

CAPITAL UNIVERSITY OF SCIENCE AND  
TECHNOLOGY, ISLAMABAD



**Impact of Shared Leadership on  
Project Team Performance with  
the Mediating Role of Knowledge  
Sharing and Moderating Role of  
Project Manager's Ambidexterity**

by

**Shamsa Naz**

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

in the

**Faculty of Management & Social Sciences**

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*Dedicated to my Parents*



## CERTIFICATE OF APPROVAL

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Performance with the Mediating Role of Knowledge  
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Ambidexterity**

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## *Abstract*

The present research investigates shared leadership and its antecedents in the project-based organizations operating in Rawalpindi and Islamabad. Particularly, this research incorporates the quadratic model of shared leadership to the literature of leadership styles such as TOSL, COSL, ROSL and MPOSL leads to enhanced project team performance via Knowledge sharing. Ambidexterity of a project manager is also posited to hypothesized links as a moderator. Data were gathered from 291 respondents working in different project-based organizations across twin cities of Pakistan. The results delineate that TOSL, COSL, ROSL and MPOSL along with knowledge sharing have significant and positive influence on project team performance. Moreover, knowledge sharing mediates the relationship of shared leadership (TOSL, COSL, ROSL/MPOSL) and project team performance. In addition, exploitative and explorative behavior of PM playing the role of moderator has also tested. Results has shown significant impact for moderation on TOSL & COSL but insignificant impact on ROSL & MPOSL for exploitative behavior and moderated the relationship with TOSL only for explorative behavior respectively. The study significantly contributes to the area of research specifically in the domain of project management and shared leadership. This study also provides significant implications for academicians and practitioners.

**Keywords:** Task Orientation Shared Leadership, Relation Orientation Shared Leadership, Change Orientation Shared Leadership, Micro-Political Orientation Shared Leadership, Project Team Performance, Project Based Organizations.

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# Chapter 1

## Introduction

### 1.1 Theoretical Background

Previous studies have proven that teams having shared leadership structure tend to outperform those with a traditional vertical leadership arrangement. It has been found that when teams are working and performing towards shared targets, their overall performance improves. Broadly speaking, organizations operating in the private sector are used as a 'benchmark' to assess the degree to which the public sector has evolved in terms of 'best practices' that are common within private sector. Dissimilarities in environment, culture, talent management and structure, are usually highlighted while studying leadership and knowledge sharing practices existing in an organization.

Analyzing the number of practices in private and public firms led to findings that revealed that every decision in the public sector requires a lengthy hierarchy of approvals. These approvals greatly obstruct economic decisions and decision-making in general significantly. This includes environmental, social and cultural aspects (Galli, 2020). One of the researches conducted through grounded theory method suggests that through enhancing adaptability, relationship between leadership and organizational performance can be improved which are intervene by follower knowledge and perceptions and may be moderated by follower personal adaptability and the change processes in local government settings (Parry & Parry, 2006).

Shared leadership is a leadership approach that divides leadership duties and responsibilities, such that members within a project team and organization lead and support each other. One of the study shows that delegating high powers to the leadership of upper-level leaders stimulates the powers of lower-level leaders, which ultimately improves the job performance of employees (Ali, Wang, & Johnson, 2020). Enhanced team performance is anticipated with less geographically dispersed virtual team members and extra training periods due to mediating effect of leadership role effectiveness mediation (Han, Kim, Beyerlein, & Derosa, 2020).

Most effective team leaders are graded higher simultaneously on both shared and authoritative leadership style within and across stakeholder groups (Aramovich & Blankenship, 2020). Giving more powers to leadership boost the knowledge sharing practice and productivity and performance of HRM that ultimate improve the financial performance of the firms (Torasa & Mekhum, 2020). High involvement work systems contribute to shared leadership which brings team creativity in project teams (Song, Gu, & Lee, 2019). “Knowledge sharing can be best defined as exchange of knowledge between individuals, teams, organizational units and within organizations. This exchange may be focused or unfocused, but it usually does not have a clear prior objective (Paulin & Suneson, 2012).

Another research conducted on educational institution to see impact of competence and knowledge sharing on academic performance led to the results that there is an assenting and considerable relationship exists between these constructs i.e. knowledge sharing and competence. However, when tested for their combined affect on academic performance, there was a positive but not significant impact on academic performance (Rasto, Muhidin, Islamy , & Handayani 2021). Findings of another study has revealed that shared leadership plays a vital and direct role in the successful deliverance of projects in the presence of members’ autonomy by meeting team member’s psychological needs. Another result from slope analysis showed that knowledge sharing acts as a moderator between shared leadership and autonomy (Imam, 2021).

Earlier researches on project management generally discussed achievements of individual project goals by using consolidated project techniques and tools (Turner,

2014). Pat study on IT businesses shows that knowledge management inside IT projects adds to the formation and association of the vital project-based knowledge (Reich, Gemino, & Sauer, 2012). The knowledge generated on end of a project should be transferred amongst organization to improve overall learning which will contribute in shared knowledge-basis across projects. The definition of knowledge sharing techniques in Project Based Organizations has been implemented and adopted as “an informal mechanism for distribution, interpreting and applying know-what, know- how, and know-why embedded in members will contribute in the better performance of project tasks” (Boh, 2007).

Culture that prevails within an organization can be source of promoting knowledge sharing practices or main hindrance to it. (Allameh et al., 2011). Notable performance improvement at team level can be obtained, if an organization’s culture promote openness and sharing of innovative vision through motivation and support from higher management (Açikgöz & Günsel, 2011). The culture of an organization and risk mitigation strategy adopted by team reduces the impact of group/team behavior, their results and controls on team performance in Information System Medical projects (Liu & Wang, 2016). One of the study reveals that constant acquisition of knowledge has substantial impact on organizational performance. In addition, team cooperation and learning constitutes to organization’s culture of creativity and innovativeness (Hussein, Omar, Noordin, & Ishak, 2016). The most prevalent attributes of good organizational culture are their openness to knowledge sharing, mutual trust and adaptability to change (Zidane et al, 2016). Some organizations promotes culture of detaining and holding dissemination of knowledge across project teams (Wei & Miraglia, 2017)). The climate that prevails within an organization is strong and flexible to change, it helps encouraging employees to actively participate during brainstorming session for generating creative ideas. This ultimately led to improved organizational innovation performance (Shahzad et al., 2017). Firms culture with focus on knowledge sharing practices constitute to increased team and ultimately overall organizational performance (Oyemomi et al., 2019).

Workplace climate determines how employees will use and react to performance evaluation structure (Smith & Claire, 2019). Team leaders promote and develop

such environment which is conducive to knowledge learning and sharing lessons learned (Zhang & Guo, 2019). Big Data Analytics capacity as a firm's climate has direct and substantial impact on mutual trust and accomplishment of goals (Dubey et al., 2019).

Organizations are required to place knowledge and information data base in properly labeled databanks and documents, such as it can be retrieved by every concerned employee. Knowledge sharing process is applied by "people-to-document" policy. Knowledge is distributed by the people who "know". Through these mechanism members eager to search knowledge can access it easily (Hansen et al., 1999). People with high socialism would like to share more data and information with other team member as compared to people with less communism; cultural dimensions have both positive and negative impact on knowledge sharing (X. Zhang, Ordóñez, Pablos, & Xu, 2014).

People in both categories (towards personnel and towards external consultants) tend to share more knowledge within the group than outside the group. Employees tend to share greater knowledge with employees (compared to consultants), while external consultants tend to share their experiences and lessons learned with other consultants (compared to employees) (Nesheim & Hunskaar, 2015). Knowledge diversity and employee relationships play essential roles in figuring out knowledge reuse behaviors. Knowledge reiterate is an efficacious way of reducing the group understanding heterogeneity, and desirable employee relationships provide pleasant group atmosphere for knowledge reuse (Zhang & Li, 2016).

It is also found out that knowledge sharing within a team's mediates the influence of team reflexivity on individual team member innovative performance, where leadership style plays a pivotal role in moderating these affects (Wang, Ren, Chadee, Liu, & Cai 2021). Work relationships within a team such that task interdependence and work associated communication are positively related to knowledge sharing (Su, 2020). Another study conducted on IT firms in India has revealed that firm's culture, organizational intelligence and knowledge sharing are the key elements that create an overall environment conducive for organizational learning. (Meher & Mishra, 2021).

There is a reluctance of humans to assess and analyze their past activities and share experiences relating to mistakes and thus rigid error prevention reduces or even eradicates the valuable potential for learning (Love, Smith, Ackermann, & Irani, 2019). Knowledge hiding negatively influences group getting to know by means of triggering a loop of distrust amongst individuals, and this poor impact is then reflected in undertaking group overall performance (i.e. project schedule, project budget, productiveness of team operation, and first-class of project teams' deliveries) (Zhang & Min, 2019).

Sharing of information among project team members reflects the foundational factors of communication, interaction, engagement, and studying through which facts is disseminated across participants that can eventually advantage project performance outcomes (Rauniar, Rawski, Morgan, & Mishra, 2019). Prior research emphasizes on firm and business unit level ambidexterity. Concerning individual coordination instruments, results show that both the involvement of manager in cross-functional interfaces and the connectedness of a manager to his team members positively relates to manager's ambidexterity (Mom, Bosch & Volberda, 2009). Recent research proves that essential drivers for contextual ambidexterity are a high level of empowerment and an orientation towards continuous novelty and improvement. (Assen, 2020). Results obtained from one of the study conducted on Spanish public sector universities shows that in order to obtain innovation ambidexterity, concept of knowledge absorption should be promoted. (Pulles, Perez & Bravo, 2020a). Research has also proved that ambidextrous employee behavior can be generated if management style promotes room for trial and error, and encourage implementation of new ideas. (Caniels, Neghina & Schaetsaert 2016). Higher creativity performance is achieved when both exploitation and exploration behaviors of project manager are high (Zatcher, Robinson & Rosing, 2014).

## 1.2 Research Gap and Present Study

There is very limited empirical research available on the valid scales to measure shared leadership behaviors. Therefore, this current study will serve the purpose to find out whether the work done by (Grille 2015) can be used as a valid instrument

to access shared leadership. We will further see if TOSL, COSL, ROSL & MPOSL can be used as separate dimensions in measuring the variation of shared leadership that led to knowledge sharing and improved team performance.

Kim & Han (2019) studied three dimensions of shared leadership i.e. task, relation and creativity and explained that these dimensions builds strong trust within the team members which ultimately improves project team performance. Han & lee (2018) proposed future researchers to find out other intervening variables apart from coordination, knowledge sharing and goal commitment that might increase team performance where shared leadership plays a vital role. In present research, researcher has proposed that in addition to task, relation and creativity, two important dimensions i.e. micro-political and change shared leadership orientation will also help in achieving higher performing teams.

We will further test relationship of shared leadership (task, relation, change and micro-political) and project team performance due to knowledge sharing where project manager's ambidexterity acts as a fuel. Very limited evidence are found in studies that have examined the relationship between all the four dimension of Shared leadership (task, relation, change and micro-political) and team performance in context of knowledge sharing and project manager's ambidexterity. Shared leadership encourages knowledge sharing practices for improved team performance if there exists ambidexterity.

In addition, there is not even a single study carried out in Pakistan where relationship of shared leadership and project manager's ambidexterity is explained. Our study will give a detailed review on how four different dimensions of shared leadership will help in attaining higher performing teams in presence of project manager's ambidexterity through knowledge sharing. Current model will definitely a novelty and contribution in the field of research especially in context of Pakistan. Shared leadership helps organizations to develop and prosper, makes them more effective, and benefits their team in respect to less conflict, more team building and developing trust. Leadership roles have strong influence on success and failure of every organization, and the complexity of today's challenging business structures makes leadership increasingly more critical. It is becoming tougher for any single member to own all the skills and capabilities required to competently

lead teams today. Knowledge Sharing is an increasingly important discipline that promotes the creation, sharing, and leveraging of the corporation's knowledge. Successful knowledge management is believed to have the potential of enhancing an organization's competitive advantage, customer focus, employee relations and development, innovation, and market out reach.

Knowledge sharing exercises are by and large bolstered by knowledge administration frameworks. In any case, innovation constitutes just a single parameter of the numerous elements that influence the sharing of knowledge in organizations. Some of them include: authoritative culture, trust, and motivating forces.

### 1.3 Problem Statement

There is very limited empirical research available on the valid scales to measure shared leadership behaviors. Therefore, this current study will serve the purpose to find out whether the work done by (Grille 2015) can be used as a valid instrument to access shared leadership i.e. what are the important dimensions that can be used to access shared leadership? We further intend to see if TOSL, COSL, ROSL & MPOSL can be used as separate dimensions in measuring the variation of shared leadership that led to knowledge sharing and improved team performance.

These four dimensions i.e. task orientation, relation, change and micro-political orientation shared leadership styles along with role of knowledge sharing in the presence of project manager's ambidexterity are not more seen in project teams in Pakistan organizations which may affect project team performance. Another element which does not promote shared leadership is organizational culture among team leaders which ultimately effects project teams performance as there is no concept or lack of knowledge sharing exist between teams.

We need to understand that does shared leadership along with knowledge sharing brings enhanced team performance in project team and also explore the importance of managerial ambidexterity in project-based organizations which lead to improved project teams' performance. Are these constructs: shared leadership,

knowledge sharing and project manager's ambidexterity help to achieve better team performance.

Therefore, every organization should take steps and consider implementing a shared leadership approach among their leaders for achieving better results. We are conducting this study to understand how Project Manager's ambidexterity will strengthen the relationship exists between four dimensions of shared leadership and project team performance in the presence of knowledge sharing.

## 1.4 Research Questions

On the basis of the research gap identified and stated problem statement, we intend to find out answers to following questions:

**Question No. 1:**

What is the effect of four dimensions of Shared Leadership (Task, Relation, change and micro-political Leadership Orientation) on Project Team Performance?

**Question No. 2:**

Does Knowledge Sharing mediate the relationship that exists between Shared Leadership (Task, Relation, change and micro-political Leadership Orientation) and Project Team Performance?

**Question No. 3:**

Does Shared leadership (Task, Relation, change and micro-political Leadership Orientation) have strong impact on project team performance in the presence of project manager's ambidexterity?

**Question No. 4:**

Does project manager's ambidexterity strengthen relationship exists between four dimensions of shared leadership and knowledge sharing?

## 1.5 Research Objectives

The objective of this study is to test our research model to discover the impact

of Shared Leadership (Task, Relation, change and micro-political Leadership Orientation) on performance of the team within project-based organizations. Furthermore, this study will also find out the mediating role of knowledge sharing between Shared Leadership (Task, Relation, change and micro-political Leadership Orientation) in team and Project Team Performance.

Project manager's ambidexterity is anticipated as a substantial moderator to strengthen the relationship between Shared Leadership in Team and knowledge sharing. The relationship between Independent, Dependent, Mediator and Moderator is shown in the research model of the study.

Main objectives of this research are:

1. To find out the relationship between shared leadership (Task, Relation, change and micro-political Leadership Orientation) in team and project team performance.
2. To find out the extent of mediating role of knowledge sharing between four dimensions of shared leadership and project team performance in a team.
3. To find out the moderating role of project manager's ambidexterity between shared leadership in team and knowledge sharing.

## 1.6 Significance of Research

This research examines the case for shared leadership and helps to determine if more organizations should consider and be motivated in adopting a shared leadership model. This study is sought to contribute to this growing body of knowledge by determining the impact of shared leadership and knowledge sharing on project team performance in project based organizations operating in Rawalpindi and Islamabad.

This study will show whether project manager's ambidexterity fosters relationship between shared leadership and knowledge sharing which ultimately improves

Project Team Performance. Hence, our research will contribute towards attaining how to improve project team performance if shared leadership is supported by project manager's ambidexterity through use of knowledge sharing practices and will try to find out an environment which is more conducive for shared leadership.

In addition, our study will also help project based organizations in learning the importance of ambidexterity in this era of challenges and changing demands. Thus, present study will be a good addition in project management literature and fills the gap with the fewer amount of studies conducted in this domain and opens up new ways for the upcoming researchers as well.

## 1.7 Supporting Theory

Multiple researchers have been presented and explained several theories which are used all over the world to explore the studies of leadership styles and team performance like attribution theory, LMX theory, social exchange theory, knowledge-based theory, social power and organizational support theory but leader member exchange theory can best explains the relationship between leaders and followers.

Purpose of our current research is to demonstrate the role of shared leadership for the knowledge sharing among the team members, team performance and organizational culture. Therefore, Leadership-Member Exchange Theory is chosen as this is the only theory which links all the variables of our current research and explains how a win-win relationship by parties, their team, network and overall organization can be achieved.

### 1.7.1 Leadership-Member Exchange Theory

The LMX theory comprehends leadership as a practice that concentrates on the interaction between a leader and a team. This theory focuses on an interactive relationship between leader and his subordinates not just on the leader and follower. LMX originate its roots from Vertical Dyad Linkage Theory which describes vertical linkages between leaders and their subordinates with two distinct types of

relationships; In-group and Out-group. In-group focuses on special relationships which emphasizes more on privileges, preferences and more access to resources are given in exchange of routine duties. Out-group explains such relationships that do minimum amount of work in exchange are given less access to resources and decision making.

Leadership - member exchange has a positive influence on employees' job performance and self-efficacy act as an intervening variable and means efficacy as a mediating variable (Luo & Cheng, 2014). One of the study reveals that ethical leadership has both a direct and indirect influence on organizational skepticism through the mediating role of organizational identification and leader-member exchange (LMX) (Qian & Jian, 2020).

The greater the knowledge distance exists within organization, the stronger the negative effect of perceived leadership knowledge hiding and LMX. This study sheds light that managers should focus more on the potential negative effect of leader knowledge hiding, how to increase knowledge sharing with employees, to initiate reasonable talent formation in teams, as well as create a symphonious interpersonal atmosphere for employees to express their views (Chen, 2020).

# Chapter 2

## Literature Review

### 2.1 Shared Leadership and Project Team Performance

Shared leadership is a process in which team members dynamically share the leadership roles (Liang, Knippenberg & Gu, 2020). Behavioral Complexity in Leadership Theory advocated that there is a relationship between team leader roles to team performance. Trainings given to both team leaders and team members for the development of their skills could be critical in elevating leadership and team productivity from average to extraordinary levels (Han, Kim, Beyerlein & DeRosa, 2020). Medium level of indifference between team members in their ability leads to improved team performance and their team development rather than very low or high indifferences (Lee et al. 2019).

Leadership style having practical involvement in project activities encourages team to raise their voice and as a result it yield better results through innovation and team building (Ye et al. 2019). Team performance and a moderate effect of immediate trust is highly influenced by the conceptual skills and commitment to the growth of people (Employees) (Cooke 2015). “Both-and” approach (Participative & Decisive Behavior) supports that leaders concurrently harmonize competing demands are associated with leader’s effectiveness (Aramovich & Blankenship, 2020).

Different dimensions of shared leadership including Relation orientation shared leadership (ROSL), Task Orientation Shared Leadership (TOSL) and Creativity Orientation Shared Leadership (COSL) are important factors in determining project team performance as shared leadership style enhance team trust which ultimately brings positive learning environment and overall culture (Kim & Han, 2019). Impact of shared leadership on team performance was stronger during the early stages of the project team life cycle through presence of Transactive Memory System which mediated this provisional effect (He & Hu, 2021).

The degree of leadership behavior exhibited by a team leader and the dissemination of those attributes among team members appear to be vital for the project team's success. In addition to this, ROSL, TOSL & COSL were directly related to all three measures of team effectiveness i.e. subjective & objective performance and team viability (Small, 2007). Egocentric leaders need strength and dedication to pull out higher performance from virtual project teams. Also trust is pre-requisite to achieve shared leadership through self oriented leadership (Castellano et al. 2021).

Task leadership orientation dimension of shared leadership seemed to be linked to the level of task interdependence within the group and ultimately brings greater performing teams (Pearce & Sims, 2002). With greater levels of team authority base diversity, shared leadership has a direct and positive impact on project team performance because of reduced relationship conflict within a team (Sinha, Chiu & Srinivas, 2021).

Therefore, we hypothesize as;

**H1:** Task Leadership Orientation has positive impact on project team performance

**H2:** Relation leadership orientation has positive impact on project team performance

**H3:** Change leadership orientation has positive impact on project team performance

**H4:** Micro political leadership orientation has positive impact on project team performance.

Research has found that if there is a trend of knowledge sharing between management and employees, the efficiency and performance of human resource management was at the peak as a result of which increased financial performance occurs in the organization due to intervening effect of leadership empowerment (Torasa & Mekhum, 2020). Presence of certain properties like required experience & skills, integrity, self-motivation and collective coordination in team members can make sharing leadership easier with better and enhanced team performance (Barnett & Weidenfeller, 2016).

One of the study reveal that vertical leadership empowerment and interdependence (goals & tasks) has direct relationship with the evolution of shared leadership in teams, which ultimately improves team performance (Fausing et al., 2015). One of the research study conducted among sports teams showed that by empowering the players within the team, the leadership of team's coach becomes even more appreciated by the players i.e. coaches can have a chance to become substantial leaders, not because of their authority but because of their aptitude to empower their team members (Fransen, Mertens, Cotterill, & Broek, 2019).

It has been noted that shared Leadership depends on the degree to which each individual in a team feels empowered, will be fairly rewarded for their efforts and when teams are led by prototypical leaders (Grille, Schulte, & Kauffeld, 2015). Studies have found that there is significant impact on the relationship exist between shared leadership and team performance in the presence of moderators like leadership typology, job complexity, personality composition and types of team performance (Martin, 2018).

Internal team advisors/mentor remarkably effect team empowerment which is one of the key factor to team building consequently improves team processes and performance than external team advisors (Rapp, Gilson, Mathieu, & Ruddy, 2016). Another research conducted on shared leadership versus Vertical Leadership style proved that shared leadership is significantly and positively related project team effectiveness and performance (Pearce and Sims 2002).

On the basis of literature reviewed, we hypothesize as

**H5:** Task Leadership Orientation has positive impact on knowledge sharing

**H6:** Relation leadership orientation has positive impact on knowledge sharing

**H7:** Change leadership orientation has positive impact on knowledge sharing

**H8:** Micro political leadership orientation has positive impact on knowledge sharing

## 2.2 Knowledge Sharing as a Mediator

Knowledge sharing can be defined as “interchange or transfer of information between two or more individuals, i.e. communication or exchange of information between sender and receiver (Paulin & Suneson, 2012). There is a need of building simple rather than a the rigid bureaucratic organizational/team structure in order to eliminate the gaps between team managers and librarians so that it can facilitate the process of knowledge sharing by reducing the communication gap and increased informal interactions between the team members (Kakhti et al. 2020).

Team performance can be explained as group of people from various functions that are combined together to achieve defined project goals. Performance can be defined as how skillfully and competently activities and group work is carried out (Okoronkwo, 2017). Structure of an organization can be recurrently sustained by historical and authentic knowledge and not by the structure makers (Chi & Chen, 2009). Another study suggest that knowledge attainment has direct positive relationship with knowledge explication which helps in identifying prospective entrepreneurial business opportunities (Skerlavaj, Song, & Lee, 2010).

Team achievement and performance are circumscribed by the information modeling system and team socialization (Janhonen & Johanson, 2011). Research has shown that there is a direct and purposeful relationship between firm’s culture and information creation, capture, storage, organization, application and dissemination. These are six different types of knowledge management dimensions or angles presented by author (Allameh, Zamani, & Davoodi, 2011). Further studies conducted on IT firm confirm that firm’s Information Technology embodiment potential has significant impact on project team performance (Basaglia, Caporarello, Magni, & Pennarola, 2010).

Method of knowledge gaining as a rational method involves both dynamic modeling and understanding knowledge formation activities. These approaches are built-in in a spiral of existential content that grows upward through transforming tacit knowledge into specific knowledge, which becomes the basis for new knowledge generation. These methods involve deduction, induction, creativity and efficiency (Cairó & Guardati, 2012). Project Management Office act as knowledge mediator within project based organizations. Project Management office has developed methods for managing explicit information specifically related to technical and procedural information (Pemsel & Wiewiora, 2013).

Mentoring and coaching is a key method to knowledge transfer, which allows for both the specific and tacit elements of knowledge and information to be transferred. A knowledge management program has given importance on establishing senior management support and taking every opportunity to convey organizational project goals and vision to project teams (Pollack, 2012). To make a long lasting and well-grounded knowledge management system in an organization, there must be universal information system development, its continuous upgradation and deduction at place (Chi & Chen, 2009).

Different forms of intercommunication and exchange of information within a project enhance the management and distribution of embedded information (Bosch-Sijtsema & Henriksson, 2014). Some of the cases shows that knowledge diversity indirectly impact Engineering Design Team productivity, however, effective use of knowledge and healthy team environment mitigate the negative impact to some extent (Zhang & Li, 2016).

The competencies of controlling and managing own feelings after awareness could help the group individuals eliminate the detrimental thoughts from what to do in the requirement analysis. Awareness is the foundation of management. Any person who uses his/her positive attitude to impact another teammate who is consistently depressed, he/she need to be aware of the group mate's emotion at first.(Xiang, Yang, & Zhang, 2016). The intention of this paper is to motivate reflective practice by offering participants the chance to work as a team to derive 'common' solutions; evaluate the consequences and effectiveness of their mutual

business enterprise towards system generated status reports (provided to the teams after every repetition) (Lee- Kelley, 2018).

Beyond applying positive direct effects, there is one additional factor i.e. time pressure which indirectly improve team member creativity via activating a motivational process (through studying orientation) and a comprehension process (through information sourcing), while high perceived time pressure weakens it by means of limiting information sourcing (Khedhaouria, Montani, & Thurik, 2017). Developing the skill to assume ‘outside the box’ requires extra than a vigorous shape or sound process (Kelley, 2018).

Culture of an organization is an essential accelerator to attain firm’s strategic goals, enforce information management and sharing procedures and endure firm’s business performance (Oyemomi, Liu, Neaga, Chen, & Nakpodia, 2019). The presence of assailants within organization requires a strong need of balance between knowledge dissemination and knowledge safety so that only particular data about project is shared and insider information about organization and their clients must be kept confidential (Gast, Gundolf, Harms, & Matos Collado, 2019).

Knowledge dissemination approaches and methods lead to creativity and cost effective prompt response customer requirements as a result gaining competitive edge in the market (Singh, Gupta, Busso, & Kamboj, 2019). Information concealing within team members will lead to decrease participation of respective departments in project activities (Zhang & Guo, 2019). For the successful implementation of cooperation project, organizations and teams do share lessons learned and specific information (Gast et al., 2019).

One of the study shows direct relationship exist between knowledge management/sharing & project team performance outcomes (Rauniar, et al, 2019). Information assortment effect on project team performance is moderately impacted by knowledge leadership with the help of exchange of information (Zhang & Min 2019). Knowledge management can only stimulates project team performance if it induces ambidexterity (exploitation and exploration) with the project team (Alshawabkeh, Rumman, Abbadi & Abu-Rumman, 2020).

According to literature, we hypothesize:

**H9:** Knowledge Sharing has positive impact on project team performance

**H10:** The level of knowledge sharing positively mediates the relationship between task leadership orientation and project team performance

**H11:** The level of knowledge sharing positively mediating the relationship between relation leadership orientation and project team performance

**H12:** The level of knowledge sharing positively mediating the relationship between change leadership orientation and project team performance

**H13:** The level of knowledge sharing positively mediating the relationship between micro political leadership orientation and project team performance.

## 2.3 Project Manager's Ambidexterity as a Moderator

Since many firms operate in more than one strategic environment at once, ambidexterity is the capability to apply numerous methods to strategy either successively or synchronously. So as to achieve prosperity in the present and future, project teams must be led by senior leaders who could balance competing dimensions of exploitation and exploration within their organizational structure. Exploration refers to use of already existing policies with little amendments whereas exploitation refers to trial and error i.e. bringing innovation and new trends within the teams. (Westerfield, 2021).

While analyzing the mediating role of knowledge absorption and knowledge transfer in the relationship between the internal networking created in university research groups and innovation ambidexterity, researchers have found that knowledge absorption and transfer has positive and significant relationship to internal networking. However, only knowledge absorption has a positive and significant impact on innovation ambidexterity (Cabeza- Pulles et.al, 2020b). One of the study on Quality management practices (QMP) effect on organizational ambidexterity showed that QMP can create a suitable organizational framework to concurrently develop both exploitative innovations and explorative innovations. Research

proved that ambidexterity within a firm creates better performance (Pertusa-Ortega, 2021). Firms are constantly facing challenges demand of doing more than satisfying customer needs. Having leaders within a project team that promotes empowerment and knowledge sharing within team network builds the environment required for ambidexterity to grow. For instance, by sharing their own experiences such as failures/trials, leaders could create an environment in which team members feel safe and secure to take risks (Caniels et.al. 2017).

Previous results have suggested that innovation and creativity can be boosted within a team if team member is willing to thoroughly look into the situation by spending the time and effort for identifying a problem, gather extensive information, and generate numerous ideas from divergent perspectives (Zhang & Bartol, 2010). Further studies has endorsed unlearning-performance bond occurs through simultaneous exploitative and exploratory learning tasks in a balanced form (Acikgoz, Demirkan, Latham & Kuzey, 2021).

Entrepreneurial leaders act as a trial and risk taker and encourage innovation, therefore, boost innovation ambidexterity in the firm which in turn results novelty in projects (Khairuddin, Haider, Tehseen & Iqbal, 2021). Performance management and shared leadership traits are mutually pivotal for creating high performance teams that builds ambidextrous culture within the project based organizations. However, it was also concluded that the lower the team member was in the hierarchy of the project team, the lower he has rated ambidextrous characteristics of project manager. (Birkinshaw & Gibson, 2004).

One of the studies has highlighted that small-medium enterprises could achieve a close balance of explorative and exploitative characteristics through utilizing right organizational structures and adopting appropriate leadership styles. In addition, project performance (business performance) mediates the relationship between the leadership style, contextual and structural characteristics on project performance of small medium enterprises (Chang & Hughes, 2012). Psychological empowerment mediated the link between six dimensions of empowering leader (delegation of authority, accountability for outcomes, risk taker and innovative, information sharing and skill development) and two outcomes that are job satisfaction and organizational commitment (Konczak, Stelly & Trusty, 2000).

Knowledge sharing and mutual exchange of tools and practices are very essential in the contemporary technological and informational culture within higher education sector. Policy makers should keep in their mind modulation of virtual team shared environments while devising virtual team management plans/strategies (Singh, 2020). Another research has proved that by adapting exploitation more rapidly than exploration will become more effective in attaining organizational learning in the short run but rather destructive in long run (March, 1991).

Another study has stated that Project manager's decision making authority positively linked to Project manager's ambidexterity (Mom et.al, 2009). Further, it is endorsed that new product development performance tends to decline when project manager doesn't balance between exploration and exploitation activities and ultimately reduces the project team performance (Lee, Joshi & Woo, 2017). Organizational dynamism and strong social networks within the teams are positively and significantly related to managerial ambidexterity in the presence of knowledge sharing as a mediator (Yap, Ahmad, Jalaludin & Hashim, 2020).

Project manager's opening and closing traits positively correlated to team member's exploitation and exploration behaviors respectively. Balance of both exploitation and exploration activities in turn are assumed to effect team's performance in terms of creativity (Zacher et.al, 2014). Project teams headed by an empowering manager tend to have greater performance improvement with the passage of time due to higher levels of coordination, shared authority, team learning and mental model development (Lorinkova, Pearsall & Jr., 2013).

Knowledge sharing inflows of managers from top to down is directly related to the extent to which exploitation behavior is seen within an organization. However, they are least related to manager's exploration activities (Mom et.al, 2009). Empowering leadership was directly linked to team efficacy and knowledge sharing which ultimately brings higher performing teams within a project based organizations (Srivastava et al. 2006).

The characteristics possessed by CEO of organizations are felt all over the firm and made strong impact on the norms within organization that support or discourage employees patterns of behavior and interaction among each other (Giberson et

al. 2009). Notable performance improvement at team level can be obtained, if higher management promote openness and sharing of innovative vision through motivation and support from higher management (Açikgöz & Günsel, 2011).

Traits such as exploitative and exploratory innovation are predicted by the firm's innovation climate, which in turn is predicted by appropriate leadership style. The results also showed a slight moderating effect of organizational dynamism on ambidexterity and innovation. It was also highlighted that contextual leadership style is a major predictor for improving novelty and innovation climate (Visser & Scheepers, 2021).

Research conducted on Small Medium Enterprises in the high tech sector's operating in developed and developing countries showed that ambidextrous leadership approach is directly and positively linked with the innovation (Atiku & Randa, 2021). Relationship between Inclusive leadership and firms performance is mediated by Explorative and exploitative dimensions of manager's ambidexterity (Gong, Liu, Rong & Fu, 2021).

According to literature, we hypothesize:

**H14:** Positive relationship between task leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.

**H15:** Positive relationship between relation leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.

**H16:** Positive relationship between change leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.

**H17:** Positive relationship between Micro political leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.

**H18:** Positive relationship between task leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.

**H19:** Positive relationship between relation leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.

**H20:** Positive relationship between change leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity high.

**H21:** Positive relationship between Micro political leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.

## 2.4 Theoretical Framework

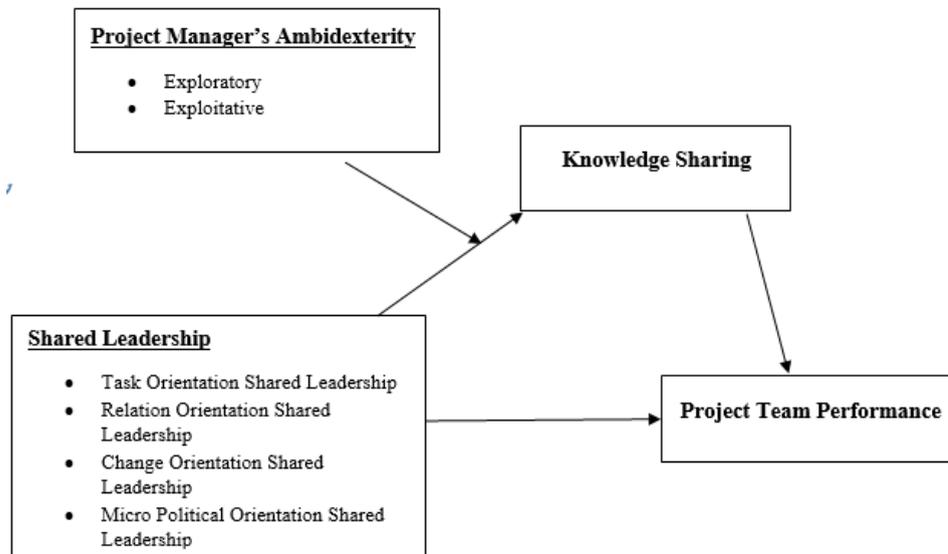


FIGURE 2.1: Research Model

The theoretical framework for this study is shown in figure 1. This framework illustrated the effect of shared leadership on project team performance via mediation of knowledge sharing and the moderating effect of project manager's ambidexterity. This framework shows one of the dimensions of leadership style, i.e. shared leadership which includes four constructs. These are Task orientation shared leadership (TOSL), relation orientation shared leadership (ROSL), change orientation shared leadership (COSL) and micro-political orientation shared leadership (MPOSL).

# Chapter 3

## Research Methodology

This chapter explains the essential steps taken into consideration to investigate the proposed theoretical framework, research design and methodology and provides information about selecting and analyzing the data techniques. Further points about measurement and instrument reliability analysis are also described in this chapter.

### 3.1 Research Design

Research design is defined as a framework of a research plan of action including tools, techniques and methods of data collection. (Zikmund 2003) explain research design as a sketch used by the researcher that explains the methods and procedure for collecting and analyzing the necessary information. There are two most common techniques that are used in research are qualitative-quantitative research designs. Out of them, quantitative research design is preferred due to its reliability and effectiveness than qualitative method and produces more reliable and authentic results (Chase et al. 2015). Research design of present study includes types of study, study setting, unit of analysis, and time horizon which are discussed below.

### 3.2 Type of Study

Present study is the causal research in which we explain the impact of four dimensions of shared leadership i.e. TOSL, COSL, ROSL & MPOSL on project team performance through mediating effect of knowledge sharing. We will also highlight whether this relationship is strengthening by moderator project manager's ambidexterity.

For this present research, data were collected from the companies having project based setup operating within territory of Pakistan based in Rawalpindi and Islamabad. The data were collected in only one go because tendency was cross sectional.

### **3.2.1 Study Setting**

The nature of the study was cross-sectional. Data were collected using questionnaire surveys. Many researchers prefer to use this technique for data collection. Collecting data using questionnaires are cost-effective with minimum interference of researchers that also helps to reduce the biases of respondents (Cavanaugh & Noe, 1999).

This method also gives ease to respondents to respond at the time feasible for them. The survey questionnaire technique is also less time consuming, cost-effective and data examination is also easy. Data were collected in a natural environment which was neutral with almost no manipulation and interference from the researcher.

### **3.2.2 Time Horizon**

Due to the cross-sectional nature of the study, data were collected in one month and in one go for this research.

### **3.2.3 Unit of Analysis**

The unit of analysis of this research were individuals (employees) working in project based organizations operating within territory of Pakistan based in Rawalpindi and Islamabad.

## **3.3 Population and Sample**

### **3.3.1 Population**

Population can be defined as group of individuals persons, items or objects from which samples are drawn for analysis and measurement. The population in the current study is employees working in capacity of project managers, team leaders and team members from companies operating within territory of Pakistan based in Rawalpindi and Islamabad. Using the personal and professional network, data were collected from professionals working in a higher, middle and lower management capacity in different project based organizations where leadership exists.

### **3.3.2 Sampling**

Set or portion of respondents chosen from a larger population for the purpose of research survey to determine different parameters is stated as sampling (Weber, Martin & Cayanus, 2005). Different sampling techniques are used for conducting research studies. Most common of them are probability and non probability sampling techniques.

Probability technique in sampling could be more preferred and desired when complete information about the population is available (Wiersma & Jurs, 2005). Our present study has used convenience sampling technique as the population is size very large and unknown. Data is collected from a conveniently available pool of respondents which belongs to a non probability sampling technique.

### **3.3.3 Sample Size**

Sample size depends on many factors including desired precision of the estimates researcher wishes to attain, the nature of the research analysis to be performed, the kind and number of comparisons that will be made, the number of variables that have to be examined simultaneously and how heterogeneous a universe is sampled. Approximately 300 questionnaires were distributed in different project

based organizations operating in twin cities of Pakistan. Out of which, 291 responses were received and 288 responses were included in this study for empirical analysis. Respondent's qualifications were BS Hons, Master's and Ph.D.

### **3.4 Data Collection Procedure**

Using the personal and professional network, data were collected from professionals working in a higher, middle and lower management capacity in different project based organizations operating in twin cities where leadership exist. A cover note was also attached with questionnaire to give complete assurance to the respondents about data confidentiality and purpose of the conducted research.

It was further stated to assure respondents that data would be accessible only to relevant persons involved in the research. A soft copy of the questionnaire through Google docs was floated to selected participants clearly stating the basic instructions so that it can be filled easily without any hesitation.

The estimated time required to fill the complete questionnaire was 10 minutes only. All the personal and contact details were kept anonymous which was necessary to follow the ethics in research. The questionnaire contained items regarding shared leadership, project manager's ambidexterity, and knowledge sharing and project team performance. Questionnaires were filled by managers, team leaders and team members.

### **3.5 Handling of Received Response**

In the first step, detailed scrutiny of collected responses was done to identify missing responses. It is found that few participants did not fill complete questionnaires. In quantitative research, in order to avoid bugs, handling of such missing data is vital for getting perfect results. Identification of incomplete data brings statistical power in data, which helps to distinguish any major or important impact from the collected data (Roth and Switzer III, 1995). Furthermore missing data can

also affect the accuracy of observed variables. Guiding principles on the topic of handling missing data are available in the literature. (Roth and Switzer III, 1995) listed different techniques for the handling of missing data which are regression imputation, mean substitution and deletion.

In using mean substitution: researcher can incorporate mean value for missing responses. While using regression imputation: the researcher can develop a regression equation of relevant variables for assigning missing values. The most common technique is list wise deletion: in which analyst delete full responses of missing data from questionnaires. For this particular study, after entering received data in SPSS data sheet researcher has observed few missing values. To deal with these missing values likewise deletion technique was utilized because there were only 3 questionnaires that are not completely filled and the missing values were not from any sensitive section of the questionnaire.

## 3.6 Sample Characteristics

In the first part of data analysis, the researcher gets a comprehensive understanding of the demographics of respondents. Demographics are usually categorized in aligned with topics or the nature of research. Demographics section of present study includes: age, Gender, Age, Qualification, designation and Experience. The questionnaire has section A for demographic variables. The Researcher has drawn a frequency table for each demographic variable separately and also drawn basic characteristics of data.

### 3.6.1 Employment Sector

TABLE 3.1: Employment Sector Frequency and Percentage

<b>Employment Sector</b>	<b>Frequency</b>	<b>Valid Percent</b>	<b>Cumulative Percentage</b>
Public	92	31.9	31.9
Private	196	68.1	100
Total	288	100	

**Table 3.1** displays that out of total 288 responses received, 68.1% of the data is working in private sector and 31.9% are working in public sector organizations of Pakistan.

### 3.6.2 Age

Age is vital element to consider while analyzing your target audience. With the help of age variable, the researcher can easily evaluate their responses with respect to experiences and positions in their company.

TABLE 3.2: Age, Frequency and Percentage

Age	Frequency	Valid Percent	Cumulative Percentage
21-30	153	53.1	53.1
31-40	108	37.5	90.6
41-50	20	6.9	97.6
Above 51	7	2.4	100
Total	288	100	

**Table: 3.2** shows composition of sample based on age groups. 53.1% respondents are between 21-30 years of age group, 37.5% are lying between 31-40 years of age, 6.9% between 41-50 years and 2.4% respondents are from above 51 years of age group from total 288 sample size. Age group lies between 21-30 shows higher percentage in total sample size.

### 3.6.3 Gender

Gender statistics have an important role in identifying and monitoring gender roles towards different positions within organization. This part of demographic will identify the ratio of female and male respondents.

TABLE 3.3: Gender Frequency and Percentage

Gender	Frequency	Valid Percent	Cumulative Percentage
Male	66	22.9	22.9
Female	222	77.1	100
Total	288	100	

**Table 3.3** displays gender composition of sample. 22.9% were males and 77.1% were females out of total 288 population. Our sample contains more data from males.

### 3.6.4 Qualification

TABLE 3.4: Respondents and their Qualification

Qualification	Frequency	Valid Percent	Cumulative Percentage
Bachelor/Graduate	174	60.4	60.4
MS/M-Phil	101	35.1	95.5
PhD	13	4.5	100
Total	288	100	

**Table 3.4** explains the qualification of respondents. As per the analysis, Bachelor/Graduate qualified was 60.4%, MS/M-Phil was 35.1%, and PhD qualified was 4.5% of the total 288 data. The Graduate qualified percentage is high.

### 3.6.5 Work Experience

Below table illustrates job tenure of employees.

TABLE 3.5: Work Experience

Work Experience	Frequency	Valid Percent	Cumulative Percentage
0-5	160	55.6	55.6
06-Oct	52	18.1	73.6
Nov-15	51	17.7	91.3
16 years or above	25	8.7	100
Total	288	100	

**Table 3.5** summarizes the respondents' work experience, in which high percentage of respondents work experience is 55.6% in range (0-5), in range (6-10) and (11-15) the respondent's experience was 25.8% respectively and in category (16 years or above) the respondents' experience was 8.7% only.

### 3.6.6 Designation

TABLE 3.6: Work Experience

Designation	Frequency	Valid Percent	Cumulative Percentage
Manager/Team Lead	79	27.4	27.4
Team Member	209	72.6	100
Total	288	100	

**Table 3.6** illustrates that from total received responses, 72.6% comprises of team members and 27.4% of team leads and managers.

## 3.7 Instrumentation

### 3.7.1 Measures

Pre developed instruments i.e. questionnaires in the English language were used in this study. In Pakistan, English is taught as a compulsory course beginning in

primary school. Respondents should not have had any problems understanding the questionnaires as all of them were university pass outs working in lower, middle and higher management capacity. Respondents indicated the strength of agreement to these statements on a 5 point Likert scale. The items in the questionnaire are rated using Likert scale ranging from 1 (strongly Disagree), 2 (Disagree) 3 (Neutral), 4 (Agree) and 5 for (strongly Agree).

This scale is a short form widely used with better reliability and validity. Simultaneously it is a cumbersome and time-consuming assignment because this study was following an online data collection due to the COVID-19 pandemic. Some of the employees approached were not willing to fill the questionnaire because of their company policies and confidentiality of data. The total number of statements was 48 which were generated to analyze the constructs of 04 dimensions of shared leadership, knowledge sharing, project manager's ambidexterity and project team performance. Furthermore, employment sector, age, gender, qualification, work experience and designation were measured as control variables because past studies indicated that these variables have an enormous impact on work passion which has been discussed above.

### **3.7.2 Shared Leadership**

There has been very limited evidence and material available on the true dimensions to access shared leadership in terms of scale. Based on the literature on leadership and team work, Grille2015 has developed four different aspects which can be used as a reliable and valid instrument to measure shared leadership. We have also adopted their questionnaire in our research which includes task, relation, change and micro-political orientation dimensions each comprising of 05 items.

### **3.7.3 Task Orientation Shared Leadership (TOSL)**

With respect to TOSL, respondents have completed 05-items scale. It was based on a 5 point Likert scale (1= strongly disagree to 5= strongly agree) with reliability of .878. Items measured in this construct are given in the appendix section of this paper.

### **3.7.4 Relation Orientation Shared Leadership (ROSL)**

With respect to ROSL, respondents have also completed 05-items scale. This dimension was also based on a 5 point Likert scale (1= strongly disagree to 5= strongly agree) with reliability of .876. Items measured in this dimension of variable are given in the appendix section of this paper.

### **3.7.5 Change Orientation Shared Leadership (COSL)**

This scale was comprised of 05-items which were measured using 5 point Likert scale (1= strongly disagree to 5= strongly agree) with reliability of .911. Items measured in this dimension of variable are given in the appendix section of this paper.

### **3.7.6 Micro-Political Orientation Shared Leadership (MPOSL)**

With respect to MPOSL, respondents have completed 05-items scale. It was based on a 5 point Likert scale (1= strongly disagree to 5= strongly agree) with reliability of .844. Items measured in this construct are given in the appendix section of this paper.

### **3.7.7 Knowledge Sharing**

Knowledge sharing scale was developed by (Park and Lee, 2014) consists of 06-items with Cronbach's Alpha of .885. It was adopted as mediator in our theoretical model. Items measured in this scale are stated in the appendix section of this research paper. Responses are recorded by using five point Likert scale was used with (1= strongly disagree to 5= strongly agree).

### **3.7.8 Project Manager's Ambidexterity**

Project manager's ambidexterity involved was taken as a moderator in stated model. This was measured with the help of scale developed by Mom, Van Den

Bosch, and Volberda (2009) consists of 14-items with two dimensions of project manager's ambidexterity: Exploratory has 7 items with Cronbach's alphas of .858 ; Exploitative has 7 items with Cronbach's alphas of .867. Five point Likert scale was used with (1= strongly disagree to 5= strongly agree). Items measured in this scale are stated in the appendix section of this research paper.

### 3.7.9 Project Team Performance

Project team performance is accessed as a dependent variable in current study. This construct was measured by questionnaire adopted from Shaw et al. (2011) having 08-items with Cronbach's alphas of .920. It was based on a 5 point Likert scale (1= strongly disagree to 5= strongly agree).

TABLE 3.7: Scales for Measurement

Variables	Authors	Items
Shared Leadership (IV)	Grille 2015	20
Knowledge Sharing (MED)	Park and Lee (2014)	6
Project Manager's Ambidexterity	Mom, Van Den Bosch, and Volberda (2009)	14
Project Team Performance	Shaw et al. (2011)	8

## 3.8 Data Analysis Method

After the gathering of required data for the present study from 288 respondents, the data was analyzed on SPSS software version 20. I have done multiple steps for data investigation. The procedures are given below:

1. Firstly, all incomplete questionnaires must have been excluded before analysis, if any.
2. After data collection researcher transfer all data in the SPSS 20 data sheet and coded all constructs of the questionnaire.

3. All coded constructs were used in the analysis.
4. Frequency tables were drawn to represent the demographic of respondents.
5. Then Reliability analysis of all constructs was conducted.
6. After the reliability analysis, researcher has analyzed the model fitness that was hypothesized.
7. Control variables were explored.
8. In this step, one-way ANOVA analysis was performed to test the effect of each demographics to the dependent variable.
9. To check the model first test was conducted which was Correlation analysis. The researcher checks whether the relationships between the research variables of the current study are significant or not.
10. To examine the projected hypothesis of independent and dependent single linear regression analysis was performed in SPSS 20.
11. Preacher and Hayes Processes 1 and 4 were followed for testing mediation and moderation between the independent and dependent variables.
12. By using correlation analysis and Preacher and Hayes processes, the researcher analyzed the proposed hypotheses to confirm the rejection and acceptance of the projected hypothesis.

### **3.9 Ethical issues in Academic Research**

Ethics in research contributes the novelty in generating new findings; therefore, researchers should keep in their mind several ethics which brings value to their work. There are no pet rules that are to be followed, however some basic points should be followed. Following are some ethical standards that are kept in mind while conducting research:

- Scientific Validity

- Independent review
- Informed consent
- Results should be kept intimate
- Unbiased evaluation
- Data collection should be done with no interference
- Generalizability of results
- No plagiarism
- Novelty

# Chapter 4

## Data Analysis and Discussion

In this part, the researcher interprets the results of a current research setting. Results of descriptive statistics, correlational analysis, reliability analysis and linear regression are represented in both tabular and explanatory. Moreover, the researcher debated the findings and implications of the current research and clarify in addition to focuses and cutoff points of the current study. Future headings are additionally planned in this section.

The purpose of correlation is to show the relationship between two variables, or to examine the movement of the two variables in the same or opposite direction. Correlation analysis is conducted in order to know about the nature of variation between the two variables that if the variables vary together at the same time or not. Basically correlation analysis does not entail relationship between two or more than two variables because it is different from the regression analysis.

In correlation analysis, Pearson correlation analysis tells about the strength and nature of the relationship through Pearson correlation range i-e from -0.1 to 0.1. Hence, through magnitude value we can conclude the strength of the relationship between two variables and that magnitude value can generalize by the distance of correlation from zero. If the correlation is distant from zero that means the relation between the two variables is strong and vice versa. But if the values are zero that straightly means that there exist no relationship between the understudied variables. Positive and negative sign depicts the nature of the relationship, if the

sign is positive that means increase in one variable causes increase in the other variable and that is considered as direct relationship and in the same way if the sign is negative that means that increase in one variable will cause decrease in another variable and that would be an indirect relationship.

## 4.1 Descriptive Statistics

Data were also evaluated for basic information of the collected sample. Basic statistics of all constructs like Task Leadership orientation, Relation Leadership orientation, Change Leadership orientation, and Micro political Leadership orientation, Knowledge Sharing, Project Team Performance, Exploratory PMA, and Exploitative PMA are mentioned in below table. The minimum value, maximum value, mean and standard deviation are illustrated. The mean values depicts the responder's consent towards agreements and disagreements with the items of construct. Higher mean values reveals respondents preference toward agreement side and the lower value describes preference of respondents towards disagreement.

TABLE 4.1: Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
TOSL	288	1	5	4.3868	0.70535
ROSL	288	1.8	5	4.2611	0.7462
COSL	288	1	5	4.2778	0.77796
MPSOL	288	1	5	4.1953	0.75409
KS	288	1	5	4.1227	0.75503
PTP	288	1	5	4.1523	0.77419
Exploratory PMA	288	1	5	3.7862	0.74063
Exploitative PMA	288	1.14	5	3.9335	0.71482
Valid N (listwise)	288				

**Table 4.1** represents the maximum and minimum value of a 5 points Likert scale it also shows the mean and standard deviation of the whole sample. This information explains that 288 was sample size the mean value of task leadership orientation in

the table was 4.38 and standard deviation was 0.70 shows that project managers and team members agree that task leadership orientation of shared leadership effect on team performance.

As the mean value of relation leadership orientation in the table was 4.26, and the standard deviation was 0.74 shows that project managers and team members agree that relation leadership orientation of shared leadership effect on team performance. The mean value of change leadership orientation was 4.27, and the standard deviation was 0.77 depicts that most of the project managers and team members had a leaning towards the agreement side.

As the mean value of micro-political leadership orientation in the table was 4.19 and the standard deviation was 0.75 explain project managers and team members agree that the micro-political leadership orientation of shared leadership affects team performance. Knowledge sharing has a mean value of 4.12 with an SD value of .75 shows that share of knowledge leads to best team performance. The mean value of project team performance was 4.15, and the standard deviation was 0.77 depicts that most of the project managers and team members had inclined towards the agreement side.

The mean value of PMA exploratory was 3.78, and the standard deviation was 0.74 depicts that project managers and project team members agree that exploratory ambidexterity of project managers affects the project team performance. The mean value of PMA exploitative was 3.93, and the standard deviation was 0.71 represents that project managers and project team members agree that exploitative ambidexterity of project managers affects the performance of the project team.

## 4.2 Control Variable

The researcher performed one-way ANOVA by utilizing SPSS 20. The researcher performed one-way ANOVA to distinguish whether demographic variables are essentially impacts dependent variable which is project team performance. The novel component of control factors is there nature which is unessential. Under this nature of factors we shouldn't test these factors for speculation and hypothesis of

any investigation. The Purpose of this test is to distinguish balanced statistical significance between demographic variables like employment sector, gender, age, qualification, experience, and designation.

TABLE 4.2: Control Variables for Project Team Performance

<b>Control Variables</b>	<b>F-value</b>	<b>Significance</b>
<b>Employment Sector</b>	2.055	0.153
<b>Age</b>	2.263	0.081
<b>Gender</b>	0.001	0.972
<b>Qualification</b>	3.683	0.096
<b>Experience</b>	2.871	0.077
<b>Designation</b>	8.935	0.083

As in table 4:2 represents the results of the insignificant difference in project team performance across employment sector ( $F=2.055$ ,  $p>0.05$ ), age ( $F=2.263$ ,  $p>0.05$ ), Gender ( $F=0.0012$ ,  $p>0.05$ ), Qualification ( $F=3.683$ ,  $p>0.05$ ), Experience ( $F=2.871$ ,  $p>0.05$ ), Designation ( $F=8.935$ ,  $p>0.05$ ).

Therefore, all values illustrates insignificant relationships, which represent that there is no need to confound these control variables because these are not creating distortion in the observation of project team performance.

### 4.3 Reliability Analysis

In the literature of psychometrics, homogeneity of scale is known as reliability. (Carlson et al., 2009) mentioned a scale that delivers the same results in multiple

settings is called a reliable scale.

TABLE 4.3: Instrument Reliability

Variables	Items	Reliability (Cronbach's alpha)
TOSL	5	0.878
ROSL	5	0.876
COSL	5	0.911
MPOSL	5	0.844
KS	6	0.885
PTP	8	0.92
Exploratory PMA	7	0.858
Exploitative PMA	7	0.867

In the above **Table: 4.3** Cronbach values of instruments are mentioned. A commonly accepted criterion of Cronbach alpha is  $\alpha$  should be equal or greater than 0.6-0.7. However, values higher to 0.8 is also a good level of reliability. Task leadership orientation Cronbach's alpha value is 0.878 in the present study, relation leadership orientation Cronbach's value is 0.876, Cronbach's value of change leadership orientation in this study is 0.911, the Cronbach's value of micro-political leadership orientation is 0.844 in the current study and knowledge sharing Cronbach's is 0.885. Project team performance has 0.920 Cronbach's value. PMA Exploratory scores 0.858 and PMA exploitative has 0.867 Cronbach's value. Overall all the constructs have good reliability and greater than the threshold value.

#### 4.4 Correlation Analysis

Generally correlation analysis is directed to examine the relationship between quantitative constructs. It is statistical representation of level of relations between two variables. In this current examination principle reason for correlation

analysis is to examine the relationship between the orientations of shared leadership like task, relation, change and micro-political and project team performance with the mediation of knowledge sharing and the moderation of project manager's ambidexterity for approval of developed hypothesis. Correlation is used to figure out dissimilarities between variables that if these variables are change together at same period or not.

Correlation analysis measures the nature and force of relationship and present on the basis of Pearson relationship values. The scope of correlation Pearson value is -0.1 - 0.1. Positive indication of value shows that variables are pushing toward same positive or negative way which gives direct relationship and negative indication of significant value shows that variables are moving against direction of one another. Which shows indirect relationship of variables?

Moreover, "r" value shows the strength of the association. If the value of p is between 0.1- 0.3 it shows weak correlation, the value between the range of 0.3-0.5 shows significant correlation and the p value >0.5 depicts highly correlated association. Correlation matrix for theorized variables of current research setting is given below:

TABLE 4.4: Correlation Matrix

Variables	1	2	3	4	5	6	7	8
TOSL	1							
ROSL	.687**	1						
COSL	.720**	.821**	1					
MPOSL	.653**	.764**	.777**	1				
KS	.590**	.675**	.735**	.661**	1			
PTP	.582**	.598**	.678**	.564**	.694**	1		
Exploratory PMA	.493**	.517**	.553**	.537**	.562**	.622**	1	
Exploitative PMA	.468**	.374**	.474**	.403**	.435**	.534**	.742**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).  $p < 0.05^*$ ,  $p < 0.01^{**}$ .

In correlation analysis, demographics are not included. In table 4.4 researcher illustrate that there is significant relationships exist among constructs with respect

to Pearson value criteria. The positive and highly significant relation between the micro-political leadership orientation and project team performance as per ( $r=.564$ ,  $p<0.01$ ). The positive and significant association existing between the change leadership orientation and knowledge sharing, as per ( $r=.735$ ,  $p<0.01$ ). There is a positive and significant association illustrated between the relation leadership orientation and PMA Exploratory as per ( $r=.517$ ,  $p<0.01$ ). Overall all variables are highly and strongly correlated.

## 4.5 Regression Analysis

To assess the relationship between all variables Pearson correlation analysis was utilized that was insufficient for hypotheses support since correlation analysis has not given any sign of causal relationship thus regression analysis is utilized to find the proof of the causal relationship between variables. Regression analysis is a statistical examination device. This examination instrument assists to recognize the conditions of one variable to another variable. We have two kinds of regression analysis, linear (direct) regression, and multi regression. In this current research setting, the researcher utilized the two kinds of regression. In linear regression, the analyst set up a causal relationship between two develops, and in multi regression set up related among all research variables including moderator and mediator. There are four (04) tables of direct regression given underneath:

### 4.5.1 Linear Regression

TABLE 4.5: Linear Regression Model 1

<b>Project Team Performance</b>			
<b>Predictor</b>	$\beta$	<b>R<sup>2</sup></b>	<b>Sig</b>
TOSL	.639***	0.339	0.000

Hypothesis 1 stated that task leadership orientation influence project team performance. For this hypothesis, the results of table provides strong justification.

There was no control variable because there was insignificant impact of demographics on project team performance. So, demographics were not included in linear regression. Results shows that task leadership orientation has positive and significant link with project team performance as presented by the regression coefficient ( $B=.639$ ,  $p<0.000$ ). In addition, the value of ( $R^2 .339$ ) represents that task leadership orientation brings 33% variations in project team performance.

TABLE 4.6: Linear Regression Model 2

<b>Project Team Performance</b>			
<b>Predictor</b>	$\beta$	$R^2$	<b>Sig</b>
ROSL	.621***	0.358	0.000

Hypothesis 2 stated that relation leadership orientation influence project team performance. For this hypothesis, the results in table provides strong justification. There was no control variable because there was insignificant impact of demographics on project team performance. So, demographics were not included in simple regression. Results shows that relation leadership orientation has positive and significant relationship with project team performance as presented by the regression coefficient ( $B=.621$ ,  $p<0.000$ ). In addition, the value of ( $R^2 .358$ ) denotes that relation leadership orientation brings 35% variations in project team performance.

TABLE 4.7: Linear Regression Model 3

<b>Project Team Performance</b>			
<b>Predictor</b>	$\beta$	$R^2$	<b>Sig</b>
COSL	.675***	0.46	0.000

Hypothesis 3 projected that change leadership orientation influence project team performance. For this hypothesis, the results of table provides solid evidence. There was no control variable because there was insignificant impact of demographics on project team performance. So, demographics were not incorporated in linear regression. Results demonstrates that change leadership orientation has

positive and significant relationship with project team performance as presented by the regression coefficient ( $B=.675$ ,  $p<0.000$ ). In addition, the value of ( $R^2 .460$ ) shows that change leadership orientation bring 46% variations in project team performance.

TABLE 4.8: Linear Regression Model 4

<b>Project Team Performance</b>			
<b>Predictor</b>	$\beta$	$R^2$	<b>Sig</b>
MPOSL	.579***	0.318	0.000

Hypothesis 4 stated that micro-political leadership orientation influence project team performance. For this hypothesis, the results of table plots strong evidence. There was no control variable because there was insignificant impact of demographics on project team performance. So, demographics were not incorporated in linear regression.

Results shows that micro-political leadership orientation has positive significant relationship with project team performance as supported by the regression coefficient ( $B=.579$ ,  $p<0.000$ ). In addition, the value of ( $R^2 .318$ ) indicates that micro-political leadership orientation bring 31% variations in project team performance.

TABLE 4.9: Linear Regression Model 5

<b>Project Team Performance</b>			
<b>Predictor</b>	$\beta$	$R^2$	<b>Sig</b>
Knowledge Sharing	.712***	0.482	0.000

Hypothesis 9 is enunciates that knowledge sharing affect project team performance. For this hypothesis, the results in table provides strong justification. There was no control variable because there was no significant impact of demographics on project team performance. So, demographics were excluded in linear regression. Results illustrate that knowledge sharing has positive and significant relationship

with project team performance as presented by the regression coefficient ( $B=.712$ ,  $p<0.000$ ). In addition, the value of ( $R^2 .482$ ) represents that knowledge sharing brings 48% variations in project team performance.

#### 4.5.2 Multi Regression

For present study, mediation and moderation analysis were measured by adopting (Hayes, 2018) process macros. Mediation analysis was conducted to explore knowledge sharing as a mediator between task, relation, change, micro-political leadership orientation, and project team performance. To analysis this, process macros were utilized and model 4 was applied to test mediation regression analysis. Additionally, moderation analysis was piloted to examine project manager's ambidexterity: Exploratory and exploitative as a moderator between task, relation, change, micro-political leadership orientation, and knowledge sharing for this model 1, was utilized. In adding, as our model is moderated mediation model so for that persistence model 7 was applied.

TABLE 4.10: Mediation Task Leadership Orientation

IV	Effect of IV on M	Effect of M on DV	Direct Effect	Total Effect	Bootstrapping Result for Indirect Effect	
					LL 95%	UL 95%
<b>TOSL</b>	.631***	.290***	.290***	.638***	0.2066	0.5050

*TOSL .631\*\*\* .290\*\*\* .290\*\*\* .638\*\*\* 0.2066 0.5050 N=288, IV Independent variable, M Mediator Variable, DV Dependent variable, LL Lower level confidence interval UL Upper level confidence interval \*\*\*  $p<0.000$ .*

Hypothesis 10 enunciates that knowledge sharing will mediate the relation between task leadership orientation and project team performance. The results shown in the table 4.6, provides strong evidence. As mentioned in above table effect of task leadership orientation on knowledge sharing is positively significant link with

coefficient regression ( $B=.631$ ,  $p<0.000$ ), so developed hypothesis 5 is supported. Moreover, in table 4.6: depicts that indirect effect of task leadership orientation on project team performance has the lower level confidence interval and upper level confidence interval of .2066 and .5050. Both the ULCI and LLCI has similar sign positive and there was no zero exist between these two limits. Therefore, we can conclude that mediation is happening. Therefore, hypothesis 10, was supported, that knowledge sharing mediates the relationship between task leadership orientation and project team performance.

TABLE 4.11: Mediation Relation Leadership Orientation

IV	Effect of IV on M	Effect of M on DV	Direct Effect	Total Effect	Bootstrapping Result for Indirect Effect	
					LL 95%	UL 95%
<b>ROSL</b>	.682***	.547***	.262***	.620***	0.2361	0.5221

$N=288$ , IV Independent variable, M Mediator Variable, DV Dependent variable, LL Lower level confidence interval UL Upper level confidence interval \*\*\*  $p<0.000$ .

Hypothesis 11 states that knowledge sharing will mediate the link between relation leadership orientation and project team performance. The results shown in the table 4.7, provides strong evidence. As mentioned in above table effect of relation leadership orientation on knowledge sharing is positively significant link with coefficient regression ( $B=.682$ ,  $p<0.000$ ), so developed hypothesis 6 is supported. Moreover, in table 4.7 depicts that indirect effect of relation leadership orientation on project team performance has the lower level confidence interval and upper level confidence interval of .2361 and .5221. Both the ULCI and LLCI has similar positive signs and there was no zero exist between these two limits. Therefore, we can conclude that mediation is happening. Therefore, hypothesis 11, was supported, that knowledge sharing mediates the relationship between relation leadership orientation and project team performance.

$N=288$ , IV Independent variable, M Mediator Variable, DV Dependent variable, LL Lower level confidence interval UL Upper level confidence interval \*\*\*  $p<0.000$ .

TABLE 4.12: Mediation Change Leadership Orientation

IV	Effect of	Effect of M on	Direct effect	Total effect	Bootstrapping result for indirect effect	
	IV on M	of M on DV	Effect	Effect	LL 95%	UL 95%
COSL	.713***	.436***	.363***	.674***	0.1595	0.4908

Hypothesis 12 states that knowledge sharing will mediate the association between change leadership orientation and project team performance. The results shown in the table 4.8, provides strong evidence. As mentioned in above table effect of change leadership orientation on knowledge sharing is positively significant link with coefficient regression ( $B=.713$ ,  $p<0.000$ ), so developed hypothesis 7 is supported. Moreover, in table 4.8 depicts that indirect effect of change leadership orientation on project team performance has the lower level confidence interval and upper level confidence interval of .1595 and .4908. Both the ULCI and LLCI has similar positive signs and there was no zero exist between these two limits. Therefore, we can conclude that mediation is happening. Therefore, hypothesis 12, was supported, that knowledge sharing mediates the relationship between change leadership orientation and project team performance.

TABLE 4.13: Mediation Micro-Political Leadership Orientation

IV	Effect of	Effect of M on	Direct Effect	Total Effect	Bootstrapping Result for Indirect Effect	
	IV on M	of M on DV	Effect	Effect	LL 95%	UL 95%
MPOSL	.661***	.585***	.191***	.578***	0.2233	0.5536

$N=288$ , IV Independent variable, M Mediator Variable, DV Dependent variable, LL Lower level confidence interval UL Upper level confidence interval \*\*\*  $p<0.000$ .

Hypothesis 13 states that knowledge sharing will mediate the association between micro-political leadership orientation and project team performance. The results

shown in the table 4.9, provides strong evidence. As mentioned in above table effect of micro-political leadership orientation on knowledge sharing is positively significant link with coefficient regression ( $B=.661$ ,  $p<0.000$ ), so developed hypothesis 8 is supported. Moreover, in table 4.9 depicts that indirect effect of micro-political leadership orientation on project team performance has the lower level confidence interval and upper level confidence interval of .2233 and .5536. Both the ULCI and LLCI has similar positive signs and there was no zero exist between these two limits. Therefore, we can conclude that mediation is happening. Therefore, hypothesis 13, was supported, that knowledge sharing mediates the relationship between micro-political leadership orientation and project team performance.

TABLE 4.14: Moderation Effect of Exploratory Project Manager's Ambidexterity and Exploitative Project Manager's Ambidexterity

Variables	$\beta$	SE	T	P	LLCI 95%	ULCI 95%
<b>Exploratory Project Manager's Ambidexterity</b>						
TOSL $\times$ KS	0.123	0.047	2.609	0.009	0.0302	0.215
ROSL $\times$ KS	0.0216	0.049	0.439	0.66	-0.075	0.1181
COSL $\times$ KS	0.079	0.042	1.875	0.061	-0.0039	0.163
MPOSL $\times$ KS	0.074	0.043	1.713	0.0877	-0.0111	0.1604
<b>Exploitative Project Manager's Ambidexterity</b>						
TOSL $\times$ KS	0.139	0.051	2.73	0.006	0.039	0.2404
ROSL $\times$ KS	0.05	0.048	1.028	0.304	-0.0457	0.1457
COSL $\times$ KS	0.117	0.042	2.768	0.006	0.0338	0.2002
MPOSL $\times$ KS	0.069	0.045	1.535	0.125	-0.0196	0.1584

For moderation, hypothesis was given. Hypothesis 14 enunciates that exploratory

project manager's ambidexterity moderates the link between task leadership orientation and knowledge sharing such that task leadership orientation will have stronger positive relationship with knowledge sharing for project managers who have exploratory ambidexterity. Table 4.10, results provides evidence for hypothesis 14. The reason is interaction term of "task leadership orientation and exploratory project manager's ambidexterity" moderates on the relationship of "task leadership orientation and knowledge sharing" has the lower level and upper level confidence interval of 0.0302 and 0.2150 and both have the similar sign and zero is not existing.

Likewise the interaction term shown positive and significant regression coefficient ( $\beta=0.123$ ,  $p<.009$ ) means that exploratory project manager's ambidexterity moderates the relationship of task leadership orientation and knowledge sharing such that task leadership orientation have stronger positive link with exploratory project manager's ambidexterity for project team performance. Hence, we settle that hypothesis 14 was accepted for moderation.

Table 4.10, results provides evidence against hypothesis 15. The reason is interaction term of "relation leadership orientation and exploratory project manager's ambidexterity" moderates on the relationship of "relation leadership orientation and knowledge sharing" has the lower level and upper level confidence interval of -.0750 and 0.1181 and both have the opposite sign and there is zero between them. Likewise the interaction term shown positive and insignificant regression coefficient ( $\beta=.0216$ ,  $p<.660$ ) means that exploratory project manager's ambidexterity does not moderates the relationship of relation leadership orientation and knowledge sharing such that relation leadership orientation have positive weaker link with exploratory project manager's ambidexterity for project team performance. Hence, we settle that hypothesis 15 was not accepted for moderation.

In above table 4.10, shown results are against the support of projected hypothesis 16. Because the interaction term of "change leadership orientation and exploratory project manager's ambidexterity" has not moderating effect on the link of "change leadership orientation and knowledge sharing" with the LLCI and ULCI of -.0039 and 0.1630 having opposite signs and there is zero between the range of LLCI and ULCI. Same as interaction term of change leadership orientation and

exploratory project manager's ambidexterity depicted insignificant regression coefficient ( $\beta=0.079$ ,  $p>0.05$ ) which shows that exploratory project manager's ambidexterity has not moderating effect on the link of change leadership orientation and knowledge sharing thus exploratory project manager's ambidexterity has no link with knowledge sharing of project managers and project team. Therefore, researcher stated that hypothesis 16 is rejected.

In above table 4.10, shown results are against the support of projected hypothesis 17. Because the interaction term of "micro-political leadership orientation and exploratory project manager's ambidexterity" has not moderating effect on the link of "micro-political leadership orientation and knowledge sharing" with the LLCI and ULCI of  $-0.0111$  and  $0.1604$  having opposite signs and there is zero between the range of LLCI and ULCI. Same as interaction term of micro-political leadership orientation and exploratory project manager's ambidexterity depicted insignificant regression coefficient ( $\beta=0.074$ ,  $p>0.05$ ) which shows that exploratory project manager's ambidexterity has not moderating effect on the link of micro-political leadership orientation and knowledge sharing thus exploratory project manager's ambidexterity has no link with knowledge sharing of project managers and project team. Therefore, researcher stated that hypothesis 17 is rejected.

Hypothesis 18 stated that exploitative project manager's ambidexterity moderates the link between task leadership orientation and knowledge sharing such that task leadership orientation will have stronger positive relationship with knowledge sharing for project managers who practice exploitative ambidexterity. **Table 4.10**, results provide strong judgment for hypothesis 18. The reason is interaction term of "task leadership orientation and exploitative project manager's ambidexterity" moderates on the relationship of "task leadership orientation and knowledge sharing" has the lower level and upper level confidence interval of  $0.0390$  and  $0.2404$  and both have the similar sign and zero is not existing. Likewise the interaction term shown positive and significant regression coefficient ( $\beta=0.139$ ,  $p<.05$ ) means that exploitative project manager's ambidexterity moderates the relationship of task leadership orientation and knowledge sharing such that task leadership orientation have stronger positive link with exploitative project manager's ambidexterity. Hence, we settle that hypothesis 14 was accepted for moderation.

Hypothesis 19 projected that exploitative project manager's ambidexterity moderates the link between relation leadership orientation and knowledge sharing such that relation leadership orientation will have stronger positive relationship with knowledge sharing for project managers who practice exploitative ambidexterity.

**Table 4.9**, results provide evidence for hypothesis 19.

The reason is interaction term of "relation leadership orientation and exploitative project manager's ambidexterity" moderates on the relationship of "relation leadership orientation and knowledge sharing" has the lower level and upper level confidence interval of -.0457 and 0.1457 and both have the opposite sign and there is zero between them.

Likewise the interaction term shown positive and insignificant regression coefficient ( $\beta=0.050$ ,  $p<.05$ ) means that exploitative project manager's ambidexterity does not moderates the relationship of relation leadership orientation and knowledge sharing such that relation leadership orientation have no link with exploitative project manager's ambidexterity . Hence, we settle that hypothesis 19 was not accepted for moderation.

Hypothesis 20 proposed that exploitative project manager's ambidexterity moderates the link between change leadership orientation and knowledge sharing such that change leadership orientation will have stronger positive relationship with knowledge sharing for project managers who practice exploitative ambidexterity.

**Table 4.10**, results provide strong judgment for hypothesis 20.

The reason is interaction term of "change leadership orientation and exploitative project manager's ambidexterity" moderates on the relationship of "change leadership orientation and knowledge sharing " has the lower level and upper level confidence interval of 0.0338 and 0.2002 and both have the similar sign and zero is not existing. Likewise the interaction term shown positive and significant regression coefficient ( $\beta=0.139$ ,  $p<.05$ ) means that exploitative project manager's ambidexterity moderates the relationship of change leadership orientation and knowledge sharing such that change leadership orientation have stronger positive link with exploitative project manager's ambidexterity. Hence, we settle that hypothesis 20 was accepted for moderation.

Hypothesis 21 anticipated that exploitative project manager's ambidexterity moderates the link between micro-political leadership orientation and knowledge sharing such that micro-political leadership orientation will have stronger positive relationship with knowledge sharing for project managers who practice exploitative ambidexterity. **Table 4.10**, results provide evidence for hypothesis 21. The reason is interaction term of "micro-political leadership orientation and exploitative project manager's ambidexterity" moderates on the relationship of "micro-political leadership orientation and knowledge sharing" has the lower level and upper level confidence interval of -.0196 and 0.1584 and both have the opposite sign and there is zero between them. Likewise the interaction term shown positive and insignificant regression coefficient ( $\beta=0.069$ ,  $p<.05$ ) means that exploitative project manager's ambidexterity does not moderates the relationship of micro-political leadership orientation and knowledge sharing such that micro-political leadership orientation have no link with exploitative project manager's ambidexterity . Hence, we settle that hypothesis 21 was not supported for moderation.

## 4.6 Summary of Hypotheses

Hypothesis	Statement	Result
H1	Task Leadership Orientation has positive impact on project team performance	Supported
H2	Relation leadership orientation has positive impact on project team performance	Supported
H3	Change leadership orientation has positive impact on project team performance	Supported
H4	Micro political leadership orientation has positive impact on project team performance	Supported
H5	Task Leadership Orientation has positive impact on knowledge sharing	Supported

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H6	Relation leadership orientation has positive impact on knowledge sharing	Supported
H7	Change leadership orientation has positive impact on knowledge sharing	Supported
H8	Micro political leadership orientation has positive impact on knowledge sharing	Supported
H9	Knowledge Sharing has positive impact on project team performance	Supported
H10	The level of knowledge sharing positively mediating the relationship between task leadership orientation and project team performance	Supported
H11	The level of knowledge sharing positively mediating the relationship between relation leadership orientation and project team performance	Supported
H12	The level of knowledge sharing positively mediating the relationship between change leadership orientation and project team performance	Supported
H13	The level of knowledge sharing positively mediating the relationship between micro political leadership orientation and project team performance	Supported
H14	Positive relationship between task leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.	Supported
H15	Positive relationship between relation leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.	Not supported

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H16	Positive relationship between change leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.	Not supported
H17	Positive relationship between Micro political leadership and knowledge sharing will be stronger when exploratory project manager's ambidexterity is high.	Not supported
H18	Positive relationship between task leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.	Supported
H19	Positive relationship between relation leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.	Not supported
H20	Positive relationship between change leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity high.	Supported
H21	Positive relationship between Micro political leadership and knowledge sharing will be stronger when exploitative project manager's ambidexterity is high.	Not supported

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# Chapter 5

## Discussion and Conclusion

This section of paper relates to the comprehensive discussion of the hypothesis generated with literature support and justification of the results taking into consideration the theory and empirical evidence. This chapter is divided into three main parts where part 1 discusses the four important dimensions of shared leadership and hypothesis results; the second part discusses the theoretical and practical implications. The last portion of the section discusses the limitations and future research. Our study focuses on the implementation of shared leadership practices specifically in project-based organizations to impact project team performance.

We were also interested in finding whether project manager's ambidexterity moderates the relationship between shared leadership and knowledge sharing which ultimately impact project team performance. Different tests were conducted to see which dimension of shared leadership strongly influence project team performance in the presence of knowledge sharing. Apart of shared leadership, two dimensions i.e. exploratory and exploitative of PMA are also tested and discussed in detail.

Research studies done during 1960s and 1970s, there has been so much emphasis put on the categories of shared leadership. On the basis of the work done by Grille (2015) and the results obtained from current study, we through an idea that task, relation, change and micro-political orientation can be stated as an important dimensions of shared leadership. Results from current study further supports that TOSL, COSL, ROSL & MPOSL can be used as separate dimensions in measuring

the variation of shared leadership that led to knowledge sharing and improved team performance.

Shared leadership leads to better organizational performance. When individuals feel that they have an impact on the project and that they have some power and sense of responsibility, they have a greater desire for success. According to the literature cited, Ye et al. (2019) declared that Leadership style having practical involvement in project activities yields better results through innovation as it encourages team to feel empowered. Results revealed that there is a strong and significant relationship between dependent and independent variables.

The study serves evidence from the project based organizations of Pakistan working in cities of Rawalpindi and Islamabad and the findings can be used by the policymakers/higher management and managers for effectiveness in the project fields. The study developed 21 hypotheses and out of which 16 hypotheses were supported by data findings and theory as well.

Hypothesis 1, 2, 3 and 4 states that all stated 04 dimensions of shared leadership have positive impact on project team performance. Findings of our results show that task, relation, change and micro-political orientation shared leadership are directly related to project team performance. Our results are in line with the findings of Kim & Han (2019) that ROSL, TOSL and Creativity Orientation Shared Leadership (COSL) are key elements of shared leadership in determining project team performance. They further narrated that shared leadership style is a source to build trust within a team which ultimately brings positive learning environment.

The link among multiple dimensions of shared leadership and project team performance is also discussed in the literature (Han & lee, 2018) and concluded that shared leadership dimensions effect project team performance. In another study similar results were supported that empowering leadership of upper-level leaders stimulates the authority of lower-level leaders, which as a result improves the performance of team members (Ali, Wang, & Johnson, 2020).

Hypothesis 5, 6, 7 & 8 states that all stated 04 dimensions of shared leadership have positive impact on knowledge sharing. Knowledge sharing is used as a mediator

in our model which is a cause of enhanced project team performance. Results of our tests show that task, relation, change and micro-political orientation shared leadership are positively related to knowledge sharing within a team. Our results support the findings of prior researches of Zhang & Min, (2019) and Rauniar, Rawski, Morgan, & Mishra, (2019) by showing that Knowledge hiding negatively influences group getting by means of triggering distrust amongst individuals.

They further stated that poor impact of knowledge hiding by managers is then reflected their teams overall performance (i.e. prolonged project schedule, increased project budget, less productiveness of team operation, and lesser first-class of project teams' deliveries). Turner (2014) concluded that through use of consolidated project techniques and tools such as knowledge management, greater level of project goals and enhanced team performance can be achieved.

We hypothesize in hypothesis 09 that knowledge sharing has positive impact on project team performance. Our findings support our hypothetical statement and tests confirmed that sharing of knowledge among team members has strong and direct effect on team's performance. Past literature has also supported our current results. Research studies conducted by Nesheim & Hunskaar (2015), Hansen et al. (1999) and Zhang & Li (2016) indicates that trend of knowledge sharing within an organization helps in achieving higher performance and achieving organizational goals.

Hypothesis 10, 11, 12 and 13 states that knowledge sharing is mediating the relationship between 04 dimensions of shared leadership (TOSL, ROSL, COSL & MPOSL) and project team performance. These hypotheses are supported by our results which are achieved through running different tests using SPSS. Previous work done by Zhang & Li (2016) and Love, Smith, Ackermann, & Irani (2019) Knowledge diversity and relationships within team play vital roles in figuring out knowledge reclaim behaviors. These behaviors of leader encompass such traits that will nurture team and brings improved performance out of them. The tested 04 dimensions of shared leadership support the positive learning culture and must be inculcated in the leaders for successful teams. For smooth and improved project team's performance, upper management must bring such practices and which promote knowledge sharing culture among team members. Results of past studies had

also shown that direct relationship exist between knowledge management/sharing & project team performance outcomes (Rauniar, et al, 2019). Findings of Rauniar, Rawski, Morgan and Mishra (2019) also shows similar relationship i.e. sharing of information among project team members reflects the foundational factors of communication, interaction, engagement, and studying through which facts is disseminated across participants that can eventually advantage project performance outcomes.

Further to above, we have also applied several tests to check exploratory and exploitative dimensions of project manager's ambidexterity and how it affects the relationship between all the 04 dimensions of shared leadership and knowledge sharing. Hypothesis 14, 15, 16 and 17 states positive relationship between TOSL/ROSL/COSL/MPOSL and knowledge sharing is stronger when exploratory dimension of project manager's ambidexterity is high. Our results shows that impact of exploratory dimension is greater between relationships of task orientation shared leadership and knowledge sharing. We have received negative results when this dimension is tested for the rest of dimensions i.e. COSL, ROSL and MPSOL. The rejection of hypothesis 15, 16 & 17 shows that exploratory trait of project manager's ambidexterity does not moderates the relationship between COSL, ROSL, MPOSL and knowledge sharing.

Hypothesis 18, 19, 20 and 21 states positive relationship between TOSL/ROSL/-COSL/MPOSL and knowledge sharing is stronger when exploitative dimension of project manager's ambidexterity is high. The acceptance of hypothesis 18 and 20 shows that exploitative project manager's ambidexterity is strengthening the relationship between TOSL/COSL and knowledge sharing. Similar results are supported by literature done by Caniels, Neghina & Schaetsaert (2017). Findings from results of hypothesis 19 & 21 show that exploitative dimension do not moderate the positive relationship between ROSL/MPOSL and knowledge sharing.

Based on above discussion, this study highlights the importance of 04 vital dimensions of shared leadership that are if present, simultaneously affect project team performance. We end up claiming that four dimensions of shared leadership and project team performance has significant and positive relation and knowledge sharing mediates the relationship among independent and dependent variables.

However, exploratory behavior only moderates the relationship in case of TOSL and exploitative in case of TOSL & COSL respectively. In reality, team leaders are so reluctant to incorporate change and innovation into practice due to fear of rejection and failure and similar findings are obtained from current study. It is shown that project based organizations within Pakistan does not support such culture which promotes trial and error in leadership styles.

Here in Pakistan, organizational culture, teams working style and their dynamics are different from multinational firms operating worldwide and their tools and techniques, because of difference in context and working environments there may certain other factors that are impacting project team performance because of any other variable other than ambidexterity. Public sector of Pakistan does not normally focus on their organizational cultures and their flexibility and this is shown by our results which are showing that manager's ambidexterity does not moderates the impact of shared leadership (ROSL/COSL & MPOSL) and knowledge sharing on project team performance.

## **5.1 Theoretical Implications**

This current study adds value to shared leadership research by confirming and validating new sub-dimensions of shared leadership ie. Change orientation and micro-political orientation. This quantitative study supports COSL & MPOSL, which shed light on the research conducted on shared leadership domain. In the past, many researchers have found a direct and positive link between shared leadership and team performance (Hu et al. 2017; Han et al, 2020). This may imply that change-oriented and micro-political orientated shared leadership traits will emerge when performing teamwork and possibly enhance project team performance. This study further confirms the likelihood of including a MPOSL & COSL component into shared leadership dimensions as a new contribution when structuring shared leadership constructs and theories. In addition, there is very limited work done on scales that can be used to access shared leadership behavior. Our research will serve as great theoretical implication as results are in line with past literature

that TOSL, ROSL, COSL and MPSOL are key and vital scales to measure shared leadership style for evaluating project team performance.

## **5.2 Practical Implications**

The present findings have several implications for managers in terms of instructional design and learning culture in project based organization. Project managers can suggest such interventions (e.g. knowledge management tools) for teams to build shared leadership and knowledge sharing. Our finding supports shared leadership, including TOSL, COSL, ROSL, and MPOSL, as vital factors for achieving higher team performance because these dimensions has direct effects on project team performance. More importantly, shared leadership may enhance knowledge sharing, which ultimately enhances a positive learning work environment and overall culture. This study and its findings will help project managers to achieve optimal project team performance through knowledge sharing practices shared leadership style.

Based on our rejected hypothesis, project managers should try to find out those practices and systems that help in generating at promote shared leadership through use of exploratory and exploitative behaviours. Organizations should develop such systems that encourage trial and error in exploring new trends and discourage knowledge hiding culture and promotes healthy and flexible team environment. Evidence from this study suggests that in order to achieve improved team performance, there should be an environment in an organization which is conducive for managerial ambidexterity and knowledge learning practices for successful execution of shared leadership styles.

## **5.3 Research Limitation**

Though this research is comprehensive and provides substantial insights, it is subject to several limitations. First, a cross-sectional research was performed, thereby inducing caution in interpreting causal findings. However, literature written by

Gibson and Birkinshaw (2004) and Mom et al. 2009, supports the causal reasoning of shared leadership and manager's ambidexterity being affected by a culture of motivation, knowledge sharing, and empowerment. Future longitudinal research may add a momentous contribution in this respect.

Research studies providing a dynamic perspective on manager's explorative and exploitative behavior with respect to shared leadership are still scarce. A second possible limitation is the use of questionnaire for data collection, taken as non-serious activity by most employees and gives perception-based data and may lack a factual point. Hence, the validity of data can be improved using structured interviews. Third, Convenience sampling technique was used for data collection. There was limitation of sample size and were collected only from project based organizations operating in Rawalpindi and Islamabad. Researchers can take large sample size with different sampling technique.

## **5.4 Future Directions**

As there is limited work done on dimensions of shared leadership, i would highly recommend future researchers to further investigate on different dimensions that can be used to access shared leadership by applying EFA and CFA tests in different industries operating within Pakistan. Further to this, tests can also be conducted between private and public sector organizations to see how different dynamics in two cultures impact project team performance in the presence of shared leadership and knowledge sharing. Future research can also test the mediation of management support between shared leadership and project team performance. It will be attention-grabbing to see whether future work that use a broad structure of empowering leadership style will come to findings about the relationship with managerial ambidexterity that are homogenous to the ones found in current study. Finally, the results leave open the prospect that a shared leadership and knowledge sharing culture may impact exploration and exploitation in multiple ways. This concept adds to studies presented by O'Reilly2008 and Birkinshaw2004, which have indicated that exploratory and exploitative learning behaviors have various different roots each of which can boost a certain type of actions while obstructing the

other. Further research should explore whether a a culture if promoting knowledge sharing practices has a different outcome on exploitative and exploratory behaviors if supported by certain leadership style.

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# Appendix-A

## Questionnaire

**Dear Respondent**

I am MS research student at Capital University of Sciences and Technology, Islamabad, I am conducting research for my research paper titled as “**Impact of Shared Leadership on Project Team Performance with mediation of Knowledge Sharing and Moderation of Project Managers Ambidexterity**”. It will take your 15 minutes to answer the questions and to providing the valuable information. I assure you that data will be kept confidential and will only be used for academic purposes.

Sincerely,

**Shamsa Naz,**

**MS (PM) Research Scholar,**

**Faculty of Management and Social Sciences,**

**Capital University Science and Technology, Islamabad.**

## Section 1: Demographics

Sector	1- Public 2- Private
Age(years)	1 (21-30), 2 (31-40), 3 (41-50), 4 (51-above)
Gender	1- Male 2- Female
Qualification	1 (Bachelors), 2 (MS/M.Phil.), 3 (PhD)
Experience(years)	1 (0-5), 2 (6-10), 3 (11-15), 4 (16-above years)
Designation	1 (Manager/Team Leader), 2 (Team Member)

## Section 2: Shared Leadership

Please tick the relevant choices:

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

<b>Task Orientation Shared Leadership</b>					
As a team we clearly assign tasks	1	2	3	4	5
As a team we clearly communicate our expectations	1	2	3	4	5
As a team we provide each other with work relevant information	1	2	3	4	5
As a team we ensure that everyone knows their tasks	1	2	3	4	5
As a team we monitor goal achievement	1	2	3	4	5
<b>Relation Orientation Shared Leadership</b>					
As a team we take sufficient time to address each other's concerns	1	2	3	4	5
As a team we recognize good performance	1	2	3	4	5
We promote team cohesion.	1	2	3	4	5
We support each other in handling conflicts within the team	1	2	3	4	5
As a team we never let each other down	1	2	3	4	5
<b>Change leadership orientation</b>					

We help each other to correctly understand ongoing processes in our team	1	2	3	4	5
As a team we help each other to learn from past events	1	2	3	4	5
As a team we help each other to correctly understand current company events	1	2	3	4	5
As a team we can inspire each other for ideas	1	2	3	4	5
As a team we support each other with the implementation of ideas	1	2	3	4	5
<b>Micropolitical leadership orientation</b>					
We use networks in order to support our team's work.	1	2	3	4	5
We ensure that our team is supported with necessary resources to fulfill the task	1	2	3	4	5
As a team we assist each other to network	1	2	3	4	5
We establish contact with important experts valuable for our team	1	2	3	4	5
As a team we are open to external assistance in the case of internal team problems	1	2	3	4	5

### Section 3: Knowledge Sharing

Please tick the relevant choices:

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

Sr. No.	Statements					
1	We share the minutes of meetings or discussion records in an effective way.	1	2	3	4	5
2	We always provided technical documents, including manuals, Books, training materials to each other.	1	2	3	4	5

3	We shared project plans and the project status in an effective way.	1	2	3	4	5
4	We always provided know-where or know-whom information to each other in an effective way.	1	2	3	4	5
5	We tried to share expertise from education or training in an effective way.	1	2	3	4	5
6	We always shared experience or know-how from work in a responsive and effective way.	1	2	3	4	5

## Section 4: Project Team Performance

Please tick the relevant choices:

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

Sr. No.	Statements					
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: Project Managers Ambidexterity

Please tick the relevant choices:

1= to very small extent, 2= to small extent, 3= Neither/Neutral, 4= to large extent, 5= to very large extent

To what extent did you, last year, engage in work related activities that can be characterized as follows?

<b>Exploratory</b>						
<b>Sr. No.</b>	<b>Statements</b>					
1	Searching for new possibilities with respect to products/services, processes, or markets.	1	2	3	4	5
2	Evaluating diverse options with respect to products/services, processes, or markets.	1	2	3	4	5
3	Focusing on strong renewal of products/services or processes.	1	2	3	4	5
4	Activities of which the associated yields or costs are currently unclear	1	2	3	4	5
5	Activities requiring quite some adaptability of you.	1	2	3	4	5
6	Activities requiring you to learn new skills or knowledge	1	2	3	4	5
7	Activities that are not (yet) clearly existing company policy.	1	2	3	4	5
<b>Exploitative</b>						
8	Activities of which a lot of experience has been accumulated by yourself	1	2	3	4	5
9	Activities which you carry out as if it were routine	1	2	3	4	5
10	Activities which serve existing (internal) customers with existing services/products	1	2	3	4	5
11	Activities of which it is clear to you how to conduct them	1	2	3	4	5
12	Activities primarily focused on achieving short term goals	1	2	3	4	5

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13	Activities which you can properly conduct by using your present knowledge	1	2	3	4	5
14	Activities which clearly fit into existing company policy	1	2	3	4	5