business and Psychology*, 28(2), 159-174.

Hoch, J. E., & Dulebohn, J. H. (2013). Shared leadership in enterprise resource planning and human resource management system implementation. *Human resource management review*, 23(1), 114-125.

Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, 99(3), 390.

Hoegl, M., & Muethel, M. (2007). Shared leadership in dispersed innovation teams: Mutual influence and proactive followership. Paper presented at the Academy of management proceedings.

Hoegl, M., Weinkauf, K., & Gemuenden, H. G. (2004). Interteam coordination, project commitment, and teamwork in multiteam R&D projects: A longitudinal study. *Organization science*, 15(1), 38-55.

Holm, F., & Fairhurst, G. T. (2018). Configuring shared and hierarchical leadership through authoring. *Human relations*, 71(5), 692-721.

Houghton, J. D., Neck, C. P., & Manz, C. C. (2003). Self-leadership and superleadership. Shared leadership: Reframing the hows and whys of leadership, 123-140.

House, R., & Rousseau, D. (1992). If it aint meso, it aint OB. Paper presented at the 3rd Annual Meso Conference, Northwestern University, Evanston, IL.

Howell, J. M., & Hall-Merenda, K. E. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84(5), 680.

Hsueh, L.-m., & Tu, Y.-y. (2004). Innovation and the operational performance of newly established small and medium enterprises in Taiwan. *Small Business Economics*, 23(2), 99-113.

Hubbard, G. (2009). Measuring organizational performance: beyond the triple bottom line. *Business strategy and the environment*, 18(3), 177-191.

Hui-ying, M., & Jian-peng, W. (2013). The impact of shared leadership on innovation performance. Paper presented at the 2013 International Conference on Management Science and Engineering 20th Annual Conference Proceedings.

Hlsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: a comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology*, 94(5), 1128.

Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity Research Journal*, 19(1), 69-90.

Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of marketing*, 62(3), 42-54.

Ishikawa, J. (2012). Transformational leadership and gatekeeping leadership: The roles of norm for maintaining consensus and shared leadership in team performance. *Asia Pacific Journal of Management*, 29(2), 265-283.

Janssen, O., Van de Vliert, E., & West, M. (2004). The bright and dark sides of individual and group innovation: A special issue introduction. *Journal of Organizational Behavior*, 25(2), 129-145.

Jayaram, J., Droge, C., & Vickery, S. K. (1999). The impact of human resource management practices on manufacturing performance. *Journal of Operations Management*, 18(1), 1-20.

Jun, L., Qiuzhen, W., & Qingguo, M. (2011). The effects of project uncertainty and risk management on IS development project performance: A vendor perspective. *International Journal of Project Management*, 29(7), 923-933.

Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The leadership quarterly*, 14(4-5), 525-544.

Kale, P., & Singh, H. (2007). Building firm capabilities through learning: the role of the alliance learning process in alliance capability and firmlevel alliance success. *Strategic management journal*, 28(10), 981-1000.

Kanter, R. M. (1983). The change masters: Innovation for productivity in the American corporation: ERIC.

Kark, R., & Van Dijk, D. (2007). Motivation to lead, motivation to follow: The role of the self-regulatory focus in leadership processes. *Academy of Management Review*, 32(2), 500-528.

Katz, D., & Kahn, R. L. (1978). The social psychology of organizations (Vol. 2): Wiley New York.

Kellogg, K. C., Orlikowski, W. J., & Yates, J. (2006). Life in the trading zone: Structuring coordination across boundaries in postbureaucratic organizations. *Organization science*, 17(1), 22-44.

Kim, Y., Min, B., & Cha, J. (1999). The roles of R&D team leaders in Korea: a contingent approach. *R&d Management*, 29(2), 153-166.

Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection, and analysis. *Academy of Management Review*, 19(2), 195-229.

Klein, K. J., Ziegert, J. C., Knight, A. P., & Xiao, Y. (2006). Dynamic delegation: Shared, hierarchical, and deindividualized leadership in extreme action teams. *Administrative science quarterly*, 51(4), 590-621.

Korhonen, T., Laine, T., & Martinsuo, M. (2014). Management control of project portfolio uncertainty: A managerial role perspective. *Project management journal*, 45(1), 21-37.

Kouzes, J. M., & Posner, B. Z. (2009). To lead, create a shared vision. *Harvard business review*, 87(1), 20-21.

Lai, C.-Y., & Hsu, J. S.-C. (2013). Leadership, regulatory focus and project performance. Paper presented at the 8th Pre-ICIS International Research Workshop on Information Technology Project Management (IRWITPM 2013).

Lai, C.-Y., Hsu, J. S.-C., & Li, Y. (2018). Leadership, regulatory focus and information systems development project team performance. *International Journal of Project Management*, 36(3), 566-582.

Lam, C. K., Huang, X., & Chan, S. C. (2015). The threshold effect of participative leadership and the role of leader information sharing. *Academy of management journal*, 58(3), 836-855.

Lau, D. C., & Liden, R. C. (2008). Antecedents of coworker trust: Leaders' blessings. *Journal of Applied Psychology*, 93(5), 1130.

Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: a dynamic capabilities approach. *International Journal of Innovation Management*, 5(03), 377-400.

Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management learning*, 41(4), 473-491.

Levine, J., & Moreland, R. (1998). Small groups. In, DT Gilbert, ST Fiske, & 0. Lindzey (Eds), The handbook of social psychology. Volume II (4 Ed.)(pp. 415-469). In: New York. NY: McGraw-Hill.

Lin, J., & Yan, X. (2011). Research on relationship between shared leadership and knowledge sharing in teams: Based on the view of transaction memory system [J]. *Science and Technology Management Research*, 10(1), 133-137.

Liberman, N., Molden, D. C., Idson, L. C., & Higgins, E. T. (2001). Promotion and prevention focus on alternative hypotheses: implications for attributional functions. *Journal of personality and social psychology*, 80(1), 5.

Liu, P., & Wei, Y. (2009). Team potency moderates the relationship between shared leadership and team performance. Paper presented at the International Conference on Business and Information (BAI), Kuala Lumpur, Malaysia.

Liu, S., Hu, J., Li, Y., Wang, Z., & Lin, X. (2014). Examining the cross-level relationship between shared leadership and learning in teams: Evidence from China. *The leadership quarterly*, 25(2), 282-295.

Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: regulatory focus determines who will best inspire us. *Journal of personality and social psychology*, 83(4), 854.

Lord, R. G., Day, D. V., Zaccaro, S. J., Avolio, B. J., & Eagly, A. H. (2017). Leadership in applied psychology: Three waves of theory and research. *Journal of Applied Psychology*, 102(3), 434.

MacCrimmon, K. R., & Taylor, R. N. (1976). Decision making and problem solving. *Handbook of industrial and organizational psychology*, 1(976), 1397-1463.

Madsen, S., & Pries-Heje, J. (2009). Taking a closer look at uncertainty in IS projects. *AMCIS 2009 Proceedings*, 119.

Mehra, A., Smith, B. R., Dixon, A. L., & Robertson, B. (2006). Distributed leadership in teams: The network of leadership perceptions and team performance. *The leadership quarterly*, 17(3), 232-245.

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *Academy of Management Review*, 26(3), 356-376.

McIntyre, R. M., & Salas, E. (1995). Measuring and managing for team performance: Emerging principles from complex environments. *Team effectiveness and decision making in organizations*, 16, 9-45.

Memmert, D., Plessner, H., Httermann, S., Froese, G., Peterhnsel, C., & Unkelbach, C. (2015). Collective fit increases team performances: Extending regulatory fit from individuals to dyadic teams. *Journal of Applied Social Psychology*, 45(5), 274-281.

Meredith, J., & Mantel Jr, S. (2010). Project Management: A managerial approach (7 utg.). Hoboken, New Jersey: John Wiley & Sons, Inc.

Merry, M. (1994). Shared leadership in health care organizations. *Topics in health care financing*, 20(4), 26.

Miles, R. H. (1980). Macro organizational behavior. Santa Monica. *Cal.: Goodyear Publishing*.

Miller, D., & CHEN, M. J. (1996). The simplicity of competitive repertoires: An empirical analysis. *Strategic management journal*, 17(6), 419-439.

Mohr, L. B. (1971). Organizational technology and organizational structure. *Administrative science quarterly*, 444-459.

Morgeson, F. P., DeRue, D. S., & Karam, E. P. (2010). Leadership in teams: A functional approach to understanding leadership structures and processes. *Journal of management*, 36(1), 5-39.

Morgeson, F. P., & Hofmann, D. A. (1999). The structure and function of collective constructs: Implications for multilevel research and theory development. *Academy of Management Review*, 24(2), 249-265.

Muethel, M., & Hoegl, M. (2013). Shared leadership effectiveness in independent professional teams. *European Management Journal*, 31(4), 423-432.

Muethel, M., & Hoegl, M. (2016). Expertise coordination over distance: Shared leadership in dispersed new product development teams. In Leadership lessons from compelling contexts: Emerald Group Publishing Limited.

Munns, A. K., & Bjeirmi, B. F. (1996). The role of project management in achieving project success. *International Journal of Project Management*, 14(2), 81-87.

Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological bulletin*, 103(1), 27.

Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring performance in entrepreneurship research. *Journal of business research*, 36(1), 15-23.

Navarro Cid, J., Quijano de Arana, S. D. d., Berger, R., & Meneses, R. (2011). Grupos en las organizaciones: herramienta bsica para gestionar la incertidumbre y ambigedad crecientes. *Papeles del Psiclogo*, 2011, vol. 32, num. 1, p. 17-28.

Neck, C. P., Bligh, M. C., Pearce, C. L., & Kohles, J. C. (2006). The importance of selfand shared leadership in team based knowledge work. *Journal of managerial Psychology*.

Nidumolu, S. (1995). The effect of coordination and uncertainty on software project performance: residual performance risk as an intervening variable. *Information systems research*, 6(3), 191-219.

Nidumolu, S. R. (1996). Standardization, requirements uncertainty and software project performance. *Information & management*, 31(3), 135-150.

Nijstad, B. A., Berger-Selman, F., & De Dreu, C. K. (2014). Innovation in top management teams: Minority dissent, transformational leadership, and radical innovations. *European journal of work and organizational psychology*, 23(2), 310-322.

Nygren, R., & Levine, E. L. (1996). Leadership of work teams: Factors influencing team outcomes: Elsevier Science/JAI Press.

O'Leary-Kelly, A. M., Martocchio, J. J., & Frink, D. D. (1994). A review of the influence of group goals on group performance. *Academy of management journal*, 37(5), 1285-1301.

Ospina, S. M. (2017). Collective leadership and context in public administration: Bridging public leadership research and leadership studies. *Public Administration Review*, 77(2), 275-287.

Paiva, E. L., Roth, A. V., & Fensterseifer, J. E. (2008). Organizational knowledge and the manufacturing strategy process: a resource-based view analysis. *Journal of Operations Management*, 26(1), 115-132.

Parasuraman, A. (2010). Service productivity, quality and innovation. *International Journal of Quality and Service Sciences*.

Pearce, C. L. (2004). The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Perspectives*, 18(1), 47-57.

Pearce, C. L., & Conger, J. A. (2003). All those years ago. Shared leadership: Reframing the hows and whys of leadership, 1-18.

Pearce, C. L., Conger, J. A., & Locke, E. A. (2007). Shared leadership theory. *The leadership quarterly*, 18(3), 281-288.

Pearce, C. L., Conger, J. A., & Locke, E. A. (2008). Shared leadership theory. *The leadership quarterly*, 19(5), 622-628.

Pearce, C. L., & Manz, C. C. (2005). The new silver bullets of leadership: The importance of self-and shared leadership in knowledge work.

Pearce, C. L., & Sims Jr, H. P. (2002). Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors. *Group dynamics: Theory, research, and practice*, 6(2), 172.

Pearce III, J. A., & Ravlin, E. C. (1987). The design and activation of self-regulating work groups. *Human relations*, 40(11), 751-782.

Perminova, O., Gustafsson, M., & Wikstrm, K. (2008). Defining uncertainty in projectsa new perspective. *International Journal of Project Management*, 26(1), 73-79.

Perry, M. L., Pearce, C. L., & Sims Jr, H. P. (1999). Empowered selling teams: How shared leadership can contribute to selling team outcomes. *Journal of Personal Selling & Sales Management*, 19(3), 35-51.

Price, M. S., & Weiss, M. R. (2013). Relationships among coach leadership, peer leadership, and adolescent athletes psychosocial and team outcomes: A test of transformational leadership theory. *Journal of applied sport psychology*, 25(2), 265-279.

Sadikoglu, E., & Zehir, C. (2010). Investigating the effects of innovation and employee performance on the relationship between total quality management practices and firm performance: An empirical study of Turkish firms. *International journal of production economics*, 127(1), 13-26.

Sanderson, J. (2012). Risk, uncertainty and governance in megaprojects: A critical discussion of alternative explanations. *International Journal of Project Management*, 30(4), 432-443.

Schoonhoven, C. B. (1981). Problems with contingency theory: testing assumptions hidden within the language of contingency" theory". *Administrative science quarterly*, 349-377.

Schoper, Y.-G., Wald, A., Ingason, H. T., & Fridgeirsson, T. V. (2018). Projectification in Western economies: A comparative study of Germany, Norway and Iceland. *International Journal of Project Management*, 36(1), 71-82.

Scott-Young, C. M., Georgy, M., & Grisinger, A. (2019). Shared leadership in project teams: An integrative multi-level conceptual model and research agenda. *International Journal of Project Management*, 37(4), 565-581.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*, 37(3), 580-607.

Seers, A., Keller, T., & Wilkerson, J. M. (2003). Can team members share leadership. Shared leadership: Reframing the hows and whys of leadership, 77-102.

Seers, A., Petty, M., & Cashman, J. F. (1995). Team-member exchange under team and traditional management: A naturally occurring quasi-experiment. *Group & Organization Management*, 20(1), 18-38.

Shah, J., Higgins, T., & Friedman, R. S. (1998). Performance incentives and means: how regulatory focus influences goal attainment. *Journal of personality and social psychology*, 74(2), 285.

Shaw, J. D., Zhu, J., Duffy, M. K., Scott, K. L., Shih, H.-A., & Susanto, E. (2011). A contingency model of conflict and team effectiveness. *Journal of Applied Psychology*, 96(2), 391.

Singh, A., & Jampel, G. (2010). Leadership flexibility space. *Journal of Management in Engineering*, 26(4), 176-188.

Sivasubramaniam, N., Murry, W. D., Avolio, B. J., & Jung, D. I. (2002). A longitudinal model of the effects of team leadership and group potency on group performance. *Group & Organization Management*, 27(1), 66-96.

Slater, S. F., Mohr, J. J., & Sengupta, S. (2014). Radical product innovation capability: Literature review, synthesis, and illustrative research propositions. *Journal of Product Innovation Management*, 31(3), 552-566.

Sohn, S., Joo, Y. G., & Han, H. K. (2007). Structural equation model for the evaluation of national funding on R&D project of SMEs in consideration with MBNQA criteria. *Evaluation and program planning*, 30(1), 10-20.

Solansky, S. T. (2008). Leadership style and team processes in self-managed teams. *Journal of Leadership & Organizational Studies*, 14(4), 332-341.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering leadership in management teams: Effects on knowledge sharing, efficacy, and performance. *Academy of management journal*, 49(6), 1239-1251.

Stinson, J. B. (2001). The effect of task uncertainty on performance in a goal setting environment.

Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of management journal*, 48(3), 450-463.

Sue-Chan, C., Wood, R. E., & Latham, G. P. (2012). Effect of a coachs regulatory focus and an individuals implicit person theory on individual performance. *Journal of management*, 38(3), 809-835.

Stasser, G., Stewart, D. D., & Wittenbaum, G. M. (1995). Expert roles and information exchange during discussion: The importance of knowing who knows what. *Journal of Experimental Social Psychology*, 31(3), 244-265.

Stasser, G., & Titus, W. (1985). Pooling of unshared information in group decision making: Biased information sampling during discussion. *Journal of personality and social psychology*, 48(6), 1467.

Steiner, I. D. (1972). Group process and productivity: Academic press New York.

Stinson, J. B. (2001). The effect of task uncertainty on performance in a goal setting environment.

Sue-Chan, C., Wood, R. E., & Latham, G. P. (2012). Effect of a coachs regulatory focus and an individuals implicit person theory on individual performance. *Journal of management*, 38(3), 809-835.

Sweeney, A., Clarke, N., & Higgs, M. (2019). Shared leadership in commercial organizations: A systematic review of definitions, theoretical frameworks and organizational outcomes. *International Journal of Management Reviews*, 21(1), 115-136.

Taggar, S., Hackew, R., & Saha, S. (1999). Leadership emergence in autonomous work teams: Antecedents and outcomes. *Personnel Psychology*, 52(4), 899-926.

Tallon, P. P., Queiroz, M., Coltman, T., & Sharma, R. (2019). Information technology and the search for organizational agility: A systematic review with future research possibilities. *The Journal of Strategic Information Systems*, 28(2), 218-237.

Tannenbaum, S. I., Salas, E., & Cannon-Bowers, J. A. (1996). Promoting team effectiveness. *Handbook of work group psychology*, 503-529.

Tatikonda, M. V., & Rosenthal, S. R. (2000). Technology novelty, project complexity, and product development project execution success: a deeper look at task uncertainty in product innovation. *IEEE Transactions on engineering management*, 47(1), 74-87.

Teece, D. J. (1986). Profiting from technological innovation: Implications for integration, collaboration, licensing and public policy. *The Transfer and Licensing of Know-How and Intellectual Property: Understanding the Multinational Enterprise in the Modern World*, 15, 67-88.

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.

Tesluk, P. E., & Mathieu, J. E. (1999). Overcoming roadblocks to effectiveness: Incorporating management of performance barriers into models of work group effectiveness. *Journal of Applied Psychology*, 84(2), 200.

Tian, M., Risku, M., & Collin, K. (2016). A meta-analysis of distributed leadership from 2002 to 2013: Theory development, empirical evidence and future research focus. *Educational Management Administration & Leadership*, 44(1), 146-164.

Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel Psychology*, 52(3), 591-620.

Trevio, L. K., Brown, M., & Hartman, L. P. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human relations*, 56(1), 5-37.

Tushman, M. L., & Nadler, D. A. (1978). Information processing as an integrating concept in organizational design. *Academy of Management Review*, 3(3), 613-624.

Urbancova, H. (2013). Competitive advantage achievement through innovation and knowledge. *Journal of competitiveness*, 5(1).

Van de Ven, A. H., Delbecq, A. L., & Koenig Jr, R. (1976). Determinants of coordination modes within organizations. *American sociological review*, 322-338.

Van Dijk, D., Kark, R., Matta, F., & Johnson, R. E. (2020). Collective aspirations: collective regulatory focus as a mediator between transformational and transactional leadership and team creativity. *Journal of Business and Psychology*.

Wall, T. D., Cordery, J. L., & Clegg, C. W. (2002). Empowerment, performance, and operational uncertainty: A theoretical integration. *Applied Psychology*, 51(1), 146-169.

Wallace, L., Keil, M., & Rai, A. (2004). How software project risk affects project performance: An investigation of the dimensions of risk and an exploratory model. *Decision sciences*, 35(2), 289-321.

Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, 99(2), 181.

West, M. (1996). Reflexivity and work group effectiveness: A conceptual integration: John Wiley & Sons, Ltd.

West, M. A. (1990). The social psychology of innovation in groups.

West, M. A. (2002). Sparkling fountains or stagnant ponds: An integrative model of creativity and innovation implementation in work groups. *Applied Psychology*, 51(3), 355-387.

West, M. A., & Anderson, N. R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, 81(6), 680.

West, M. A., & Farr, J. L. (1989). Innovation at work: Psychological perspectives. *Social behaviour*.

West, M. A., & Farr, J. L. (1990). Innovation and creativity at work: Psycological and organizational strategies: John Wiley.

Williams, D. R., & Sternthal, M. (2010). Understanding racial-ethnic disparities in health: sociological contributions. *Journal of health and social behavior*, 51(1_suppl), S15-S27.

Withey, M., Daft, R. L., & Cooper, W. H. (1983). Measures of Perrow's work unit technology: An empirical assessment and a new scale. *Academy of management journal*, 26(1), 45-63.

Wolff, J. A., & Pett, T. L. (2006). Smallfirm performance: modeling the role of product and process improvements. *Journal of Small Business Management*, 44(2), 268-284.

Wu, C.-M., & Chen, T.-J. (2018). Collective psychological capital: Linking shared leadership, organizational commitment, and creativity. *International Journal of Hospitality Management*, 74, 75-84.

Wu, Q., & Cormican, K. (2016). Shared leadership and team creativity: A social network analysis in engineering design teams. *Journal of technology management & innovation*, 11(2), 2-12.

Wu, Q., Cormican, K., & Chen, G. (2020). A meta-analysis of shared leadership: Antecedents, consequences, and moderators. *Journal of Leadership & Organizational Studies*, 27(1), 49-64.

Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of management*, 15(2), 251-289.

Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The leadership quarterly*, 12(4), 451-483.

Zhu, J., Liao, Z., Yam, K. C., & Johnson, R. E. (2018). Shared leadership: A stateoftheart review and future research agenda. *Journal of Organizational Behavior*, 39(7), 834-852.

Zott, C. (2003). Dynamic capabilities and the emergence of intraindustry differential firm performance: insights from a simulation study. *Strategic management journal*, 24(2), 97-125.

Appendix A

Research Questionnaire

Section-1: Demographics/Respondents Profile

	1	2				
Gender	**Male**	**Female**				
	1	2	3	4	5	
Age	**18-25**	**26-33**	**34-41**	**42-49**	**50 & above**	
	1	2	3	4	5	6
Qualification	**matric**	**Inter**	**Bachelor**	**Masters**	**MS/M.Phil.**	**PhD**
	1	2	3	4	5	6
Experience	**0-5**	**06-10**	**10-16**	**17-22**	**23-28**	**29 &above**

Please indicate your response by circling the number that best describes how you feel about the statement:

Strongly Disagree	**Disagree**	**Uncertainty**	**Agree**	**Strongly Agree**
1	**2**	**3**	**4**	**5**

Section-2: Shared Leadership

1. As a team we clearly assign tasks.	**1**	**2**	**3**	**4**	**5**
2. As a team we clearly communicate our expectations.	**1**	**2**	**3**	**4**	**5**
3. As a team we ensure that everyone knows their tasks.	**1**	**2**	**3**	**4**	**5**
4. As a team we monitor goal achievement.	**1**	**2**	**3**	**4**	**5**
5. As a team we provide each other with work relevant information.	**1**	**2**	**3**	**4**	**5**
6. As a team we take sufficient time to address each others concerns	**1**	**2**	**3**	**4**	**5**
7. As a team we recognize good performance.	**1**	**2**	**3**	**4**	**5**
8. We promote team cohesion.	**1**	**2**	**3**	**4**	**5**
9. We support each other in handling conflict within the team.	**1**	**2**	**3**	**4**	**5**
10. As a team we never let each other down.	**1**	**2**	**3**	**4**	**5**
11. We help each other to correctly understand ongoing processes in our team	**1**	**2**	**3**	**4**	**5**
12. As a team we help each other to learn from past events.	**1**	**2**	**3**	**4**	**5**
13. As a team we help each other to correctly understand current company events.	**1**	**2**	**3**	**4**	**5**
14. As a team we can inspire each other for ideas.	**1**	**2**	**3**	**4**	**5**
15. As a team we support each other with the implementation of ideas.	**1**	**2**	**3**	**4**	**5**
16. We use network in order to support our teams work.	**1**	**2**	**3**	**4**	**5**
17. We ensure that our team is supported with necessary resources to fulfill the task.	**1**	**2**	**3**	**4**	**5**
18. As a team we assist each other to network.	**1**	**2**	**3**	**4**	**5**
19. We establish contact with important experts valuable for our team.	**1**	**2**	**3**	**4**	**5**
20. As a team we are open to external assistance in the case of internal team problems.	**1**	**2**	**3**	**4**	**5**

Section-3: Team Innovation

1. Team members often implement new ideas to improve the quality of our products and services.	**1**	**2**	**3**	**4**	**5**
2. This team gives little consideration to new and alternative methods and procedures for doing their work.	**1**	**2**	**3**	**4**	**5**
3. Team members often produce new services, methods or procedures.	**1**	**2**	**3**	**4**	**5**
4. This is an innovative team.	**1**	**2**	**3**	**4**	**5**

Section-4: Project Team Performance

1. Team members have Knowledge of tasks.	**1**	**2**	**3**	**4**	**5**
2. Team members always do quality work.	**1**	**2**	**3**	**4**	**5**
3. Team members do good quantity of work.	**1**	**2**	**3**	**4**	**5**
4. Team members take Initiative for tasks.	**1**	**2**	**3**	**4**	**5**
5. Team members have interpersonal skills.	**1**	**2**	**3**	**4**	**5**
6. Team members spend time on planning and allocation.	**1**	**2**	**3**	**4**	**5**
7. Team members are committed to their team.	**1**	**2**	**3**	**4**	**5**
8. Overall evaluation of team performance is good.	**1**	**2**	**3**	**4**	**5**

Section-5: Task Uncertainty

1. There is a clearly known way to do the major types of tasks I normally encounter.	**1**	**2**	**3**	**4**	**5**
2. There is a clearly defined body of knowledge of subject matter which can guide me when doing my job.	**1**	**2**	**3**	**4**	**5**
3. There is an understandable sequence of steps that can be followed when doing my work.	**1**	**2**	**3**	**4**	**5**
4. To do my work, I can rely on established procedures and practices.	**1**	**2**	**3**	**4**	**5**
5. My tasks are the same from day-to-day.	**1**	**2**	**3**	**4**	**5**
6. In general, I would say that my work is fairly routine.	**1**	**2**	**3**	**4**	**5**
7. My employees do about the same job in the same way most of the time.	**1**	**2**	**3**	**4**	**5**
8. Basically, my employees perform repetitive activities when doing their job.	**1**	**2**	**3**	**4**	**5**
9. My duties are repetitive.	**1**	**2**	**3**	**4**	**5**