

CAPITAL UNIVERSITY OF SCIENCE AND  
TECHNOLOGY, ISLAMABAD



**Impact of Temporal Leadership  
on Organizational Ambidexterity:  
Mediating Role of Team  
Flexibility and Moderating Role  
of Collaborative Culture**

by

**Tahira Aslam**

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

in the

**Faculty of Management & Social Sciences  
Department of Management Sciences**

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*I want to dedicate my thesis to my beloved parents and respected teachers who  
always encourage me and support me to achieve my career goal.*



## CERTIFICATE OF APPROVAL

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Then which of the Blessings of your Lord will you deny. (Surah Ar-Rehman)

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## *Abstract*

Current research literature on project-based organizations does not provide detailed insights on how project based organizations can achieve ambidexterity in organizations. This research thesis explores those accentuating factors that can be ascertained to contribute in improving organizational ambidexterity. Data was collected from 265 respondents working in various project based organizations across Pakistan. The research examined the impact of temporal leadership on organizational ambidexterity. The results of the research indicate that temporal leadership has significantly positive impact on organizational ambidexterity. The mediating role of team flexibility is also significantly positive between the relationship of temporal leadership and organizational ambidexterity. The moderating role of collaborative culture has also shown significant impact on the relationship between temporal leadership and team flexibility. The study significantly contributes to the area of research specifically in the domain of project management. This framework will contribute positively in a productive manner towards achievement of the desired goals and milestones of the project along with active involvement of project manager making the best use of leadership on the team flexibility through his cultural interactions. The implications, limitations and future directions are discussed.

**Keywords: Temporal Leadership, Team Flexibility, Collaborative Culture, Organizational Ambidexterity.**



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# Abbreviations

|            |                              |
|------------|------------------------------|
| <b>CC</b>  | Collaborative Culture        |
| <b>CFA</b> | Confirmatory Factor Analysis |
| <b>OA</b>  | Organizational Ambidexterity |
| <b>PM</b>  | Project Manager              |
| <b>TF</b>  | Team Flexibility             |
| <b>TL</b>  | Temporal Leadership          |

# Chapter 1

## Introduction

### 1.1 Background of the Study

Leadership is considered as unique critical gauge of project success especially in project-based organizations where resources are limited and project needs to be delivered in a defined time span (Dwivedula et al., 2016). Leadership is “the competency of an individual to motivate, influence and empower others to subsidise toward the efficiency and prosperity of the organization” (House and Mansor, 1999). Leadership is one of the most persuasive interpreter towards innovation (Dorfman, 1996; Javidan and Carl, 2005). The association between leadership and innovation has expanded amplified consideration in the theoretical literature. (Mohammed and Harrison, 2013).

Organizations have become dominant and persistent; the significance of management and leadership is needed to maintain equaliser stability in the organization. Team members mostly become uneasy to manage and understand the structure of organization and in the result; the managers are clueless about the thinking of their subordinates (Bolman and Deal, 2000). Therefore, according to Osborne & Winterkorn, there is a need to develop bold leadership for the organizations to be prosperous in projects. Leadership in projects is transferable from the project manager (vertical leadership) towards the employee line (horizontal leadership) along with these managerial and theoretical dimensions that further inspects the

flexibility of project team towards leadership (Yu et al., 2018).

As for any organizations, the project is considered as a temporary endeavor which is planned to achieve goals and objectives so many researchers interpret for the temporal unpredictability to illuminate innovation (Mitchell and James, 2001). Temporal Leadership has been defined as “The leader’s behaviour who encourage in achieving goals, managing and coordinating the pacing of achievement of the tasks in the teams” (Mohammed and Nadkarni, 2011). Researches highlighted the importance of Temporal leadership that has been considered as those who take care of the temporal aspects of the project (Ancona et al., 2001). It enables that how confidently the project leader facilitates temporal framework (Zaccaro et al., 2001).

Temporal leadership is considered as the important mechanism, which enhances the organizational performance and results in the time efficiency and time effectiveness positively. Set of actions that encompass temporal leadership are synchronizing, scheduling and allocating temporal resources. (Mohammed and Nadkarni, 2011). Many studies indicate that positive outcome of projects need the project context that links the relation between leadership competences and project success (Shao et al., 2017). Projects are increasingly relying on teamwork and effective leader is one who motivates the team members to work that result in effective outcome (Potipiroon and Ford, 2017). Two major factors flexibility and reflexivity that should be followed on different steps of innovation through which the willingness and adaptation of employees lead towards the organizational performance. These steps greatly influence in enhancing the creative sense in the employees by providing them the ways. (Farnese and Livi, 2016).

Golden and Powell (2000) describe team flexibility laterally with four magnitudes: responsiveness, efficiency, robustness and versatility. The initial two magnitudes describe the effort and the interval occupied to response to fluctuations, while the last two defines in terms of opportunity that an organization be able to response to fluctuations. Now a day’s research focused on the process of innovation towards new resources. Flexibility states towards adaptation in response to range of changes (Wright and Snell, 1998; Sanchez, 1995). Bledow et al. (2009), propose



team to be more flexible if they engross in both exploration and exploitation. It is necessary not to balance between them but to integrate them and flexibly switch according to the situation (O'Reilly 3rd and Tushman, 2004). Integrative form of organizational ambidexterity is the most possible gain in the result of team flexibility through collaborative culture of the synergies of exploration and exploitation. Organizations are continuously confronting the challenge of maintaining a balance between continuous improvement and innovation (Turner and Lee-Kelley, 2013). These two terms are defined by (March, 1991) on the scale of requisite for exploitation and exploration, where scale of exploitation takes into account terms as choice, refinement, execution, implementation, selection, efficiency, production', whereas scale of exploration takes into account terms as innovation, search, discovery, variation, flexibility, risk taking, play, experimentation. Ambidexterity addresses the part of literature where exploitation and exploration are used simultaneously to achieve both refinement and innovation in the organization.

Ambidexterity is the main structural characteristic that reveals itself in definite actions of individuals all the way through the organization (Hedlund and Ridderstrale, 1997). As a concept on organizational level, ambidexterity is defined as "organization's capability to pursue two different things equally well" (Raisch and Birkinshaw, 2008). In main, organizational ambidexterity interplay between alignment and adaptability that rely on individuals to make their own decisions and choices flexibly and innovatively (Adler et al., 1999). Duncan (1976), concentrated on the significance to develop twin structures for innovation management; and the balance between the exploitation and exploration is highly needed to maintain this conflict (March and Simon, 1958). Flexibility and efficiency are the explicit choices in organizations (Hart, 1999; Klein, 1984; Carlsson, 1989; Ghemawat and Ricart Costa, 1993) to form alignment and adaptability, which form multidimensional, construct of ambidextrous environment (Ford and Ford, 1994; Lewis, 2000). Supportive leaders and flexible managers are the main source to build ambidextrous organization (Bartlett and Ghoshal, 2002).

Jesus et al. (2015), reveal that the temporal leadership always engage employees

with their work and organization to get a beneficial response. It enhance collaboration of employees within the organization. Collaboration is said to be the potential tool in order to cope up with the ambiguous situations and to lift up the team culture (Nidumolu, 1995; Melander and Lakemond, 2015). Collaboration assist the project-based organizations with the opportunity to exploit new experiences and attaining advantage from their expertise and experience (Yan and Wagner, 2017; Peng et al., 2014; Yan and Dooley, 2014), thereafter, leading towards better organizational culture.

Collaborative culture affects both individual performance and organizational performance in a constructive manner (Avery et al., 2008). Organizations with workforce having cultural collaboration can positively affect commitment of employees, their morale and innovative capability to work (Goldman et al., 2006). Several scholars view leadership as the conceptualization, which evolves around influencing but is also sensitive towards collaborative culture. Basic beliefs, systems values of individual impact the cultural forces as the leadership mechanisms (Bass, 1997; Ayman, 2004). Researches shows that collaborative culture brings the shared values in project team for open communication, teamwork, diversity, risk taking and inspiration towards innovative climate (Barczak et al., 2010). Cultural collaboration in project-based organizations is considered innovative strength of project team.

Palmer and Dunford (1996) discovered that leadership challenge is to align organizational and human needs and develop powerful base and strategic agenda for creating faith and belief among the team. Ambidexterity is the need of today's business while also favourable to change the common environment of project-based organizations towards the innovative and structural one (Duncan and Estabrook, 1976; Tushman and O'Reilly III, 1996). Many other studies of researchers shows that there is continue rapid evolve between organizations and their leadership challenges, and researchers have high competition to keep a pace. Therefore, it is significant to study the impact of temporal leadership because it impacts significantly on important areas like human resource management, organizational culture and employee relations among themselves and with manager. Therefore,

increasing the innovative and creative capability of team both holistically and individually in organization environment.

## 1.2 Gap Analysis

Leadership trait of project-based organizations have recently adopted by many theorists. [Chen and Nadkarni \(2017\)](#) illuminates that the people come up with different qualities, behaviors and characteristics, which influence the style of leadership based on trait theory of leadership. This research model in focus the elements such as planning, problem solving, decision-making, time management while envisaging the temporal leadership. In the context of project-based organizations, the scope of work for temporal leadership and as an individual aptitude of project manager is relatively limited ([Behfar et al., 2008](#); [Schriber and Gutek, 1987](#)).

A recent study by ([Mohammed and Alipour, 2014](#)), highlighted the role of temporal leadership in assessing organizational phenomena in terms of today's need of time. This research further develop the gap, which allow researchers to gain more dimensions when looking at organizational issues ([Ancona et al., 2001](#)). The current framework has responded to this gap by utilizing temporal leadership for project-based organizations as organizations have tight deadlines.

[Naccache \(2018\)](#), suggested in his paper that future research should encompass their model while emphasizes how abundant are the tactic of exploring temporal leadership towards team flexibility. [Santos et al. \(2016\)](#), recommended for upcoming research to explore the significance of lack of agreement on temporal issues among the teams. By taking into account this gap, we are examining the mediating role of team flexibility and moderator as collaborative culture.

Therefore, utilizing the existing literature gap with influential dimensions, the current study is proposing a unique framework that explains how temporal leadership results in organizational ambidexterity through team flexibility. The current construct also proposes that collaborative culture moderates the relation between temporal leadership and team flexibility. It is not tried exploratory along with its

applicability in project-based firms so far and very limited studies conducted on the fact; therefore, the present study fills the specified gap.

### 1.3 Problem Statement

Researches highlighted the temporal leadership as one of the emerging and critical factors of the project based organizations due to its novel nature. Time management is a key factor that regulates the reputation of organization and the scale to measure the success of any project (Santos et al., 2016). Most of the projects generally have tight deadlines, which make it obligatory to complete the task on time (Santos et al., 2016). As project is temporary endeavour so, time management is the essential need for every project, likewise also the necessity for organizations. Therefore, it is very critical for the leaders to give significance to every related time-based issues of the project.

Temporal leadership motivates the team members to collaborate for it and complete it in due time. For team flexibility, collaborative culture is mandatory among team members therefore the moderator needs to be tested on team flexibility. One person cannot have the complete knowledge of each and every dimension so collaborated culture is essential to be opted flexibly by the team members in edict to make the organization to achieve ambidexterity. Study on ambidexterity of an organization is limited.

The influence of Temporal Leadership on Organizational Ambidexterity with mediating role of Team Flexibility & moderating role of Collaborative Culture is the novel framework of project management, which has not been studied yet in the context of Pakistan. Therefore, the current framework is an effort to make an addition to the literature on this issue by linking temporal leadership to organizational ambidexterity, as it is very necessary for leadership to give prominence to the time-based issues associated to the project-based organization. So, this is the novel domain which has not been studies yet along with all the variables (Temporal Leadership, Organizational Ambidexterity, Team Flexibility and Collaborative Culture).

## 1.4 Research Questions

Established on the above-mentioned problems, the goal of the existing study is to catch answers of the following research questions, brief summary of the questions are as follows:

### **Research Question: 1**

Does Temporal Leadership affect Organizational Ambidexterity?

### **Research Question: 2**

Does Team Flexibility mediate the affiliation between Temporal Leadership and Organizational Ambidexterity?

### **Research Question: 3**

Does Collaborative Culture moderates the association between Temporal Leadership and team flexibility?

## 1.5 Research Objectives

Research objective is to explore the affiliation between Temporal Leadership, Team Flexibility, Collaborative Culture and Organizational Ambidexterity according to the proposed theoretical framework. In addition, collaborative culture will be used as a moderator to identify the strength of the relation of temporal leadership so as to implore its relevant impact on team flexibility. The main aim is to explain theoretical framework of the new dimension of temporal leadership in project management in order to enhance organizational ambidexterity. The specific objectives of the study are stated below:

### **Research Objective: 1**

To investigate the relationship between temporal leadership and organizational ambidexterity.

### **Research Objective: 2**

To check the relationship between temporal leadership and team flexibility.

**Research Objective: 3**

To check the relationship between team flexibility and organizational ambidexterity.

**Research Objective: 4**

To check the relationship between temporal leadership and collaborative culture.

**Research Objective: 5**

To check the association between collaborative culture and team flexibility.

**Research Objective: 6**

To investigate the mediating role of team flexibility between temporal leadership and organizational ambidexterity.

**Research Objective: 7**

To investigate the moderating association of collaborative culture on the relation between temporal leadership and team flexibility.

## 1.6 Significance of the Study

Project-based organization's scope is up-and-coming since the past decades and are considers as more convenient form of organizations in order to provide the relevant services. This research is not only adding theoretical content to project management but it also helps to understand the concerns of project based organizations. There are many projects that are currently undergoing in our country and every project has different environment, features, behaviors scale, needed skills, timeline and leadership styles etc. Respectively every projects has different reactivity towards its situation too. For this, leadership style tend to be of unique and novel nature.

This study examines the personal dispositional abilities of project managers like temporal leadership and team flexibility to enhance the project organizational ambidexterity because in the modern age of globalization projects have been the

most popular way of performing tasks in a specific duration. Therefore, concepts regarding temporal leadership of project manager need to be clarified to make sure that the projects are completed successfully and have positive impact on the society in general.

Now a day's research focused on the process of innovation towards new resources. There are two major factors flexibility and reflexivity that should be followed on different steps of innovation through which the willingness and adaptation of employees lead towards the exploration and exploitation (Farnese and Livi, 2016). These steps greatly influence in enhancing the creative sense in the employees by providing them the ways through temporal leadership.

The study will fulfil the theoretical gap existing in pervious literature because temporal leadership is not considered popular due to less availability in the research field, tough several dimensions of leaderships affects organizational behaviours. Therefore, this framework will pay emphasis to the prevailing body of knowledge. Theoretical contribution demonstrates that temporal leadership is significantly related to the organizational ambidexterity. Temporal leadership of project managers are capable to make the environment creative by giving opportunity towards the openness to the resources to ensure the smooth running of organizational processes that result in the flexibility of team individuals under collaborative culture. The contribution of this construct signifies that temporal leaders can help in achieving project success when employees are highly motivated and trust leaders with the involvement of cultural collaboration as an external factor.

This framework will contribute positively in a productive manner towards achievement of the desired goals and milestones of the project along with active involvement of project manager making the best use of leadership on the team flexibility through his cultural interactions. The study opens new features of observing temporal leadership in the projects to be studied further in detail. It will also help the project-based organizations of Pakistan to recognize the significance of the impact of temporal leadership on organizational ambidexterity in project based organizations effectively and efficiently. There is very rare interest revealed by scholars to verify the influence in the context of Pakistan's project based organizations.

Thus, the study adds in the domain of project's success under circumstances of Pakistan.

## 1.7 Supporting Theory

“Leadership Member Exchange Theory” formulated by (Dansereau Jr et al., 1975). This theory will help to support all the relations of theoretical framework directly or indirectly to each other. Leader Member Exchange Theory covers all the variables in an appropriate way because it depicts the exchange of leader and member traits and shared goals and their impact on each other as well. LMX is extensively used for empathetic leader member relationship in organizations.

### 1.7.1 Leadership Member Exchange Theory

Dansereau, Graen and Haga discovered LMX also known as Vertical Dyad Linkage Theory in ancient. Leader-Member Exchange (LMX) theory has been achieving significance in latest years with many different dimensions and extracts. It is a relationship-based attitude emphasis on the dyadic relation between leadership and follower (Katz and Kahn, 1978). Study include the measures that focus on the leaders' behaviours and traits such as personality, attitudes, perception, influence, power etc. It examine how real leadership relationships mature between dyadic followers. Furthermore, it tells its effectiveness on organizational development (Graen and Uhl-Bien, 1995).

LMX also encourage optimistic employment practices and organizational efficacy (Liden et al., 1997). Liao et al. (2010) indicate the relation between LMX and team creativity, which shows its outcome towards organizational ambidexterity. Graen and Uhl-Bien discuss the evolutionary stages to develop Leader-Member Exchange (LMX) as: Leader-Member Exchange, Vertical Dyad Linkage, Team-Making and Leadership-Making. Organizational culture is the future outcome in the result of evolutionary steps of Leader-Member Exchange (Anand et al., 2011). Leader-Member Exchange (LMX) related to the work related attitudes and behaviours such as job satisfaction, commitment, decision-making, shared visions; it



is more strongly relevant to organizational behaviour (Rockstuhl et al., 2012). As this theory supports the construct through dyadic relation between temporal leadership and organizational ambidexterity through exploration and exploitation. Theory constitutes of three major stages i.e. role taking, role making and routinization and built a relation between leader and its subordinates by passing through these stages. LMX embrace leaders relation with their sub-ordinates, intensity of relation is different with each of the sub-ordinate either they are high quality relation or low quality relation. In high quality LMX relation, subordinates are greatly responsible, achieve more support of their leader, which constitutes the In-group sub-ordinates, and cause organizational ambidexterity (Kacmar et al., 2003). Whereas in low quality LMX relation, sub-ordinates are less likely to responsible thus comprise of getting low level of leader support making the out-group sub-ordinate, which causes organizational cynicism. High quality LMX relationship positively affects organizational effectiveness.

LMX theory fully supports the link between temporal leadership and organizational ambidexterity. It enhance energy level in the employees, which in return directed to creativity, innovation and organizational commitment. This theory validates the actions of people within the organizations, which forms the bridge between one another and the leader. LMX theory related to the organizational efficiency and emphasis on the worth of leader-member exchanges occasioning the positive outcomes for the organizations as a whole, groups, followers and leaders. Organizational commitment increases because of high-quality relation of leader to its sub-ordinate. Employees who are greatly involved in LMX with their leaders are reflected as the best contributors towards the achievement of organizational success. Through high quality LMX, both the organizations and its members are acquiring the assistances of efficient leadership (Wang et al., 2019). When leader are establish to engross in relational interactions with their team, the team will retort in the equivalent manner due to norms of reciprocity and these relations thus boost the performance of organization .

# Chapter 2

## Literature Review

### 2.1 Temporal Leadership

[Mohammed and Nadkarni \(2011\)](#), defines temporal leadership as “the gradation to which the leader of team, synchronise behaviours of team members, schedule deadlines and allot temporal resources”. Temporal leadership has established significant consideration, the scholars like ([Santos et al., 2016](#)), have supported the positive and negative effects of temporal leadership in a circumstances of strain and the performance of the team in the organizations.

Temporal leadership is abstracted by many researchers according to their own perceptions and conceptualizations. Latest devotion of this study shows that these behavioural characteristics are towards the professional role of leaders who up bring themselves in the association of their team-members to come across the target deadlines ([Mohammed and Alipour, 2014](#); [Mohammed and Nadkarni, 2011](#); [Halbesleben et al., 2003](#)). The literature on temporal leadership assumes as the personnel who effort interdependently but conquer changed, recognised work responsibilities ([Klein et al., 2006](#)). Precisely, temporal leadership provide positional opportunities to leaders and sub-ordinates for developed synchronisation by given them time-based association and management ([Saunders et al., 2004](#)).

## 2.2 Team Flexibility

“Team” is defined to be a group of people working together for a defined time span and coordinating with each other in order to achieve shared and agreed objective that cannot be achieved by a single person (Swezey and Salas, 1992). “Flexibility” refers to adaptation in reaction to ecological deviations and this adaptation fabricates at the core of team efficacy (Burke et al., 2006). “Team flexibility” signifies an aptitude of team to retort environmentally friendly fluctuations (McComb et al., 2007).

Organizational researchers consume demarcated flexibility as a structural aptitude to react for the amendments and astonishments in occupational environs (Lee and Xia, 2007). This sight takes its origins in the skill centred perception. This skill centred conceptualization of team flexibility has revealed in numerous circumstances, together with organizational theories, operations management, project management and strategic management (Lee and Xia, 2007, 2005). Henceforth, team flexibility is extensively considered as creating objects proficient of evaluating the structure and behaviour by constructing the variations and essential amendments which are necessary to function meritoriously (McComb et al., 2007).

## 2.3 Collaborative Culture

Lederach (1995), states “culture as the mutual knowledge and patterns generated by an established set of individuals for recognising, inferring, articulating, and retorting to the social certainties around them”. In addition, collaboration is a vibrant and active progression between individuals that is commonly focussed towards exploiting and achieving approximately (Leap et al., 2010). Collaborative culture, referring to (Barczak et al., 2010) as well as (Pérez López et al., 2004) is demarcated as “team’s collective morals and opinions about the organizations and provision for flexibility, exposed communication, and inspiration of admiration, cooperation, risk taking and multiplicity”.

The present study focuses on the intellections and is defined collaborative culture

as two or more persons/parties working together in order to achieve agreed outputs and targets (Um and Kim, 2018; Sheu et al., 2006; Cao and Zhang, 2011). Peng et al. (2014) established that the culture collaboration elevate and enhance the effectiveness of the organizational projects through the usage of modern technology involvement.

## 2.4 Organizational Ambidexterity

Ambidexterity, as a conception on individual level, is considered as the person's aptitude to be equally skilled with the practice of both right and left hands. As a perception on organizational level, organizational ambidexterity is demarcated as organization's proficiency to pursue two different things equally well (Raisch and Birkinshaw, 2008). Therefore, the organizational ambidexterity is to understand and deal with rigidities but also to remain successive in instantaneously achieving higher altitudes of in cooperation of the limits (O'Reilly III and Tushman, 2008). Organizational ambidexterity, as a concept, embraces versatility in it encapsulating different types of dualities that organizations attempt to pursue such as compliance and configuration (Graetz and Smith, 2005), effectiveness and flexibility (Gupta et al., 2006), exploration and exploitation (Cao and Zhang, 2011), and assimilation and approach-ability (Gulati and Puranam, 2009). Research indicates that ambidexterity when exhibited on individual level leads to creativity and innovation in the task being performed (Wu and Wu, 2016).

## 2.5 Temporal Leadership and Organizational Ambidexterity

Large number of studies have associated different leadership styles with organizational ambidexterity. For occurrence, in one study it was found that transformational leadership leads to an increase in organizational ambidexterity (Jansen et al., 2008). Similarly, in an additional study, it was found that charismatic

leadership is positively associated with organizational ambidexterity (Gibson and Birkinshaw, 2004). The present study targets to explore the impact of a relatively new and less studied leadership style on organizational ambidexterity that is temporal leadership. This study proposes that temporal leadership leads to an increase in the organizational ambidexterity.

Temporal leadership raises to the amount to which a manager aims to set targets, aims, assigns temporal capitals and coordinates follower's behaviours under these circumstances (Mohammed and Nadkarni, 2011). Follower's behaviours comprises of setting milestones, reminding of deadlines, prioritizing tasks, in time contingencies plan and the completion of sub tasks on time (Alipour et al., 2017). Diverse from origination of structure, temporal leadership emphasis entirely on temporal behaviours (Alipour et al., 2017). Time-based structures help to overcome the risk of incomplete workflow and task alignment instigated by the subordinates who strategies lengthier and works deliberately (Weick, 1995). Additionally, temporal leaders allocates the temporal resources more accurately and built time plans for unseen contingencies that avoid the delays in projects (Mohammed and Nadkarni, 2011).

Though the obligation of temporal leadership certainly tumbles to officially nominated leaders in numerous organizations, cliques also engross in programming activities, apportioning temporal capitals, and prompting others of due dates (Friedrich et al., 2009). Schyns et al. (2011) established a detailed implementation of mind mapping and brain storming that can be exploited to help both leaders and subordinate so that they develop more conscious of originals and opportunities for each other. Evolving leaders are entities who are professed by other individuals as influencer in spite of not holding a prescribed leadership character (Lord et al., 1984). Organizations are fluctuating to conduct work through self-managed, short-termed in performance leaning individuals in which leadership is not attributed but moderately appears unceremoniously (Bakker, 2010).

Moreover, organizations highlight the prominence of temporal leadership through inspiring managers to prompt followers of time limit, direct the speeding of responsibilities, and practice contingency campaigns (Mohammed and Nadkarni,

2011). The amalgamation of temporal characteristics into research appears predominantly appropriate to leader and follower investigation in organizational situations. The study of (Barsalou, 1985) shows that managers and subordinates who might not give abundant believe to temporal individuality's, temporal behaviours which expected to influence leadership and sub-ordinate insights that control forthcoming behaviour. Many theorists' researches temporal features into leadership investigation and emphasis proceeding circumstances in which leaders temporal behaviours fail to tie supporters' temporal behaviour that results in the contradiction on leader-member coordination.(Junker and van Dick, 2014).

Mathieu and Rapp (2009), highlighted that organizations with deadline-bound want project teams to embolden team members to show up on time, communicate modifications in pace and work styles, and take the resourcefulness to propose ways to coordinate efforts effectively feasibly through a team charter. Models of leaders and cliques are expected to embrace formerly overlooked temporal magnitudes, and their reflexion may have functional insinuations for better understanding between the leaders and sub-ordinates inside organizations (Mohammed and Harrison, 2013). Temporal leadership plays a significant role in resolving temporal issues in organizations by leading team motivation and by resolving team ambiguity (Gevers et al., 2006).

The journalists of contemporary theoretical effort have opposed that temporal leadership has encouraging effect on organizational social conscience behaviour and team performance, but also on team innovation that balance between exploitation and exploration (Wu and He, 2018). Exploration activities are linked with increasing variance accompanied with trial and error methods to enhance learning by doing processing capabilities, whereas, exploitation activities are linked with decreasing variance accompanied with standardization processes to enhance problem-solving capabilities. Exploitation strengthens the past principles and procedures of organization and exploration paves way for new innovative abilities and approaches that are different from the organizational past (Chebbi et al., 2017). Ambidexterity has emerged as a vibrant field in the domain of organizational and

management studies (Wan et al., 2017; Yuan and Lo, 2018). More recently, scholars have started to examine ambidexterity from leadership perspective (Filippini et al., 2012). It involves exploiting existing knowledge and exploring new innovative ideas to enhance the creativity and innovation (Eriksson, 2013). Research indicates that ambidexterity when exhibited on individual level leads to creativity and innovation the task being performed (Wu and Wu, 2016). The element of ambidexterity is well refined in the organizational settings having team flexibility providing opportunities to diverse workforce to prompt their innovative accepted wisdom and proper channel to exploit and explore different horizons (Baškarada et al., 2016).

Organizational Ambidexterity has recently become the focus of research in management (Turner et al., 2015). By emerging the latest creative and up to date products in the tremendously short time span to gain, the market opportunity is the biggest responsibility to create ambidexterity (Thoms, 2004). Temporal characteristics are deliberated severely embedded and essential individual transformations (Bluedorn and Jaussi, 2008), and include time resolution, polychronicity, speeding grace and time perception (Mohammed and Harrison, 2013). From a pragmatic standpoint, temporal individual transformations matter because they characterize task appropriate characteristics in current business world where operative time management is an authoritative for organization (Conte and Gintoft, 2005).

Temporal leadership is all about assembling the tasks into sequential arrangement, producing a team interaction, considerate pacing classes, and assisting the followers of the organization to efficiently complete the projects through exploration and exploitation (Wu et al., 2017). Temporal leadership style is the one, which empower its team to accomplish organizational functions below such favourable and satisfied environment (Bluedorn and Jaussi, 2008). The temporal leadership plays a synergic role in promoting exploitation and exploration activities by enforcing culture and strategy, as organizational ambidexterity got achieved in return (Lin and McDonough III, 2011).

Therefore, this suggests the first hypothesis

$H_1$ : *There is positive association between Temporal Leadership and Organizational Ambidexterity.*

## 2.6 Temporal Leadership and Team Flexibility

Teams can be demarcated as; two or more entities who socially interrelate possess one or more mutual goals. In addition, these goals are organised to achieve managerially appropriate tasks to revelation interdependence with reverence to workflow, consequences and objectives having diverse errands. They are self-possessed entrenched in an incorporating organizational classification, with limitations and associations for the task environment (Kozlowski and Ilgen, 2006). Flexibility is demarcated as an entity's or an group's aptitude to be practical, flexible, and strong enough to face any situation anytime (Jones, 2006), also the capability to transform and to acclimatise to stimulating environs (Georgsdottir and Getz, 2004). In further arguments, flexibility is capability to amend mutual behaviours and edifices as essential to certify existence, specifically in the expression of ambiguity (McComb et al., 2007).

Team flexibility mentions to group capacity by making modifications obligatory to endure operative comebacks to altering circumstances (McComb et al., 2007). Team flexibility is accompanying through a numeral assistances, together with amplified efficiency, reasonable benefits and boosted problematic solving proficiency (Manuj and Mentzer, 2008; Molleman and Slomp, 1999). An active team involves elevated echelons of team flexibility (Townsend A M and R, 1998). Team flexibility likewise benefits groups to survive through tempestuous besides explosive competitive intimidation meritoriously and to gross benefit of individual's intimidation as chances (Johnson et al., 2001). There is no doubt that an appropriate level of flexibility is essential to ensure optimal performance and better life quality in competitive environment (Sporis et al., 2011).

The existing literature has accredited the implication of team flexibility transversely numerous businesses; though, it occasionally enlightens in what way it is prejudiced by precarious within-sub-ordinates competitive enthusiasm (Manuj



and Mentzer, 2008). Flexibility of team characterises a aptitude of team to react to environmental variations and to make sure persistence in the aspect of ambiguity (McComb et al., 2007). Kirkman et al. (2004) researches that flexibility is real in encouraging team affiliates and empowers them to respond to environmentally friendly deviations with dexterity. Therefore, the leader who recognise stronger flexibility within their sub-ordinate are additional cognitively flexible and enhanced at problem solving (Swafford et al., 2006; Biron and Bamberger, 2010). Cooperatively, while squads are synchronised, pre-emptive behaviours such as flexibility, pliability and tenacity ensue (Chen et al., 2006). Other researches has conveyed positive relationships between members through team orientations and flexibility (Jung and Sosik, 1999; Bell, 2007).

Moreover, studies have revealed diversity factors of team flexibility can be inter-related with other influences such as time (Harrison et al., 1998), organizational beliefs (Ely and Thomas, 2001; Brickson, 2000) and the natural surroundings of a team's mission (Jackson et al., 2003; Pelled et al., 1999; Jackson and Joshi, 2004). Mohammed et al. (2009) in recent times innovate a multi-fabricated outline for learning team efficiency above time. Amongst other opinions, they illustrate that team compositional impacts will probable fluctuate over time (Harrison et al., 2000, 2003). In another place, (Aritzeta et al., 2007) have looking forward for a exemplary relating to individuals' inclinations to fulfill or inhabit different team roles. McGrath (1991) renowned the significance of accepting and integrating temporal dynamic forces in team efficiency frameworks. Whereas mutually most frameworks differentially intellectualise temporal possessions as befalling through progressive phases, reiterating sequences, steadiness, and adaptive flexible comeback (Arrow et al., 2004).

Mathieu et al. (2014), comprehended the encouragement of sub-ordinates time coordination, temporal dynamics such as time limit, and appropriate effects the team flexibility. Flexibility provisions array from informal processes executed by leader for certain workers to recognized intrusions proposing teams a great gradation of control over their project time (Jeffrey Hill et al., 2008; Kelly and Moen, 2007). Teams are composed of affiliates with alike or unlike characteristics, these

traits has strong consequences for scheduling and time resources allocations (McGrath, 1991; Mohammed and Nadkarni, 2011). The existing literature specifies that group progressions and efficacy are exaggerated by characteristics of group configuration such as affiliates' expertise, organizational engrossments, and group heterogeneity (Mathieu et al., 2008).

Mohammed and Nadkarni (2011) established that leaders play an imperative role in coordinating team members so that work is completed on given time. McGrath (1991) responding to the call for integrating temporal elements into leadership. Mohammed and Harrison (2013) projected that when teams are employed under extremely complex situations having imposing both speed and accuracy and involve decision-making and action-oriented tasks, temporal leadership is the one who enhances their team flexibility to improve performance. Alipour et al. (2017) prolonged temporal leader is the one who plays its part to build an association dimension to resolve temporal conflicts among associates and pursues team member assistance for establishing a time structure which give them space to act flexibly. Temporal leadership meritoriously reports temporal problems and coordinates the team's effort and time (Carson et al., 2016) by examining the emergence of temporal leadership at the team level.

Due to difference in styles of leadership of project manager (Santos et al., 2016), project team face difficulties while doing all independently under time pressure without having leverage to do it flexibility (Janicik and Bartel, 2003). Myer and Mayer redefined and validated a leadership intersection measurement through time, teams. It is the obligation of temporal leadership of team to synchronize the temporal collaboration within a team, which thus cause reduction in the upcoming problems (Alipour et al., 2017). Temporal leader makes the responsibilities of the team well defined and simply understood which decrease the ambiguities within the team members since these schedules are made later allowing for the team member flexibility (Morgeson and DeRue, 2006).

This research extends the emerging literature on the consequence of temporal leadership on team-members flexibility in several ways. Temporal leadership is

the scope to which team leaders bring into line, plan, and distribute time possessions (Mohammed and Nadkarni, 2011). Temporal orientation at team level is gaining a lot of attention (Mohammed and Nadkarni, 2014; Mohammed and Harrison, 2013; Waller et al., 2001). There is an emergent frame of learning guiding towards the better workplace through team flexibility as a way of enlightening the interlink between work and achieving deadlines (Voydanoff, 2004; Bianchi and Milkie, 2010; Christensen and Schneider, 2015). With an emergent tendency in the direction of the amalgamation of all project teams, team flexibility emerges as an imperative factor to the achievement of multifarious and dynamic management projects under temporal leadership. This research motivates on the flexibility of the cohesive project team and sight-sees its antecedents.

Hence, the second hypothesis can be stated as:

***H<sub>2</sub>: There is positive association between Temporal Leadership and Team Flexibility.***

## **2.7 Team Flexibility and Organizational Ambidexterity**

The perception of ambidexterity was first coined by (Duncan, 1976) in one of chapters of his book called *The ambidextrous organization: Designing dual structures for innovation*, while describing dual structures that organizations employ to manage activities that require different strategies and managerial abilities. Tushman and O'Reilly III (1996) added further to the literature of the concept in an article published in *California Management Review*, focusing on understanding that how companies can maintain both evolutionary and revolutionary processes of change equally well and simultaneously. They approached the concept in the same way approached by (Duncan, 1976), keeping dual processes as structurally separate. The empirical research in the recent years on ambidexterity suggests that since the growing age of globalization and competitiveness, ambidexterity when implemented sequentially might be ineffective, for rapid change to be incorporated

exploratory and exploitative change processes must be implemented simultaneously (Schulza P and A, 2008). These two terms are defined by (March, 1991) on the scale of requisite for exploitation and exploration, where scale of exploitation takes into account terms as choice, refinement, execution, implementation, selection, efficiency, production', whereas scale of exploration takes into account terms as innovation, search, discovery, variation, flexibility, risk taking, play, experimentation.

In the recent age of technological advancements, innovation is the key element organizations are relying on to have competitive edge over competitors. Firms have to develop both exploitative and exploratory innovativeness to keep up with the latest trends and maintain market position (Vrontis et al., 2017). However, limited insight is available on how individuals attain explorative and exploitative innovative capabilities to make organization perform in innovative domains (Li et al., 2010).

The concept of ambidexterity is mostly understood on organizational level, but limited research is available on how managers can use these ambidextrous strategies on micro level to achieve ambidexterity (Cohen et al., 2007). A review on prior research suggests that research on individual-level ambidexterity is limited in literature (Lavie et al., 2010). Ambidexterity can be manifested at both organizational and individual level. At organizational level, exploration and exploitative change processes are handled by same or different business units depending on the type of ambidexterity being implemented (Andriopoulos and Lewis, 2009). At individual level, managers engage in exploratory and exploitative strategies to ensure ambidexterity. Some managers engage simultaneously while some implement exploratory and exploitative activities sequentially. Managers who are ambidextrous maintain more comprehensive chain of information flow than managers who are not ambidextrous (Benner and Tushman, 2003). The ambidextrous capability of a manager is contextual and varies across different organization types. Team-level ambidexterity contributes towards overall ambidexterity of an organization along with other factors.

Teams are reflected as the structural chunks of contemporary organizational strategies and several hypothetical frameworks but there is the absence of consistency, incorporation, and indulgent of how line-up configuration effects relate to significant group consequences. (Mathieu et al., 2014). Team flexibility benefits the organization with enhanced competitive advantage and productivity (Li et al., 2010; McComb et al., 2007). Organization researchers have definite flexibility as a managerial capability to respond to variations and amazements in corporate environs (Lee and Xia, 2007). This opinion has its origins in the capability-based perspective. This competence conceptualization of flexibility has revealed in numerous circumstances, including organization theory, operations management, information systems, strategic management and project management. Scholars have recommended many magnitudes for tractability. For occurrence, flexibility can also be dignified in relations of the extent to which organization responses to ecological variations (Lee and Xia, 2007; Anand and Ward, 2004; Volberda, 1996; Das, 1995; Sanchez, 1995; Slack, 1983).

In the view of (Hirokawa et al., 2000; McComb et al., 2007), flexibility furthermore consider as a foremost portion of the team build. On team level, team flexibility is demarcated as the united aptitude of team members to react meritoriously in addition to professionally and to adapt these professional deviations (Li et al., 2010). As a main part of the team practices, flexibility influences the social and responsive collaborations within teams that encompasses the apparatuses, which permit groups to perceive complications in different behaviours and to catch innovative elucidations (Georgsdottir and Getz, 2004). This generous of team flexibility surroundings delivers liberty aimed at team participants to deliver their approaches deprived of a terror of retaliation. Through this approach, flexibility benefits teams, so they engross in and upkeep innovative thinking and creativity (Lumpkin and Dess, 1996) which leads towards an organizational ambidexterity.

Empirical research on ambidexterity literature reveals that is it advantageous for organizational, business unit and team performance (Jansen et al., 2012; Gibson and Birkinshaw, 2004). Team members shared the vision of completing goals and aspirations to express future organization's path (Tsai, 2001). Organizational

learning along with individual innovative capabilities allows better individual performance in particular and organizational performance in general (Kobarg et al., 2017). Hence, team flexibility in organizations with ambidexterity encourage team members to create chances for exploratory and exploitative units (Tushman and O'Reilly III, 1996; Tsai and Ghoshal, 1998; Brown and Eisenhardt, 1995).

Hence, the third hypothesis can be stated as:

**H<sub>3</sub>: *There is a positive link between Team Flexibility and Organizational Ambidexterity.***

## 2.8 Mediating Role of Team Flexibility between Temporal Leadership and Organizational Ambidexterity

Flexibility is the most leading in the theoretical literature additional than six eras past. Conversely, in the past two years, there has substantial consideration on flexibility (Reed and Blunsdon, 1998; Jones, 2006). All the theorists recommend an improved essential for the capacity to react to change. Therefore, flexibility, by way of the capability to acclimate to innovativeness, diverse, or varying necessities, has appeared as an economical benefit and a prerequisite in countless organizational accomplishments (Byrd and Turner, 2001). Flexibility can moreover be adaptive once tasks transpire in the situation or impulsive as soon as the organization takes a predilection for adjustment lacking external compression for variation (Georgsdottir and Getz, 2004; Swezey and Salas, 1992).

Based on the literature that has found team flexibility is reliant on on team self-motivated capabilities, team self-motivated capabilities was additionally studied and it was originate that tacit power sharing obliges as a determinant of team flexibility at a deeper level (Lee and Xia, 2007). Power sharing is done through the integration of leadership with the team flexibly to pave a path towards organizational innovativeness (Ashkanasy et al., 2004). In consequence, flexibility has exposed as per an imperative influence in countless characteristics of management

of organization as well as a hypothetically significant feature of inter-functional team enactment. In this exploration, flexibility examined as a crucial aspect of inter-functional team progressions. Furthermore, we depict flexibility as a credible linkage among temporal leadership and organizational ambidexterity.

Literature of project-based organizations recognised the prominence of leader conduct to team in addition for organizational outcome (Bass, 1985; Lowe et al., 1996). Individual ability of carrying out explorative and exploitative activities enables project manager's leadership effectiveness and ability to perform job or task more successfully (Yusof and Othman, 2016). Recent world economic crisis have made organizations to make adaptability with innovation their key formula to success and retain competitive edge over the competitors. Recent shift is towards aligning exploitative innovation with explorative innovation along with workforce having team flexibility under the supervision of temporal leadership to ensure success of an organization. (Woods, 2016).

The usability of project management practices in ever changing era of globalization has dramatically increased over time. Organizations adopted project management practices and procedures to deliver work packages keeping track of cost consciousness and monitoring, furthermore to use limited human resource asset to meet customer requirements and to attain competitive edge in the market (Zwikael et al., 2005). Recent researches opposed the temporal leadership has positive effect on organizational behaviour and team performance. It allocates the temporal resources and improve time utilization to enhance organizational ambidexterity (Yuan and Lo, 2018). Ambidextrous capability of organization then refines decision-making ability and allow it to make project team focused on a common creative goals. Ambidexterity becomes foundation of an organizational culture when organization values both creativity and discipline of team. Shared values through team flexibility facilitates the variation in ambidextrous organizations, which also compensate the strong vision under temporal leadership (Lubatkin et al., 2006). Flexibility spirit let the sub-ordinates to familiarize their own tactics in order to make the trade-offs amongst challenging substitutes or research through unusual techniques to line-up a difficult situation, which possibly will diminish doubt

(Günsel and Açıkgöz, 2013). While researches highlight the significance of flexibility further down circumstances of ambiguity, sensibleness would propose that teams opposing various substitutes, which should be deliberately advantaged commencing flexibility. Through demonstrating an enthusiasm to amuse diverse tactics, exploration for novel, innovative behaviours to amply project responsibilities, amongst further flexible characters, the team members should consume the origin for generating a task that encounters the necessities of the numerous potential end users and recognizing the manifold approaches aimed at implementing the project (McComb et al., 2007). This approach indicates analyzing ambidexterity by a further deeper level, over the practices and procedures lens in organization to determine the procedures and artifacts, which are essential of the growth of this proficiency (Um and Kim, 2018).

Patrashkova and McComb (2004), researches that the teams' emphasis on costs and the time linked by using extra time might root them to track the initial reasonable solution recommended deprived of entirely seeing the variety of decisions open. Certainly, indication recommends that if the team employs abundant time investigating substitutes their flexibility might suffer (Baugh, 2005). The disturbing extension lead of this logic is that a team should be trained flexible to react according to situation under the supervision of temporal leadership. Consequently, we assume flexibility in the direction of increase team efficacy, particularly under temporal leadership surroundings leading towards progressiveness. Recent world economic crisis have made organizations to make flexibility with innovation their key formula to success and retain competitive edge over the competitors. Recent shift is towards aligning exploitative innovation with explorative innovation along with success of an organization having collaborative culture in project team supervised with temporal leadership to ensure flexibility of team in an organization. (Woods, 2016).

Hence, the fourth hypothesis would be:

***H<sub>4</sub>: Team flexibility plays a mediating role between Temporal Leadership and Organizational Ambidexterity.***



## 2.9 Moderating Role of Collaborative Culture between Temporal Leadership and Team Flexibility

Collaboration is considered as a capability of human brain to respond to complex and new situations in flexible manner (Espinosa et al., 2007). Peng et al. (2014) argued that collaboration is the key to success whenever new projects is undertaken. Haycock (1998) summarised that flexible scheduling and expectations affect collaboration, which then comes out in team behaviour. Cultural collaboration fosters the group behavior positively and effectively enhances the work group productivity. Strong cultural work climate of the organization with same moral values positively affects the decision-making ability of the group (Oetzel, 2017). Many scholars took collaboration's concept as that is ingrained in symbiotic advantage where effective collaboration maximizes the firm's performance and minimizes the transaction costs (Dyer, 1997). Collaborative culture comes to play when a single person is unable to complete the dedicated task and helps to exploit each other's resources and skills along with sharing and distributing the risk in order to lessen its impact (Huxham and Vangen, 2013). For the projects to perform better and gain competitive advantage from other firms and projects they have to focus on collaborative advantage rather than competitive advantage with in the project team in order to reach towards the mutually beneficial and agreed objectives and contributes the positive effects to better project performance (Dyer and Singh, 1998).

Collaboration be able to deliberate by way of the amalgamation of diverse disciplines or businesses with diverse objectives, cultures and essentials into a consistent and reciprocally supportive entity (Austin et al., 2002). Collaborative culture approach claim that individuals as of numerous culture exert together to accomplish shared achievable project objectives from the mutual sharing of material between leader and the team. That approach give a sense that diverse establishment procedures and organisational cultures devour to be affiliated as in the collaborative way. Collaborative culture is a lot renowned as a continuous progression with the

aim of team flexibility and proficient approaches (Dainty et al., 2001).

Researches shows that collaborative culture increases as humans socially integrate under temporal leadership phenomenon and collaborative culture is positively associated with increased team flexibility. Temporal expectations comprises of synchronising, pacing and task growth of projects that proactively constitutes as a work of temporal leaders, this temporal transparency throughout the initial stage forms the leader-follower socialization. Additionally, these temporal behaviours helps to appreciate the temporal involveness and the significant necessities involve during the projects that makes a route towards the better collaboration between the subordinates themselves as well as with their leader (Mohammed and Nadkarni, 2011; Ancona et al., 2001).

Furthermore, the implicit theories shows that the accurate formation for dyadic relation is expected to be critical and serve as a pathway of sense making in their mutual behaviours collaborations so that this guidance results in the leader-follower coordination (Weick, 1995). So that implicit theories results in the better understanding, interpreting and responsiveness to each other that will form flexibility in leader-follower relation (Lord and Maher, 2002; Whiteley et al., 2012; Epitropaki et al., 2013). Mohammed and Alipour (2014); Mohammed and Nadkarni (2011), suggested that this time related leaders behaviours are strictly interconnected and this collaboration with the follower provide the clear temporal structure for dyadic relation.

Particularly, the leaders who demonstrates high level of temporal characteristics are responsible of providing the awareness, responsiveness, communiqué and collaboration desired to support temporal potentials, which legalise the dyad relation between leader and the follower (Mohammed and Nadkarni, 2011). Resilient temporal leadership permits the faster recognition and actual reactions towards temporal mismanagement among leader and follower (Mohammed and Nadkarni, 2011). It enthusiastically amend the work successions so that this collaboration of leader and subordinates results into the strong temporal behaviour of coordination success. Ingvaldsen and Rolfsen (2012) establish that great self-sufficiency is a most important obstruction for attaining coordination and synchronization is

the one that provide them with this independence.

In management, individuals and organisations (Ancona et al., 2001) use collaboration to define the overview of functioning practices, approaches and performances, which manifest a culture of effectual and active integration. Collaborative culture encourages working environs wherever facts is spontaneously swap over between the diverse members. The term “collaborative culture of project team” is used in the research to symbolize an exceedingly efficient and effective collaborative team accountable for a project under the exchange behaviour of temporal leader and team. The team take along together numerous expertise and knowledge, and eliminates the traditional obstacles which expands the operational and proficient delivery of the project (Akintoye et al., 2000; Fleming and Koppelman, 1996).

The cultural hypothesis endorses the belief that team flexibility increases as collaborative culture levels increases allowing more explorative learning (van Schaik and Burkart, 2011). When there is collaborative culture at workplace; it affects employees feelings towards work and manager positively (Triana et al., 2015) enhancing both managerial and organizational performance. Duffy and Fearne (2004) have established that collaborative relationships help the team members to effectively manage projects and involve in planning and decision making flexibly to elevate the link between leader and the team.

Where there is collaborative culture at workplace, it affects employee’s feelings towards work. It bring flexibility positively by enhancing both managerial and organizational relations. Empirical studies shown positive impacts of collaborative culture on organizational ambidexterity in particular or in general. Therefore, Collaborative culture fosters the group behaviour of team positively and effectively enhances the organizational ambidexterity. It also positively impacts the decision-making ability of the group.

Hence, the fifth hypothesis would be:

***H<sub>5</sub>: Collaborative Culture moderates the association between Temporal Leadership and Team Flexibility; such that if Collaborative Culture is high then the relationship between Temporal Leadership and Team Flexibility would be strengthened.***

## 2.10 Research Model

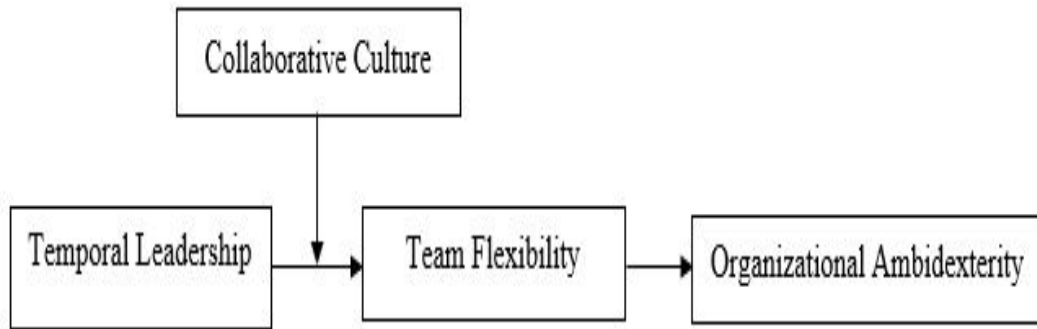


FIGURE 2.1: Research Model of Temporal Leadership on Organizational Ambidexterity through Team Flexibility: Moderation of Collaborative Culture

## 2.11 Research Hypotheses

**H<sub>1</sub>:** There is positive association between temporal leadership and organizational ambidexterity.

**H<sub>2</sub>:** There is positive association between temporal leadership and team flexibility.

**H<sub>3</sub>:** There is positive association between team flexibility and organizational ambidexterity.

**H<sub>4</sub>:** Team flexibility plays a mediating role between temporal leadership and organizational ambidexterity.

**H<sub>5</sub>:** Collaborative Culture moderates the association between temporal leadership and team flexibility; such that if collaborative culture is high then the relationship between temporal leadership and team flexibility would be strengthened.

# Chapter 3

## Research Methodology

The following section embraces of the specifics almost all the methods and procedures applied in this research to acquire the consistent results. This discussion embraces particulars regarding type of study, research philosophy, unit of analysis, population, sample, sampling technique, sample characteristics, instrumentation, statistical tools, pilot testing, reliability scales analysis and data analysis of all the variables and items incorporated in this research.

### 3.1 Research Design

The research design is a context of research plan for action; it describes the procedure for gathering data and to analyse according to this data.

#### 3.1.1 Type of Study

This research is used to highlight the implication of temporal leadership on organizational ambidexterity, for that matter inter-relational study has been accompanied. The target population for this research is project based organizations of Pakistan in order to get the required data and needed to get realistic results. Initially 350 questionnaire were distributed among the target respondents but 265 genuine responses were collected. The sample for this research mainly consists

of managerial and operational level of different project-based organizations of the Rawalpindi and Islamabad of Pakistan. This data was together through a self-administered paper-and-pencil analysis. This present study will contribute in generalisation of the results from the sample statistics that will possibly revealed by the realistic result on the entire population of Pakistan.

### **3.1.2 Research Philosophy and Research Design**

Diverse types of philosophical approaches are there characterised as “paradigm for social sciences” that reinforce and backing scientific investigation. Data collection instrument is the one, which influence the adaptation of the particular philosophy related to research (Bazeley, 2003). This research will survey on the hypothetical deductive research method, which is exclusively based on the determinism viewpoint of finding the reality utilising data, in which aforementioned research, and prevailing theories were utilized to validate and support predicted hypothesis that will then be verified empirically for authentication of the projected hypothesis.

The hypothetical deductive method is a predicted illustration of scientific method. This research paradigm is best suitable for this research study as it takes on critical focus on findings, which is yet to be explored. There are two parts of the hypothetical deductive scientific method i.e., hypothesis, which is proposed for testing, and the other one is deductive part that explains the test outcomes inferred from hypothesis. The results predicted from the hypothesis are associated with investigational data to fail or pass the decision. Conferring to this method, scientific investigation pledges by enclosing a hypothesis in an approach that could reliably be fabricated by a test on observable statistics. A result that runs antagonistic to projections of the hypothesis is inferred as a falsification of the hypothesis. A test that does not run antagonistic to the hypothesis substantiates the theory. It is then projected to associate the descriptive value of opposing hypotheses by testing how strongly they are genuine by their forecasts.

Quantitative methods are used and valued to scope a large scale of population generally in research. For that reason, this research will also exploit quantitative research method to accumulate quality data for the purpose of correlating variables

to each other and for signifying the nature of relationship between the variables used in the research.

### **3.1.3 Study Setting**

The present study is a field study rather than artificial setting. Variables involved in this research were neither manipulated nor controlled. The study was held between the employees and project managers of private project based organization by approaching to them in their job setting and to make them able to fill questionnaire in ordinary work environment.

### **3.1.4 Unit of Analysis**

The most vital feature of the research study is the unit of analysis. The unit of analysis explains that which characteristics are to be analyse in the study. In a research study, unit of analysis can array from individual to different groups, cultures, countries and to organizations etc. from where the researcher collect the data. The present study is designed to see the impact of temporal leadership on the organizational ambidexterity, therefore; the unit of analysis was dyad i.e., the project managers who act as temporal leaders and as well as its impact on organization which will be analysed by employees of project based organizations explicitly companies having collaborative culture in the workforce.

In order to evaluate the impact of temporal leadership through team flexibility needed to approach the specific sector of project-based organizations, which specifically bring about organizational ambidexterity in workforce.

### **3.1.5 Time Horizon**

The collection of data was completed in 2 months. Cross sectional study, method was adopted for the collection of data for this research. Due to the short time span

for completion of thesis is required that is why cross-sectional study was adopted to complete the research on time.

## **3.2 Population and Sampling**

### **3.2.1 Population**

As project-based organizations are the emerging source of competitive advantage for Pakistan, in this way this sector is contributing in a massive way to attract other foreigners to invest in Pakistan, which in return is increasing the cultural diversity in the workforce and global recognition of Pakistan as a new emerging and developing country. Every project is unique irrespective of the industry and have some specific deadlines, objectives and budgets whether its construction projects, NGOs project or IT projects etc. It is the key obligation of the project manager to complete the project within definite budget, time and scope. These basic characteristics of projects hustle the project manager to because he or she has no other option but to complete the project under the requirements.

The population exploited in this study was embrace project managers/supervisors and employees working under IT sector in different Islamabad and Rawalpindi project based organizations. The present research was pursue to deliberate on seven Private IT sector of project-based organizations whose names are kept confidential. These include both National level and international level project based organizations, including organizational ambidexterity in working environment, running various projects in the field of information technology of healthcare programs, education, energy, hydropower, social services etc. These projects include applications and software building of personnel, reforming of technical and vocational education and establishment records of hospitals and centres of excellence. The data is collected from the project managers and project teams including the relevant stakeholders of the projects. Almost 350 questionnaires targets to be distributed. Data was collected for measuring these four variables of concern i.e.



Temporal Leadership, Team Flexibility, Collaborative Culture and Organizational Ambidexterity.

### **3.2.2 Sample and Sampling Technique**

Sample is commonly used procedure for data collection, the representative of population. Sampling has two types. One is probability sampling and another is non-probability sampling. In probability sampling, every opinion has equal possibility to be picked as sample and in non-probability sampling, it is pre-decided that which observation would represent as sample of population. Both have their advantages as well as disadvantages. For the present research, convenience sampling were used and it comes under the non-probability sampling. As there are different arguments about the population of project-based organizations in Pakistan but exact is still unknown. Therefore, convenience sampling is the most appropriate procedure to be used in this research because through this technique randomly data can be collected from project base organizations of Pakistan, which will effectively represent the true picture of entire population in explaining the influence of temporal leadership on organizational ambidexterity through collaborative culture and team flexibility.

For the present study, generally, only project based organizations of Rawalpindi and Islamabad of Pakistan were approached. Seven project based organizations were being approached and the data was collected. The projects core team members reported the data on independent variable (i.e., temporal leadership) and moderator (i.e., collaborative culture) whereas the data on the dependent variable (i.e., organizational ambidexterity) and mediating variable (i.e., team flexibility) were reported by project manager which includes the project leaders, team leaders, and advisors/experts. However, support staff was excluded from this group. Self-administered questionnaires were distributed among the chosen organizations of Rawalpindi and Islamabad. Respondents were informed that their information will be personal and will be only used for academic purposes through cover letter. They were asked to answer the survey questions as accurately as possible by ensuring the privacy of their reactions and namelessness so the respondents

don't hesitate to fill in the survey decisively. Almost 350 questionnaire were distributed to project managers and teams for data collection; however, 265 complete responses were actually received.

### 3.3 Sample Characteristics

For the current research, two questionnaire were designed. Supervisors filled questionnaire of team flexibility and organizational ambidexterity and the employees and subordinates of that supervisor filled the other questionnaire having temporal leadership and collaborative culture. The demographics considered in this study are; project manager's and employee's age, their dynamic experience in the project based organizations and information linked to gender and qualification. Sample characteristics are explained as follows:

#### 3.3.1 Gender

Gender is a component, which remains in highlights for the purpose to maintain gender equality, so it is also contemplated as the important element of the demographics. The reason is that it differentiates between male and female in a given population sample. In this study, it has been tried to make sure the privilege of gender equality but still it has been observed that ratio of male managers is considerably greater than the ratio of female managers. **Table 3.1**, represents the

TABLE 3.1: Gender Distribution

| Gender       | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Male         | 170       | 64.2    | 64.2          | 64.2               |
| Female       | 95        | 35.8    | 35.8          | 100                |
| <b>Total</b> | 265       | 100     | 100           |                    |

gender composition ratio of the sample in which 64.2% were male and 35.8 % were female. The male percentage of male respondents was high.

### 3.3.2 Age

Age is considered as one of the demographics, to which respondents sometimes feel uncomfortable to disclose openly. So, for the convenience of respondents, scale/range was used to collect information regarding their age.

TABLE 3.2: Age Distribution

| Age      | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------|-----------|---------|---------------|--------------------|
| 18 – 25  | 73        | 27.5    | 27.5          | 27.5               |
| 26 – 33  | 90        | 34      | 34            | 61.5               |
| 34 – 41  | 62        | 23.4    | 23.4          | 84.9               |
| 42 – 49  | 29        | 10.9    | 10.9          | 95.8               |
| Above 50 | 11        | 4.2     | 4.2           | 100                |
| Total    | 265       | 100     | 100           |                    |

**Table 3.2**, shows the composition of the sample with reference to age groups. 27.5% and 34.0% of respondents were having age between the ranges of 18 - 25 years and 26 - 33 years. 23.4% respondents were having age between the ranges of 34 - 41 years, while 10.9% respondents were having age between the ranges of 42 - 49 years and just 4.2% respondents were more than 50 years. In this study, most of the respondents lie in the ranges of 18-25 and 26 - 33 years of age.

### 3.3.3 Qualification

Education is the major element which contributes towards the prosperity of the whole Nation and it is also the basic need of the hour to compete globally. Hence, after gender, qualification/education is another vital dimension of the demographics.

**Table 3.3** represents the qualification of the respondents, 1.5% were Matric qualified, 5.7% were Intermediate qualified, 40.0% were Bachelors qualified, 33.6% were Masters qualified, 17.4% were MS/M. Phil qualified, 1.9 % were Ph. D qualified. The large number of responded were having a Bachelor's degree.

TABLE 3.3: Qualification Distribution

| Qualification | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| Matric        | 4         | 1.5     | 1.5           | 1.5                |
| Intermediate  | 15        | 5.7     | 5.7           | 7.2                |
| Bachelor      | 106       | 40      | 40            | 47.2               |
| Masters       | 89        | 33.6    | 33.6          | 80.8               |
| MS/M. Phil.   | 46        | 17.4    | 17.4          | 98.1               |
| Ph. D         | 5         | 1.9     | 1.9           | 100                |
| Total         | 265       | 100     | 100           |                    |

### 3.3.4 Experience

TABLE 3.4: Experience Distribution

| Experience | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| 0 – 5      | 126       | 47.5    | 47.5          | 47.5               |
| 6 – 10     | 78        | 29.4    | 29.4          | 77                 |
| 11 – 16    | 38        | 14.3    | 14.3          | 91.3               |
| 17 – 22    | 15        | 5.7     | 5.7           | 97                 |
| Above 29   | 8         | 3       | 3             | 100                |
| Total      | 265       | 100     | 100           |                    |

To collect information regarding the experience of the respondents, also different ranges of experience time period were developed so that every respondent can easily indicate the specific tenure of their experience in the relevant field of projects. **Table 3.4** represent that 47.5 % of the persons were having job expertise ranging from (0 - 5) years. 29.4 % of persons were having job expertise ranging from (6 - 10) years, 14.3 % of persons were having job expertise ranging from (11 - 16) years, 5.7% of respondents were having job expertise ranging from (17 - 22) years, and 3.0% of respondents were having work expertise more than 29 years. Most of the respondents were lying in the work expertise of (0 - 5) years.

## 3.4 Instrumentation

### 3.4.1 Measures

This study consists of closed ended questionnaire adopted from different sources, which were used for measuring four variables. Questionnaires were administered to the various groups of employees & managers of the project based organizations that have been visited during questionnaire distribution period. Questionnaires were also distributed online to the websites of project-based organizations for quick response. Employees/managers as respondents filled the questionnaires with five sections in this study: demographics variables (gender, age, qualification and experience), Temporal Leadership, Team Flexibility, Collaborative Culture and Organizational Ambidexterity. The responses were tapped using a 5 point-Likert scale where 1 represents “strongly disagree” and 5 represents “strongly agree”, unless otherwise stated. Questionnaires also covered demographic variables like Gender, Age, Qualification and Experience.

350 questionnaires were distributed in total but only 300 were received. But the actual numbers of questionnaires used for the analysis of data for demonstrating the results were 265. The discarded questionnaires out of 300 questionnaires were those which were not having the complete information or many of the questions were unfilled in those questionnaires hence making them not appropriate for the study.

### 3.4.2 Temporal Leadership

Questionnaire for Temporal Leadership is constructed by (Mohammed and Nadkarni, 2011) by combining scales for temporal planning (Janicik and Bartel, 2003) and scales for temporal reminders (Gevers et al., 2006). Total items are 7 by partially adapting scales for temporal planning items and temporal reminders items. Additional items describing the scheduling, synchronization, and allocation of temporal resources. Item responses were coded using 5-point Likert scale from 1, “never,” to 5, “a great deal”. Some of items of scale are e.g. “To what

extent does your project leader remind members of important deadlines?” (Temporal Reminder Item), “To what extent does your project leader prepare and build in time for contingencies, problems, and emerging issues?” (Temporal Planning Item) etc.

### 3.4.3 Team Flexibility

Questionnaire for Team Flexibility is constructed by (Sparrowe et al., 2001). Total items are 4, describing the extent to which teams meet established quality, quantity, and flexibility objectives. The responses will be tapped using a 5-point Likert scale where 1 represents “very poor” and 5 represents “excellent” to measure the quality to which team is responding to each other in work. Some of the items of scale are .e.g. “the team’s quality of work.”, “the team’s overall performance.”

### 3.4.4 Organizational Ambidexterity

Jansen et al. (2006) constructs questionnaire for Organizational Ambidexterity. Total items are 14, out of which first 7 are the exploratory items and last 7 are exploitative items. The responses will be tapped using a 5-point Likert scale where 1 represents “strongly disagree” and 5 represents “strongly agree” to measure the extent of ambidextrous capability being exhibited by project manager. Some of the items of scales are .e.g. “We invent new products and services.” (Exploratory Item), “We introduce improved, but existing products and services for our local market.” (Exploitative Item) etc.

### 3.4.5 Collaborative Culture

Questionnaire for Collaborative Culture is constructed by (Gopal and Gosain, 2010). Total items are 3. The responses will be tapped using a 5 point Likert scale where 1 represents “strongly disagree” and 5 represents “strongly agree”. The items of scale are: “People in the project team were supportive and help.”, “There

was willingness to share responsibility for failure.” and “There was willingness to collaborate across different groups.”

TABLE 3.5: Instruments

| Variable                                 | Source                                     | Item |
|--|--|------|
| <b>Temporal Leadership(IV)</b>           | Mohammad & Nadkarni (2011).                | 07   |
| <b>Team Flexibility(Med)</b>             | Sparrowe, Raymond, Liden & Sandy (2001).   | 04   |
| <b>Organizational Ambidexterity (DV)</b> | Jansen, Van den Bosch & Volberda (2006).   | 14   |
| <b>Collaborative Culture(Mod)</b>        | Gopal, Anandasivam & Sanjay Gosain (2010). | 03   |

### 3.5 Statistical Tools

At very first stage scale reliability and validity was tested by doing CFA (confirmatory factor analysis) by using AMOS. The model were checked via fit statistics. These statistics involve multiple indices, such as chi square, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Indices (CFI), Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI). Comparative Fit Index assumes that there is no correlation between all latent variables and compares sample covariance matrix with null model. The acceptable range is between 0 and 1 and for good model fit the value should be close to 1. Value above 0.90 shows good model fit and below exhibits poor model fit.

TABLE 3.6: Confirmatory Factor Analysis (CFA)

|                       | Chi Square | Df  | CMIN Df | GFI   | TLI   | CFI   | RMSEA |
|-----------------------|------------|-----|---------|-------|-------|-------|-------|
| <b>Initial Model</b>  | 344.073    | 164 | 2.098   | 0.869 | .963  | 0.968 | 0.060 |
| <b>Modified Model</b> | 364.408    | 183 | 1.991   | 0.903 | 0.972 | 0.979 | 0.051 |

As the **Table 3.6** is showing that the values are significant and model is good fit. The value of GFI is more than 0.9, values of TLI and CFI are more than 0.92 and the value of RMSEA is less than 0.6. It gave the evidence of model fit and scale validity. Figure 3.6 contains more explanation of CFA.

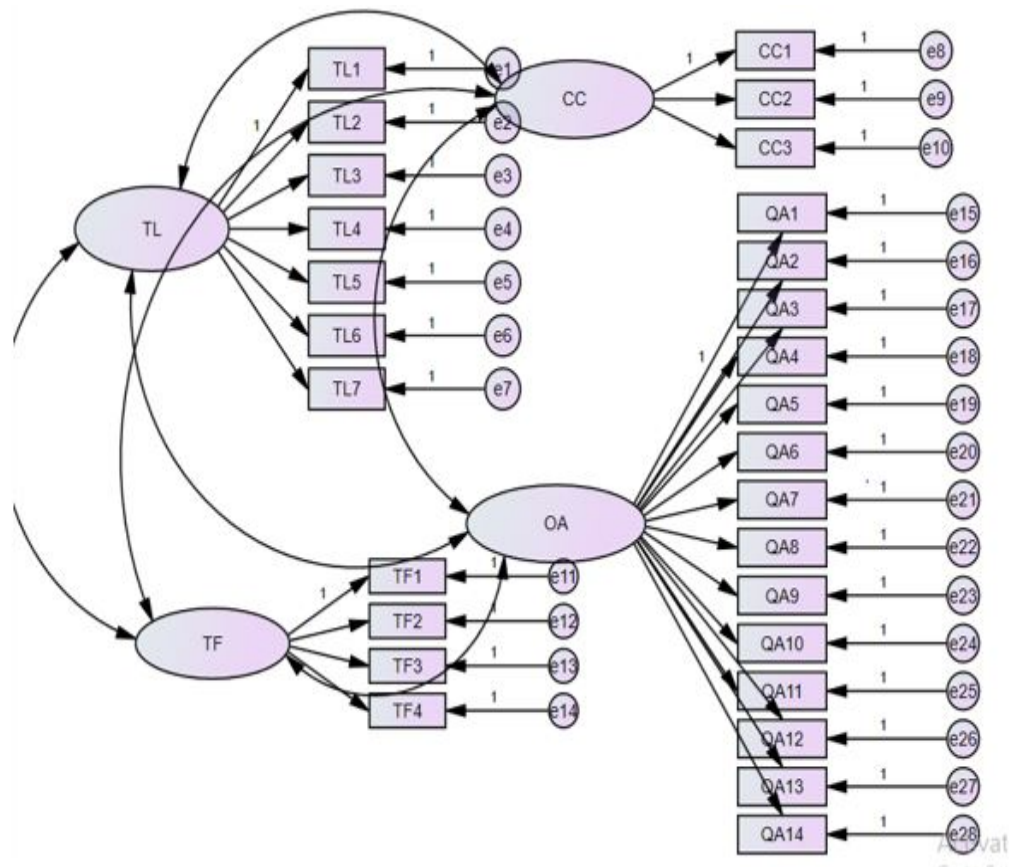


FIGURE 3.1: CFA Model

### 3.6 Pilot Testing

Before going to perform something on a larger scale it would be a very proactive and effective approach to conduct a pilot testing for it, as it will avoid many risks related to wastage of resources and time. It means that prior to administering pilot study the researcher must be clear about research topic, questions and research tools and techniques to re-evaluate them to look how they will practically perform and id needed it can be adopted accordingly. Hence, Pilot testing of almost 30



questionnaires were carried out in order to validate, whether results are familiar and in line with the proposed hypothesis or not. After conducting the pilot testing, it was concluded that there was no significant problem in the variables and the scales were reliable for the pilot study conducted.

### 3.7 Reliability Analysis of Scales Used

Reliability is referred to a process of giving same consistent results over and over again when the specific item is being tested over number of time, same is for the scales. Reliability of scale depicts the ability of the scale to give consistent results when it is being tested for number of times. I have conducted reliability test through Cronbach alpha, it tells about the internal reliability of the variables and tells about if those variables have a link between them or nor along with that it also measures the single construct. Significant range for Cronbach alpha is 0 to 1 (Cronbach, 1951). Higher the value of Cronbach alpha, the reliability of the scale to measure the construct it is meant to measure is also higher. Scale is considered reliable when the value of alpha above 0.7 and it is less reliable in measuring the selected set of construct when the value is below 0.7.

In **Table 3.7**, the Cronbach alpha of the scales used in data collection are shown. The values of Cronbach alpha for the variables under research are above 0.7. All the items having values 0.8 shows that these scales are highly reliable to be used in this study according the context of Pakistan.

TABLE 3.7: Scale Reliability and Validity Analysis

| Variable                            | Cronbach's alpha | Item |
|-------------------------------------|------------------|------|
| <b>Temporal Leadership</b>          | 0.805            | 07   |
| <b>Team Flexibility</b>             | 0.691            | 04   |
| <b>Organizational Ambidexterity</b> | 0.701            | 14   |
| <b>Collaborative Culture</b>        | 0.824            | 03   |

In **Table 3.7**, the Cronbach alpha of the scales used in data collection are shown. Table 3.7, shows the Reliability and Validity Analysis results after complete data collection. Cronbach Coefficient Alpha value of Temporal leadership was 0.805,

Team flexibility was 0.691, and Organizational ambidexterity was valued as 0.701, Collaborative culture and was 0.824.

### **3.8 Data analysis techniques**

For generating statistical results, different statistical tools and techniques have been utilize in social sciences. These tools and techniques have some merits de-merits, but the choice of accurate tests and tools is strongly link with research model, research purpose, research type and nature of data. To check the links among variables researchers utilize correlation, to investigate effect of independent variables on dependent variables. Regression is use and process macros or structural equation modelling to test the links between multiple independent, dependent variables. After the collection of the data that is relevant to the study from 265 respondents, the data was then analysed on SPSS software version 20 as well as on AMOS. A number of procedures while analysing the data are used, such procedures are as following:

1. First of all, only the questionnaires which were filled appropriately were selected for the analysis.
2. Each variable of the questionnaire were coded and each coded variable was used for data analysis.
3. Frequency tables were used in regard to explain the sample characteristics.
4. Descriptive statistics was conducted by using the numerical values.
5. Reliability of all the variables was checked through Cronbach co-efficient alpha.
6. Confirmatory Factor Analysis (CFA) was used to justify the measurement model.
7. Correlation analysis was conducted in order to know whether there is a significant relationship exist between the variables understudied in this research or not.

8. Single linear regression analysis of Independent and Dependent variable was conducted to determine the proposed relationship.
9. Preacher and Hayes Process were used for conducting mediation and moderation to determine the existence of the role of mediator and moderator between the Independent and dependent variables.
10. Through correlation and Preacher and Hayes method, the intended hypotheses were tested to check the rejection and acceptance of the proposed hypothesis.

# Chapter 4

## Results

### 4.1 Descriptive Statistics

Descriptive statistics of all the variables such as temporal leadership, collaborative culture, team flexibility and organizational ambidexterity comprehends the important points of evidence about data and their standard values. It includes the total number of respondents, the minimum and maximum values of each variable, moreover the means and standard deviations of each variable. The mean values demonstrates the average of responses while the standard deviation values indicate the variation of responses from their means. All the variables understudied were measured at 5-point Likert scale. Descriptive statistics is the information summary of whole data because it highlights the significant statistic points. The given table presents some significant figures that are representing the whole data. The descriptive statistic comprises basic particulars like the size of the population, minimum and maximum values, mean values and standard deviation values of the data. Descriptive statistics of the current data were given in Table 4.1. First column of the table gives the details of the variables. Second, third, fourth, fifth and sixth columns inform about sample size, lower most value, upper most value, mean and standard deviation respectively.

TABLE 4.1: Descriptive Statistics

|                              | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Standard Deviation</b> |
|------------------------------|----------|----------------|----------------|-------------|---------------------------|
| Temporal leadership          | 265      | 1              | 5              | 3.39        | 0.744                     |
| Team flexibility             | 265      | 1              | 5              | 3.43        | 0.77                      |
| Organizational ambidexterity | 265      | 2.07           | 5              | 3.08        | 0.444                     |
| Collaborative culture        | 265      | 1              | 5              | 3.07        | 0.986                     |

The descriptive statistic comprises basic particulars like the size of the population, minimum and maximum values, mean values and standard deviation values of the data. Descriptive statistics of the current data were given in **Table: 4.1**. First column of the table gives the details of the variables. Second, third, fourth, fifth and sixth columns inform about sample size, lower most value, upper most value, mean and standard deviation respectively.

Table 4.1 displays that sample size was 265 for all the four variables. All variables (Temporal Leadership, Team Flexibility, Collaborative Culture and Organizational Ambidexterity) were rated on a five point Likert scale, such as 1 demonstrating “Strongly Disagree” and 5 demonstrating “Strongly Agree”. Mean values and Standard Deviation values show the essence of responses. This is respondents’ observation regarding a particular variable. The mean value of the Temporal Leadership (TL) was 3.39 whereas value of standard deviation was 0.744. The mean value of Team Flexibility (TF) was 3.43 whereas value of standard deviation was 0.770. The mean value of Organizational Ambidexterity (OA) was 3.08 whereas value of standard deviation was 0.444. Finally, the mean value of Collaborative Culture (CC) was 3.07 whereas value of standard deviation was 0.986.

## 4.2 Correlational Analysis

Generally, correlation analysis is carried out to determine the association among the variables. In this research work, foremost objective to conduct correlation analysis is to find out the correlation between temporal leadership and organizational ambidexterity, the mediating role of team flexibility and the moderating role of collaborative culture; to make the proposed hypotheses valid. 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. Correlation analysis doesn't 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. However, if the values are zero that straight 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.

The below mentioned table show the correlation between the variables that are being studied under this study. Moreover, the values of correlation are depicting the nature and magnitude of relationship between the variables.

**Table: 4.2** presents the correlations for all theoretical variables. Temporal leadership was positively correlated with Team flexibility ( $r = 0.340^{**}$ ,  $p < 0.01$ ), with organizational ambidexterity ( $r = 0.322^{**}$ ,  $p < 0.01$ ), and with Collaborative culture ( $r = 0.425^{**}$ ,  $p < .01$ ). Team flexibility positively correlated with organizational ambidexterity ( $r = 0.520^{**}$ ,  $p < 0.01$ ), and with Collaborative culture ( $r$

= 0.476\*\*,  $p < 0.01$ ). Organizational ambidexterity was positively correlated with Collaborative culture ( $r = 0.495$ \*\*,  $p < 0.01$ ).

TABLE 4.2: Correlation Analysis

| Sr.No | Variables                    | 1      | 2      | 3      | 4 |
|-------|------------------------------|--------|--------|--------|---|
| 1     | Temporal Leadership          | 1      |        |        |   |
| 2     | Team Flexibility             | .340** | 1      |        |   |
| 3     | Organizational Ambidexterity | .322** | .520** | 1      |   |
| 4     | Collaborative culture        | .425** | .476** | .495** | 1 |

\*\*Correlation is significant at the 0.01 level (2-tailed).  $N = 265$ , \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .001$  (TL = Temporal leadership, TF= Team flexibility, OA= Organizational ambidexterity, CC= Collaborative culture).

### 4.3 Regression Analysis

To analyse the existence of relationship between the variables, correlation analysis has been performed in the study, however mere reliance on the correlation analysis does not suffice because it just shows the existence of relationship between variables through an inadequate support and doesn't tell about the casual relationship amongst the variables. Therefore, regression analysis is executed so as to validate the dependence of one variable on another variable. Regression analysis depicts the extent to which one variable depends on another variable i.e. independent variable on which it is being regressed.

In this study, Preacher and Hayes methods [Preacher and Hayes \(2004\)](#) have been used for both mediation and moderation regression analysis. Model 1 for moderation and Model 4 for mediation is used in Preacher and Hayes process; both for mediation and moderation are conducted separately.

#### H1: Temporal Leadership and Organizational Ambidexterity

**Table 4.3** indicates the results of hypotheses testing. First, we tested H1 that

temporal leadership is positively associated with organizational ambidexterity. Results of regression analysis revealed that there is positive and significant relationship existing between temporal leadership and organizational ambidexterity. The  $\beta$  co-efficient value is 0.132,  $R^2 = 0.46$  with the p value = 0.000. The value of  $R^2$  shows coefficient of determination whereas  $\beta$  value shows the rate of change demonstrating that 1 unit change in temporal leadership leads to 0.132 unit change in organizational ambidexterity. The p value of 0.000 indicates that relationship is highly significant. Hence, Hypothesis 1 is accepted.

TABLE 4.3: Regression of Outcomes

| Predictor                                      | Team flexibility |       |              | Organizational<br>ambidexterity |       |              |
|--|------------------|-------|--------------|---------------------------------|-------|--------------|
|  | $\beta$          | $R^2$ | $\Delta R^2$ | $\beta$                         | $R^2$ | $\Delta R^2$ |
| <b>IV: Tem-<br/>poral<br/>leader-<br/>ship</b> | 0.538***         | 0.27  | 0.268***     | 0.132***                        | 0.49  | 0.46***      |
| <b>Med:<br/>Team<br/>Flexibil-<br/>ity</b>     |                  |       |              | 0.177***                        | 0.116 | 0.112***     |

*Un-standardized regression coefficient reported. N = 265, \* p <.05; \*\* p <.01; \*\*\*p <.001*

## H2: Temporal Leadership and Team Flexibility

In Hypothesis H2, we assumed that temporal leadership is positively associated with team flexibility. The regression results of this hypothesis are given in Table 4.3. Results of regression analysis revealed that there is positive and significant



relationship existing between temporal leadership and team flexibility. The  $\beta$  coefficient value is 0.538,  $R^2 = 0.271$  with the p value = 0.000. The value of  $R^2$  shows coefficient of determination whereas  $\beta$  value shows the rate of change demonstrating that 1 unit change in temporal leadership leads to 0.538 unit change in team flexibility. The p value of 0.000 indicates that relationship is highly significant. Hence, Hypothesis 2 is accepted.

### H3: Team Flexibility and Organizational Ambidexterity

In Hypothesis H3, we assumed that team flexibility is positively associated with organizational ambidexterity. The regression results of this hypothesis are given in **Table 4.3**. Results of regression analysis revealed that there is positive and significant relationship existing between team flexibility and organizational ambidexterity. The  $\beta$  co-efficient value is 0.177,  $R^2 = 0.116$  with the p value = 0.000. The value of  $R^2$  shows coefficient of determination whereas  $\beta$  value shows the rate of change demonstrating that 1 unit change in team flexibility leads to 0.177 unit change in organizational ambidexterity. The p value of 0.000 indicates that relationship is highly significant. Hence, Hypothesis 3 is accepted.

## 4.4 Mediation Analysis Results

The Hypothesis 4 assumed that team flexibility plays a mediating role between temporal leadership and organizational ambidexterity. To test the mediation of H4 we used model 4 of PROCESS macro through SPSS by Hayes ([Preacher and Hayes, 2004](#)). In which we checked different paths a, b, c and c' respectively. According to Preacher and Hayes process, there are total three effects that have to be ascertained: total effect, direct effect and indirect effect.

TABLE 4.4: Mediation Analysis

| DV | Effect on IV on M (a path) |      | Effect of M on DV (b path) |      | Total effect of IV on DV (c path) |      | Direct Effect of IV on DV (c' path) |       | Bootstrap re-<br>sults for indirect<br>effects |      |       |     |
|----|----------------------------|------|----------------------------|------|-----------------------------------|------|-------------------------------------|-------|--|------|-------|-----|
|    | $\beta$                    | t    | $\beta$                    | T    | $\beta$                           | t    | $\beta$                             | t     | LL   | 95 % | UL    | 95% |
| TL | 0.538***                   | 9.87 | 0.177***                   | 4.53 | 0.132***                          | 3.68 | 0.036**                             | 0.906 | 0.045  |      | 0.152 |     |

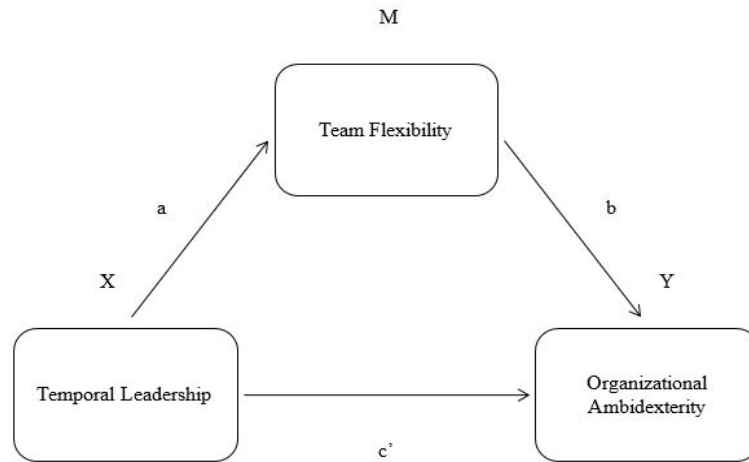


FIGURE 4.1: Mediation Analysis

$N = 265$ , \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .00$  Un-standardized regression coefficient reported. Bootstrap sample size was 5000. Confidence Interval = 95 $N = 265$ , Control variables were, Gender, Age, Education and Marital Status, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .001$  LLCI = Lower Limit Confidence Interval; ULCI = Upper Limit Confidence Interval.

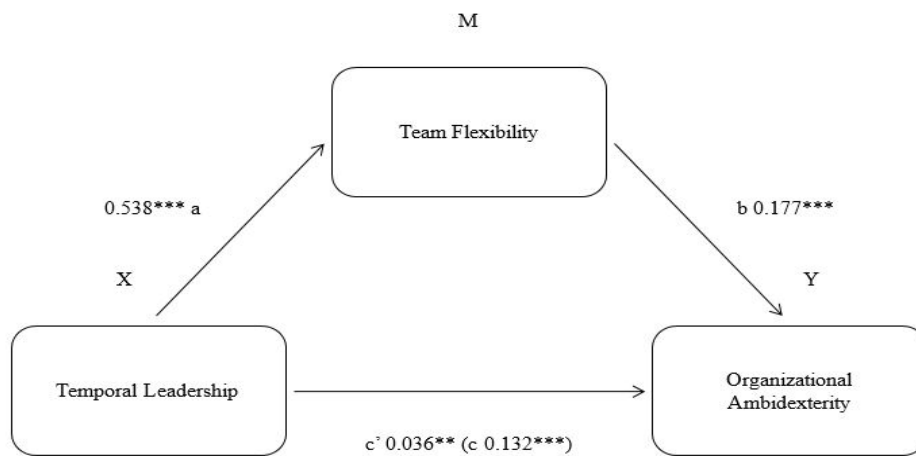


FIGURE 4.2: Mediation Analysis with Coefficients

### Total Effect

Total effect demonstrates the effect of IV temporal leadership and DV organizational ambidexterity. The total effect of temporal leadership on organizational ambidexterity is 0.132 with the significance of  $p = 0.000$ . It indicates that approximately 13% variance occur in organizational ambidexterity to temporal leadership. The lower limit of bootstrap is 0.0617 while the upper limit is 0.2031, without having any zero between both limits. Hence, H1 is accepted that temporal leadership

is positively associated with organizational ambidexterity.

### **Direct Effect**

Direct effect identifies the effect of IV temporal leadership on DV organizational ambidexterity in the presence of mediator team flexibility. In the presence of mediator, the direct effect is 0.036 with the significant p-value of 0.000. It demonstrates that temporal leadership covers 3% variation of organizational ambidexterity in the presence of team flexibility. The lower limit of bootstrap is 0.0431 while the upper limit is 0.1166, without having any zero between both limits, which clarifies that the results are significant.

### **Indirect Effect**

Indirect effect identifies that mediation exists between IV and DV i.e. Team Flexibility mediates the relationship between temporal leadership and organizational ambidexterity. The bootstrap values are predicting the significant results because there is no zero existing between lower limit i.e. 0.045 and upper limit i.e. 0.152. Therefore, the results are supporting the H4 and this hypothesis is accepted.

## **4.5 Moderation Analysis**

In order to test the hypothesis H5 that states that collaborative culture moderates the relationship between temporal leadership and team flexibility, we used model 1 of process macro through SPSS. **Table 4.5** exhibits Moderation Analysis. Hypothesis 5 states, “Collaborative Culture moderates the relationship between Temporal Leadership and Team Flexibility. The result show regression coefficients of Interaction Term (TL x CC) and Team Flexibility as ( $\beta = 0.1108$ ,  $p = 0.0268$ ,  $\Delta R^2 = 0.3618$ ). The finding show that Collaborative Culture moderate between Temporal Leadership and Organizational Ambidexterity, the relationship is significant because lower limit of bootstrap value is 0.0128 and upper limit value is 0.2088, having the zero value between both limits. The result are shown in the table and explain the conditional effect.

*Un-standardized regression coefficient reported. Bootstrap sample size was 5000. Confidence Interval = 95%. N = 265, Control variables were, Gender, Age, Education and Marital Status, \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\* $p < .001$ .*

TABLE 4.5: Moderation Analysis

| DV        | Effect of TL on TF |        | Effect of CC on TF |        | Effect of TL x CC on TF |       | Bootstrap Results for Indirect Effects |           |
|-----------|--------------------|--------|--------------------|--------|-------------------------|-------|--|-----------|
|           | $\beta$            | t      | $\beta$            | t      | $\beta$                 | t     | LL 95 % TL                             | UL 95% TL |
| <b>TF</b> | 0.1524             | 0.8198 | 0.0813             | 0.5551 | 0.1108                  | 2.226 | 0.0128                                 | 0.2088    |

Moderated in below table 4.6 states that collaborative culture will moderate the indirect effect of temporal leadership on organizational ambidexterity through project team flexibility; the mediated relationship will be stronger when collaborative culture is high as opposed to low. **Table: 4.6** provides strong justification for proposed hypothesis. The results from conditional indirect effects depicted in above table. The results from conditional indirect effects of temporal leadership on organizational ambidexterity via team flexibility becomes stronger at higher level of collaborative culture and both upper level and lower level confidence interval has the same sign and the indirect effect was significant (B=0.0943). So, the moderated mediation n was supported.

TABLE 4.6: Moderated-Mediation

| Mediator                | Collaborative Culture | Indirect | SE    | Boot LL | Boot UL |
|-------------------------|-----------------------|----------|-------|---------|---------|
| <b>Team Flexibility</b> | 2.0862                | .0555    | .0214 | .0217   | .1098   |
| <b>Team flexibility</b> | 3.0730                | .0749    | .0218 | .0393   | .1285   |
| <b>Team Flexibility</b> | 4.0597                | .0943    | .0290 | .0458   | .1619   |

## 4.6 Summary of Accepted/ Rejected Hypothesis

All the hypothesis i.e; from temporal leadership to organizational ambidexterity, mediator as team flexibility and collaborative culture as moderator are fulfilling the requirements of approved hypothesis which impact positively on each other to enhance their effect. **Table 4.7**, illustrates the precise summary of results for the proposed hypotheses under this study.

TABLE 4.7: Hypotheses Summarized Results

| <b>Hypotheses</b>   | <b>Statement</b>  | <b>Status</b>   |
|---------------------|---|-----------------|
| <b>Hypothesis 1</b> | There is positive association between Temporal leadership and organizational ambidexterity.           | <b>Accepted</b> |
| <b>Hypothesis 2</b> | There is positive association between Temporal Leadership and Team Flexibility.                       | <b>Accepted</b> |
| <b>Hypothesis 3</b> | There is positive association between Team Flexibility and Organizational Ambidexterity.              | <b>Accepted</b> |
| <b>Hypothesis 4</b> | Team Flexibility plays a mediating role between Temporal Leadership and Organizational Ambidexterity. | <b>Accepted</b> |
| <b>Hypothesis 5</b> | Collaborative Culture moderates the relationship between Temporal Leadership and Team Flexibility.    | <b>Accepted</b> |

# Chapter 5

## Discussion, Conclusion, Limitations and Recommendations

This chapter comprises of details of relationship of hypothesis and also their reasoning of acceptance and rejection and also discusses the theoretical implication, practical implication, strengths and weaknesses of the study and future research directions.

### 5.1 Discussion

Utilizing leader member exchange (LMX) theory by ([Dansereau Jr et al., 1975](#)), the objective of present study was to propose and test a model of temporal leadership on organizational ambidexterity in project-based organizations. For this purpose, data from project-based organizations in Pakistan was collected. As projected, the findings of the study were in congruent with hypothesized model. The research also studied the mediating effect of team flexibility between temporal leadership and organizational ambidexterity. The moderating effect of collaborative culture between temporal leadership and team flexibility is also studied in the research so as to know its relative impact combined with temporal leadership on

organizational ambidexterity.

The preceding researches in the domain of temporal leadership and organizational ambidexterity are comprehensive in nature encapsulating relevant aspects of the constructs (Rogan and Mors, 2014; Lubatkin et al., 2006; Gibson and Birkinshaw, 2004). Empirical researches on the literature of ambidexterity suggested that variables such as temporal leadership, flexibility, collaborative culture are important variables to study further and have significant influence on intertemporal choice problem (Yu et al., 2018; Ancona et al., 2001) and organizational ambidexterity (Heavey and Simsek, 2017).

The results of the study suggests that temporal leadership has a positive impact on organizational ambidexterity which means that temporal leadership of project manager enhances the ambidexterity of the organization overall. Therefore, H1, H2, H3, H4 and H5 are accepted developing a relationship between temporal leadership and organizational ambidexterity through mediator of team flexibility. This implies that temporal leadership positively enhances flexibility in team which enhances the organizational ambidexterity.

The study inculcated variable of collaborative culture as a moderator. The data analysis on the variable in the contextual settings of Pakistan proves that temporal leadership climate positively influences the relationship between temporal leadership of the project manager and team flexibility. The role of temporal leadership climate was found to be significant and positively affecting relationship between temporal leadership and team flexibility.

The comprehensive discussion on each of the hypothesis is as following:

### **5.1.1 Hypothesis H1: There is Positive Association between Temporal Leadership and Organizational Ambidexterity**

In Hypothesis 1, it was proposed that there is a positive relationship between temporal leadership and organizational ambidexterity. The results of the hypothesis

( $\beta = 0.132$ ,  $t = 3.68$ ,  $p = 0.00$ ) proved the existence of significantly positive relationship between temporal leadership and organizational ambidexterity. The  $t$  value of 3.68 indicates the significant level of relationship between temporal leadership and organizational ambidexterity, as the value is greater than 2 means that results are statistically significant. The  $\beta$  co-efficient is 0.132 which demonstrates that if there is 1% unit change in temporal leadership then there is a likelihood that organizational ambidexterity will increase by 13% units. Empirical studies in the domain of project management mostly considers temporal leadership as an important variable positively contributing towards organizational ambidexterity as temporal leadership has a self-confidence and capability for immediate control of the temporal misunderstanding (Mohammed and Alipour, 2014). The hypothesis in this study assumed that temporal leadership has its self-confidence and future related high-level view of their team, the way he performs his task and the environment of his task accomplishment, has a very important and value able role for enabling his teams towards organizational ambidexterity (Morgeson and DeRue, 2006). Halbesleben et al. (2003) suggested in their research paper that temporal leadership enhances ambidextrous capabilities of individuals allowing them to exploit state of the art ways available to carry out operations and explore new creative ways to improve existing operations in a better way. Ambidexterity as a concept inculcates both exploitative and exploratory methods to ensure enhanced performance on organizational as well as individual levels. Ambidexterity on individual level allows managers to exploit the existing competencies and explore new opportunities along with the creation of new knowledge (Taylor and Greve, 2006). The key element for reaching higher levels of organizational level ambidexterity is to maintain an appropriate equilibrium between exploration and exploitation. Temporal leadership is one of the few important aspects contributing to allow individuals to maintain this balance. Whenever this appropriate balance is achieved between alignment and adaptability only then successful implementation of the projects can be ensured. Keeping in view effects of globalization organizational ambidexterity is considered among the essentials required in ensuring the successful implementation and completion of projects (Lavie and Rosenkopf, 2006), along



with temporal leadership in the domain of project management. The project based organizations of Pakistan entails ambidextrous element both on organizational and individual level and relationship of temporal leadership and organizational ambidexterity is positively and significantly established as results of empirical testing of the hypothesis shows. The findings of the results supports positive relation of temporal leadership with organizational ambidexterity in the contextual settings of Pakistan.

### **5.1.2 Hypothesis H2: There is Positive Association between Temporal Leadership and Team Flexibility**

In Hypothesis 2, it was proposed that there is positive association between temporal leadership and team flexibility. The results of the hypothesis ( $\beta = 0.538$ ,  $t = 9.87$ ,  $p = 0.00$ ) proved the existence of significantly positive relationship between temporal leadership and team flexibility. The  $t$  value of 9.87 indicates the significant level of relationship between temporal leadership and team flexibility. As the value is greater than 2 means that results are statistically significant. The  $\beta$  co-efficient is 0.538 which demonstrates that if there is 1% unit change in temporal leadership then there is a likelihood that team flexibility would be increased by 53.% units. Existing literature available on temporal leadership and team flexibility (He et al., 2014; Yu et al., 2018). Bhatnagar and Tjosvold (2012) indicated in his study that decision making and risk taking through temporal synchronizations breeds team capacity to be flexible and maintain standardization as well and one of the facets of team flexibility allows them to use these processes appropriately as the situation demands.

Temporal leadership essentially encourages team members and empowers them to respond to unpredictable difficulties for change without foregoing team benefit, which push them to enable team flexibility. Under temporal leadership, team followers feel a strong intellect of a common aim and flexibility (Bhatnagar and Tjosvold, 2012; Chen et al., 2006; Mehta et al., 2009; Bosch-Sijtsema et al., 2011; Algesheimer et al., 2011), which, in turn, augments their purpose of positively prompting the team. Aforementioned study shows that interactive competition

could improve team flexibility (Tauer and Harackiewicz, 2004; Abuhamdeh and Csikszentmihalyi, 2009).

Team flexibility plays a vital role in enhancing organization performance especially when it comes to collectivist societies like that of Pakistan. The team flexibility is categorized by aspects like decision-making, helpfulness, dependability and attentiveness to needs of others (Foss et al., 2010). Temporal leadership allows project manager to act according to the demands of situation particularly therefore allowing better adaptability and flexibility to increased project performance. The relationship of temporal leadership and team flexibility is positively and significantly established in project-based organizations of Pakistan as proved by the results of this study after empirical testing of the data.

### **5.1.3 Hypothesis H3: There is a Positive Association between Team Flexibility and Organizational Ambidexterity**

In Hypothesis 3, it was proposed that there is positive association between team flexibility and organizational ambidexterity. The results of the hypothesis ( $\beta = 0.177$ ,  $t = 4.53$ ,  $p = 0.00$ ) proved the existence of significantly positive relationship between team flexibility and organizational ambidexterity. The  $t$  value of 4.53 indicates the significant level of relationship between team flexibility and organizational ambidexterity, as the value is greater than 2 means that results are statistically significant. The  $\beta$  co-efficient is 0.177 which demonstrates that if there is 1% unit change in team flexibility then there is a likelihood that organizational ambidexterity would be increased by 17% units.

The results of this hypothesis are supported by the findings of past researches that considers element of team flexibility as one of the critical factors for enhancing organizational ambidexterity (Parida and Örtqvist, 2015; Choo et al., 2007). Ambidexterity allows project managers to implement exploitative and explorative practices simultaneously not only ensuring adaptability but also improvement and enhancement in performance both on individual as well as project level (Choo

et al., 2007). Team that are creative in thinking and adaptable to recent advancements are capable of motivating team members. The team members trust managers in return whom they find intelligently capable. Flexible capability of the team allows them to perform exceptionally as well as to enhance the performance of the organization (Elenkov and Manev, 2009).

The fact that projects are time-bound make it a necessity to have mechanisms that ensure successful and timely flexibility and improvement techniques to be applied according to the demand of circumstances (Davies and Brady, 2016). Organizational ambidexterity allows team to make an effective use of his exploitative and explorative abilities given the need of an hour making certain the successful implementation and timely completion of the project. The project management literature available on critical success factors for projects considers flexibility and innovation as one of the important features contributing in the project success (Di Stefano et al., 2014). It also take into account the fact that creativity is the element modern project based organizations thrive on. The paradigm shift towards globalization makes creativity and innovation an important competitive edge organizations can have over competitors (Nikolova et al., 2017).

Project based organizations when endeavor to develop new products or services require ambidexterity on organizational level through team flexibility to ensure competencies required to complete projects within constraints and to maintain quality standards. The project based organizational setup in Pakistan entails creativity and innovation element along with the mechanisms of flexibility as the results of hypothesis suggests. The findings of the hypothesis establishes a positive and significant relationship between team flexibility and organizational ambidexterity on the basis of data collected from project based organizations in Pakistan.

#### 5.1.4 Hypothesis H4: Team Flexibility Plays a Mediating Role between Temporal Leadership and Organizational Ambidexterity

In Hypothesis 4, it was proposed that team flexibility plays a mediating role between temporal leadership and organizational ambidexterity. This hypothesis has been accepted because results are demonstrating the significant relationship of team flexibility as a mediator between temporal leadership and organizational ambidexterity. As the lower limit and upper limit 0.045 and 0.152 respectively indicated by the unstandardized regression coefficient are both positive and there is no zero existing in the bootstrapped 95% interval around the indirect effect of relationship of temporal leadership and organizational ambidexterity through team flexibility.

There is no research existing previously to study mediating effect of team flexibility with reference to organizational ambidexterity in the domain of project management. With the mediating effect, one should not overlook the implications of temporal leadership behavior to enhance team flexibility as a finding that effectively enhance ambidextrousness of organization. However, findings of the research conducted by (Yu et al., 2018) indicates that temporal leadership significantly contributes in enhancing team flexibility in completing the temporal effect of project. Inferences of the past literature also suggests that temporal leadership plays a vital role in enhancing ambidexterity of an organization through the created team flexibility, as temporal leadership and diverse workforce is repertoire of talents and expertise of various forms and kinds enhancing innovative and creative organizational performance (Grabher and Thiel, 2015).

The modern paradigm shift towards globalization makes temporal leadership a key human asset for both traditional and project based organizations (Byrd and Turner, 2001). Temporal leadership breeds team flexibility allowing exploitative and exploratory mechanisms to be adopted both on individual and organizational level and hence enhancing organizational ambidexterity. Projects, throughout their lifecycles passes through series of unforeseeable complexities be it a social or

economic events, supply chain problems or unexpected external events. Projects are subject to inherent fluctuations of organizations in which they are being carried out (Schwab and Miner, 2008). The uncertain nature of the projects call for inclusion of workforce asset which is temporal leadership. Such inclusions will lead to development of flexible capabilities for team and hence the ambidexterity will also be enhanced both on project and organizational level. The results of the hypothesis clearly suggests that relationship of temporal leadership and organizational ambidexterity is mediated through team flexibility positive and significant in the project based organizations of Pakistan.

#### **5.1.5 Hypothesis H5: Collaborative Culture Moderates Positively the Relationship between Temporal Leadership and Team Flexibility; such that if Collaborative Culture is high then the Relationship between Temporal Leadership and Team Flexibility would be Strengthened**

In Hypothesis 5, the moderating effect of collaborative culture between temporal leadership and team flexibility was studied. The results of Hypothesis 5 showed significant results. The analysis showed that there is significant effect of collaborative culture ( $\beta = 0.1108$ ,  $t = 2.226$ ,  $p = 0.0268$ ). The value of  $\beta = 0.1108$  predicts that collaborative culture is bringing change in the relationship of temporal leadership and team flexibility. The t-value of 2.226 demonstrates that the relationship is highly significant because for a hypothesis to be significant t-value should be greater than 2. The lower and upper limit of 0.0128 and 0.2088 respectively indicated by standardized regression are having same signs and zero exists in the bootstrapped 95% interval, which means the results are significant. Hence, the results are meeting the standards, statistically this relationship is significant and the hypothesis is accepted. According to the results of the hypothesis, collaborative culture does moderate the relationship between temporal leadership and team flexibility.

In this study, we explored the moderating effect of collaborative culture on the relationship of temporal leadership and team flexibility. More specifically, the study was intended to prove that collaborative culture enhances team flexibility capabilities of temporal leadership of project manager. The results of the hypothesis is significant and in our sample of study moderator of collaborative culture significantly affect the relationship of temporal leadership and team flexibility.

Previous studies have established the significant impact of collaborative culture on the relationship of temporal leadership and team flexibility (Stavros and Cole, 2015). Moreover, it enhances the flexible capabilities of temporal leadership of project manager (Oetzel, 2017). Collaboration is an indispensable feature in leveraging team flexibility and project managers are observing for approaches to escalate collaboration amongst their teams (Cole et al., 2019). Collaboration among team culture enhanced using positive and active swapping of knowledge (Raisch and Birkinshaw, 2008). Therefore, growing literature on positive temporal planning and thinking allows members to construct future through cultural collaboration and shared commitment (Stavros and Cole, 2014). Duffy and Fearne (2004) have established that collaborative relationships help the team members to effectively manage projects and involve in planning and decision making flexibly to elevate the link between leader and the team.

In conclusion, collaborative culture influences team flexibility. In the contextual settings of Pakistan, it is important to put light on these distinctive actualities. The data suggests that team culture of project teams mostly have collaborative attraction for the members sharing different values and beliefs, therefore positively affecting the group performance altogether which in return affects flexible capabilities of team under temporal leadership of project manager positively. In project based organizations of Pakistan, as the results of the hypothesis suggests that patterns of team flexibility prevails when it comes to collaborative culture.

## 5.2 Practical and Theoretical Implication

This study did very momentous contributions in the past literature in both ways, theoretically and practically. The study has contributed to the literature of variables like temporal leadership, team flexibility, collaborative culture and organizational ambidexterity. There is very limited literature available on temporal leadership highlighting the organizational issues emphasizing its role in the domain of project management (Mohammed and Alipour, 2014). Our findings indicate that with the help of strong temporal leadership we can see a major improvement in organizational ambidexterity. This is very significant contribution to literature since previously there is less research available that is highlighting it in organizational perspective within the contextual settings of Pakistan in the domain of project management. The study illustrates very significant actualities by identifying the influence of temporal leadership on organizational ambidexterity in the context of Pakistan, where leadership is considered an important yet sensitive instrument in streamlining efforts to enhance organizational ambidexterity. In the collectivist societies like that of Pakistan culture is an important element of individual life and organizational setup. It influences strongly one's believes, values and everyday interactions. In such societies ambidexterity is an important element ensuring success as it allows individuals to adapt and align favorable change towards innovative and structural team conscious (Bolman and Deal, 2000). It is identified through the study that temporal leadership significantly enhances organizational ambidexterity. It allows project manager to adapt to temporal settings and to deal with intertemporal conflicts that enhance flexibility in project team, in a way to motivate them to work effectively and as a result enhanced organizational ambidexterity is achieved.

Additional very significant theoretical contribution is the role of team flexibility as a mediator between temporal leadership and organizational ambidexterity, which is not acknowledged in the literature before. Previous literature available on flexibility is not in the project management context and also temporal leadership and organizational ambidexterity have identified other mediators in the relationship but team flexibility has never been introduced not in the relationship nor as a

mediator before. The results of the study demonstrated that temporal leadership increases flexibility capabilities of project team that leads to enhanced organizational ambidexterity. As temporal leadership and team flexibility are important and distinctive variables in the domain of project management, so analyzing these variables in the contextual settings of Pakistan, comes out as a unique research, which has contributed significantly in the literature.

Moreover, this research also studied the moderating role of collaborative culture on the relationship of temporal leadership and team flexibility. The results of the study suggested that collaborative culture positively moderate the relationship between temporal leadership and team flexibility in the contextual settings of Pakistan. This too is a significant theoretical contribution in the literature. Organizations along with project managers should inculcate proper mechanisms to improve effects of collaborative culture as it significantly influences the potential future and long-term viability of the organization in context of performance and success.

This study is equally important in the practical business world. In this age of modernization where world is moving rapidly towards globalization, temporal leadership along with team flexibility is considered one of significant aspects in defining potential future and long term viability of project based organizations in the context of ambidexterity and success. This research is helpful for project-based organizations in a way that it provide insights on how temporal leadership enhances organizational ambidexterity through team flexibility, for a system to be adopted in a way that it ensures success on both organizational and project level.

### **5.3 Limitations of Research**

While conducting the study it is tried to eliminate and overcome flaws but still there are always few limitations in research as it is not possible to cover all aspects in one study. By adding some well-informed evidences in literature, few research gaps have been filled by the current research. On the other hand, because of time and resource constraints there are some other limitations associated



with this study. The study is directed only to the project based organizations of Pakistan and the results may not be generalized to other sectors. Only one mediator and one mediator and one moderator were tested due to time constraint. However, future research can expand the model and check the other mediators as well.

Small sample size is another limitation of study and the reason behind this limitation is that data is collected in a very short time. Data was collected from only projectized organizations from IT sector operating in Islamabad and Rawalpindi so it might not represent the whole culture of Pakistan, whereas employees working in different cities exhibit different behavior due to environment and other geographical changes.

Additionally we use convenience sampling method and choose the sample which was easily reachable to us. Due to convenient sampling and data collected from the few organizations, the results of the present study cannot be generalized for the projectized organizations that are not engage in such ambidextrous activities. The results are different because of strong situational factors as well as Pakistani cultural has strong impact and results cannot be generalized to other countries.

## **5.4 Future Research Directions**

There are always some space in everything, which gives future directions. This research open abundant novel opportunities for future researches. There are some suggestions regarding current research on which research should be conducted in future. In this study, we empirically tested the influence of temporal leadership on organizational ambidexterity on the other hand in the future, researchers can examine the impact of temporal leadership on organization through different project related variables i.e. organizational cognitive complexity. The current study has been done with the focus on project based organizations only, this actually gives a way forward to the researchers inspect and duplicate the model in organizations other than project based organizations in order to inspect the effect with a large sample size.

Moreover, the relationship between temporal leadership and organizational ambidexterity can be studied with other mediating variables. Future researches can also focus on moderating role of other variables like situational and personality factors between the relationship temporal leadership and team flexibility. Together with there is also sufficient room vacant to explore multiple conditional factors that can affect these relationships. Team flexibility is the novel variable in the domain of project management can be studied and empirically tested in other relationships both on individual and organizational level.

We endorse further research to pay thoughtfulness on the data and data collection methods because this study has some drawbacks. The outcomes and implication of the study will be useful for the future researchers focusing on, this area for linking temporal leadership to various other variables like team flexibility. In addition, the sample size can be widen, as this study is just limited to certainly accessible sample. Hence, forthcoming researches perhaps can incorporate these guidelines.

## **5.5 Conclusion**

The practice of project management is accepting a lot of responsiveness from researchers and academicians. Keeping in view, the present-day study has taken a significant concept namely temporal leadership and established it in the context of project-based organizations. This study is directed to improve the domain of temporal leadership and organizational ambidexterity, which are very popular fields and having great implication in the present era. This study has attempted to consider the relationship between temporal leadership and organizational ambidexterity in project-based organizations of Pakistan. Data was collected from project-based organizations (IT private firms of Rawalpindi and Islamabad) of Pakistan through a questionnaire study to measure the extent to which temporal leadership impacts organizational ambidexterity with mediating role of team flexibility and moderating role of collaborative culture.

Altogether 350 questionnaires were dispersed however, only 265 were used for analysis since these questionnaires were having the most suitable and comprehensive

information required for carrying out the analysis of this study. Statistical tests indicate that validity and reliability of the model variables and fit of the model are also suitable. The proposed hypotheses are also supported through leadership member exchange theory. The data analysis outcomes in the acceptance of all hypotheses.

This study contributes to the existing literature of temporal leadership and team flexibility because there is very limited literature available about the variables in the domain of project management. Moreover, this study contributes to the literature in a way that it identifies a different mediator of team flexibility between temporal leadership and organizational ambidexterity. This study has given an all-inclusive view of the impact of temporal leadership on organizational ambidexterity along with team flexibility as a mediator strengthens the positive impact in project-based organizations of Pakistan. The current study not only offers several theoretical and practical implications but also opens new avenues for research.

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# Appendix-A

## Questionnaire

**Dear Respondent,**

I am a student of MS Project Management Capital University of Sciences and Technology, Islamabad, I am conducting a research on the topic: “Impact of Temporal Leadership of Project Manager on Organizational Ambidexterity, with the Mediating Role of Team Flexibility & Moderating Role of Collaborative Culture”. You can help me by completing the attached questionnaire. I appreciate your participation in my study and I assure that your responses will be held confidential and will only be used for education purposes.

Thanks a lot for your help and support!

Sincerely,

**Tahira Aslam**

**MS Scholar,**

**Capital University of Sciences and Technology, Islamabad.**

|                   |  |
|-------------------|--|
| <b>Section: 1</b> | <b>Demographics</b>  |
| Gender:           | 1- Female 2- Male  |
| Age:              | 1 (18-25), 2 (26-33), 3 (34-41), 4 (42-49), 5 (50 and above)           |
| Qualification:    | 1 (Matric), 2 (Inter), 3 (Bachelor), 4 (Master), 5 (MS/MPhil), 6 (PhD) |
| Experience:       | 1 (0-05), 2 (6-10), 3 (11-16), 4 (17-22), 5 (23-28), 6 (29 and above)  |

**SECTION II: Temporal Leadership**

1= Never, 2= Rarely, 3= Occasionally, 4= A moderate amount, 5= A great deal

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 1 | To what extent does your project leader remind, members of important deadlines?                                     | 1 | 2 | 3 | 4 | 5 |
| 2 | To what extent does your project leader prioritize tasks and allocate time to each task?                            | 1 | 2 | 3 | 4 | 5 |
| 3 | To what extent does your project leader prepare and build in time for contingencies, problems, and emerging issues? | 1 | 2 | 3 | 4 | 5 |
| 4 | To what extent does your project leader pace the team so that work is finished on time?                             | 1 | 2 | 3 | 4 | 5 |
| 5 | To what extent does your project leader urge members to finish subtasks on time?                                    | 1 | 2 | 3 | 4 | 5 |
| 6 | To what extent does your project leader set milestones to measure progress on the project?                          | 1 | 2 | 3 | 4 | 5 |
| 7 | To what extent is your project leader effective in coordinating the team to meet client deadlines?                  | 1 | 2 | 3 | 4 | 5 |

**SECTION III: Collaborative Culture**

1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 1 | People in the project team were supportive and help.          | 1 | 2 | 3 | 4 | 5 |
| 2 | There was willingness to share responsibility for failure.    | 1 | 2 | 3 | 4 | 5 |
| 3 | There was willingness to collaborate across different groups. | 1 | 2 | 3 | 4 | 5 |

**SECTION IV: Team Flexibility**

1= Very poor, 2= Fair, 3= Good, 4= Very Good, 5= Excellent

|   |                          |   |   |   |   |   |
|---|--------------------------|---|---|---|---|---|
| 1 | The quality of teamwork. | 1 | 2 | 3 | 4 | 5 |
|---|--------------------------|---|---|---|---|---|

|   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| 2 | The ability of team to get work done efficiently.           | 1 | 2 | 3 | 4 | 5 |
| 3 | The flexibility of team in dealing with unexpected changes. | 1 | 2 | 3 | 4 | 5 |
| 4 | The team's overall performance.                             | 1 | 2 | 3 | 4 | 5 |

### SECTION V: Organizational Ambidexterity

1= Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 1  | Our organization accepts demands that go beyond existing products and services.     | 1 | 2 | 3 | 4 | 5 |
| 2  | We invent new products and services.  | 1 | 2 | 3 | 4 | 5 |
| 3  | We experiment with new products and services in our local market.                   | 1 | 2 | 3 | 4 | 5 |
| 4  | We commercialize products and services that are completely new to our organization. | 1 | 2 | 3 | 4 | 5 |
| 5  | We frequently utilize new opportunities in new markets.                             | 1 | 2 | 3 | 4 | 5 |
| 6  | Our organization regularly uses new distribution channels.                          | 1 | 2 | 3 | 4 | 5 |
| 7  | We regularly search for and approach new clients in new markets.                    | 1 | 2 | 3 | 4 | 5 |
| 8  | We frequently refine the provision of existing products and services.               | 1 | 2 | 3 | 4 | 5 |
| 9  | We regularly implement small adaptations to existing products and services.         | 1 | 2 | 3 | 4 | 5 |
| 10 | We introduce improved, but existing products and services for our local market.     | 1 | 2 | 3 | 4 | 5 |
| 11 | We improve our provision's efficiency of products and services.                     | 1 | 2 | 3 | 4 | 5 |

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|    |   |   |   |   |   |   |
|----|---|---|---|---|---|---|
| 12 | We increase economies of scales in existing markets.            | 1 | 2 | 3 | 4 | 5 |
| 13 | Our organization expands services for existing clients.         | 1 | 2 | 3 | 4 | 5 |
| 14 | Lowering costs of internal processes is an important objective. | 1 | 2 | 3 | 4 | 5 |