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**Impact of Temporal Leadership
on Project Success, Mediating
Role of Project Team
Performance, Moderating Effect
of Employee Pacing Style**

by

Atiqa Shahzadi

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

in the

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Dedicated to the people I love and admire...My Parents.



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

The present research aims to investigate the impact of temporal leadership on project success. The data were gathered from 220 respondents working in different public and private project based organizations in Rawalpindi and Islamabad of Pakistan. The results depict that Temporal Leadership has significant and positive influence on project success. Moreover, the mediating role of project team performance between the relationship of temporal leadership and project success was also established. The moderating role of employee pacing style was also supported by results. The practical and theoretical implications of the current study are also discussed. The study contributes significantly to the area of research specifically in the domain of project management and Leadership. The study also provides significant implications in the available literature of Project Management.

Keywords: Temporal Leadership, Project Team Performance, Employee Pacing Style, Social Exchange Theory

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Abbreviations

EPS	Employee Pacing Style
PTP	Project Team Performance
PS	Project Success
SET	Social Exchange Theory
TL	Temporal Leadership

Chapter 1

Introduction

1.1 Background of the Study

Over the last decades, organizations have faced a number of changes that pose novel challenges for teams in temporally integrating and coordinating their work processes (Najam, Inam, Awan, & Abbas, 2018). In the contexts of projects in which teams operate have become increasingly competitive, employees often have to work under tight deadlines while managing multiple projects at the same time (Mohammed & Alipour, 2014; Siddiquei, Fisher, & Hrivnak, 2018). The concept of project success has not been defined well because of multiple factors of success that vary according to project nature and customer requirement (Martens, Machado, Martens, de Freitas, et al., 2018). In the previous study the critical success factors have attained attention of researchers to identify key determinants of project success (Ahren et al., 2014).

In the world of competitive environment there is high need for the management of projects in various organizations with numerous requirement of the market. Surprisingly the literature of project management is still in the growing era where successful projects definition is still unclear (Davis, 2018). It's been addressed that previous research revealed numerous approaches on leadership style such as, abusive leadership, autocratic, servant leadership, participative leadership style, transactional and transformational etc have influenced project success (Najam et

al., 2018) however, recently the study of leadership in a team context has become an emerging research area in the domain of project management (J. Oh, Lee, & Zo, 2019).

Team members and leader are two main pillars of any organization's success (Ilgen, Hollenbeck, Johnson, & Jundt, 2005; Podsakoff, MacKenzie, & Podsakoff, 2012). Scholars stated that leader have to manage schedule issues for that temporal leadership style helpful for project team performance to reduce schedule related conflict (Yuan & Lo, 2018). The role of leader in any project is influential in achieving goals (Rosenbach, 2018). At the same time the leader inner dispositions about how they feel and think about time may have a big influence on their firm's strategies (Casimir, 2001; Van Eerde, Beeftink, & Rutte, 2016).

Effective leadership plays vital role in ensuring the success of activities in projects (Rosenbach, 2018), where organizations are facing high degree of uncertainty due to different nature of projects and rotation of employees and their activities (Davis, 2018). However, scholar stated that the temporal leadership is perceptions of the employee toward their leader have shown continuous supportive and task oriented behavior in terms of time bond task accomplishment (Chen & Nadkarni, 2017). According to J. Gevers, Mohammed, and Baytalskaya (2015) temporal leadership have a close relationship with team performance (Aga, Noorderhaven, & Vallejo, 2016). Teams those who are interacting with time bound activities may have conflict in managing schedule deadline due to certain reason (Mohammed & Alipour, 2014).

Temporal leadership is one of the most effective leadership style that's aid in structuring, managing, coordinating and aligning the pacing of task accomplishment within team (Wu & He, 2018). The word temporal refers to the amount of time employee takes to complete a task (Chen & Nadkarni, 2017). In the word "temporal" defined amount of time given to team to accomplish time bound tasks (Rosenbach, 2018). In the context of team performance how a team leader facilitate clear arrangement of activities through scheduling, harmonizing and allocating resources for the time-based task, by doing this, so team will able to complete their sub tasks for achieving their milestones (Abrantes, Passos, e Cunha, & Santos, 2018). Due

to continuing growing market demand it has become very challenging for leader to engage their team members in project activities in order to avoid schedule related conflicts (Svejenova, 2018).

Teamwork in teams is turn out to be a way to success in the organizations when team having characteristics of effective collaboration and synchronization to put effort towards achieving common goal (Abrantes et al., 2018). So that will enhance project team performance (Aga et al., 2016). Project team performance refers to outcomes demonstrated by the team and approved by the team leader (Anichenko, Chung, & Crawford, 2017). For any successful project the team members are the backbone (Anantatmula & Rad, 2018). Project team members should have verity of skills that is highly require for better project performance (Iqbal, Anwar, & Haider, 2015). Previous study shows that temporal leadership has positive impact on team performance (Siddiquei et al., 2018).

Technological advances, accelerated changes in competition and diverse customer base have forced the firms to think about “time” (Pandey, Nambudiri, Selvaraj, & Sath, 2018). This issue has come to the fore front as one of the leader’s key strategic behavior (Mohammed & Nadkarni, 2011; Chen & Nadkarni, 2017). The leader’s view of time is emerging as an important research area in project management literature (Shaw et al., 2011). It serves as a temporal filter that molds expectations and evaluations of decision situations and forms the basis for strategic behaviors (Burke, Shuffler, & Wiese, 2018; Yuan & Lo, 2018). A consensus is found that integration of people and process through teams serves an means of enhancing project performance (Franz, Leicht, Molenaar, & Messner, 2016). Recent research found that well-integrated team lessens the chances of delay in functioning of project activities (Van Eerde et al., 2016).

The term pacing style first introduced by (Blount & Janicik, 2001), refers to teams are composed of different individuals with multiple backgrounds and different working style (Ong, Roberts, Arthur, Woodman, & Akehurst, 2016). Scholar stated that pacing style it is meant as an individual effort involved over time in working toward deadlines and employee pacing style also reflect employees output with regards to completing time bound activities (Maruping, Venkatesh, Thatcher,

& Patel, 2015). Pacing style of employee refers to how individual allocate their effort over times in working towards deadlines (J. Gevers et al., 2015). Different pacing styles of employees create diversity at work place and could be beneficial for team learning if it is deployed purposefully with in team (Van Eerde et al., 2016) because the way individual pace their working style for meeting deadlines that may affect the daily life work and shape the employee behavior at work place (Dvir, Sadeh, & Malach-Pines, 2006).

Employee pacing style is a term used for project team's individual working style and that vary from individual to individual that shows employee working contribution towards project success and represent team overall performance (Mohammed & Nadkarni, 2011). Employee pacing style can eject project success positively or negatively (Shin, Oh, & Kim, 2018). Another scholar stated pacing style is related to verity of individual's behavior, such as objectives setting, planning, making order of preferences for achieving objectives, preferences and how a person set alternatives for avoiding delays in his work (Van Eerde et al., 2016). Recent handful study of (J. Gevers et al., 2015) revealed by their study of eight samples from 2 countries pacing style and time urgency capture dissimilar time-related characteristics, however time urgency is highly relatable for time bond activities whereas pacing style is individual effort for completing task for getting desired objectives output (Mohammed & Nadkarni, 2011). According to Lim and Mohamed (1999) it has a direct influence on project success because due to the different individual's style of working, the success criteria are not fixed and deadlines are missed.

Individuals pacing style vary according to employees preferences some employee prefer to start work early and finish before the deadline and some employees choose to start work near deadline (J. Gevers et al., 2015) thus pacing style help to capture actual amount of time needed for completion of specific task (Shi, Sun, & Prescott, 2012). Hence (Mohammed & Nadkarni, 2011) discovered in their research different pacing style of team members also blame for numerous problem but stay unaddressed because rarely articulate their own style. The importance of understanding pacing style is also obvious at team level when team members have to interact with each other on codependent activities (J. Gevers et al., 2015).

Thus pacing style plays vital role in team performance and team performance is a reflection of overall project output (Mohammed & Alipour, 2014).

This study will help advance the literature by focusing on how a leader's perspective of "temporal" can influence the achievement of project goals. Every individual is born with different inherent characteristics, employee pacing style is one of it (Calvo de Mora Schmidt, Picón Berjoyo, Ruiz Moreno, & Cauzo Bottala, 2013). This research will contribute in Project based organizations in the context of success of the project, outputs of this research will make clear how temporal leadership helps teams to complete time bound tasks with in defined schedule, quality, scope and cost.

1.2 Problem Statement

Extensive research on Project Success has focused on different aspects of the project. Project-oriented organizations work with limited resources and time bound activities. The project's temporary nature of employment finds it difficult to enhance project team performance for achieving project success. Hence, if the time element of project activities is ignored it may often lead to project failures. This study tries to figure out the solution to this problem more deeply in the presence of temporal leadership which is time-oriented. There is paucity of research on project leader's temporal style of work contributing in achieving overall goal of project success.

Furthermore the moderating role of employee pacing style on the relationship of temporal leadership and project team performance has also not tested in previous literature specifically in the domain of project management literature. Apart from all those, Pakistani context also lack empirical studies on the temporal leadership and project success.

1.3 Gap Analysis

In the practical world relationship of leader and project teams plays vital role to

carry out whole project that's why relationship of principle and agent must be accommodative for project success. Project success is the ultimate desired objective of each project based organizations. In this regard, studies found numerous critical success factors (CSFs) and leadership styles that positively affect project success but temporal leader as a critical success factor is not yet studied. The project success have been studied for over four decades. However, scholars are still examining the underlying mechanisms of project success to explain why such effects exist, when researcher stated that if a leader have high quality relationship with teams then teams efficiently perform task and ultimately increase project success (Santos, Passos, Uitdewilligen, & Nübold, 2016).

Although a handful study have shown the Shared temporal cognitions as substitute for temporal leadership and shown the analysis of their effects on temporal conflict and team learning, (Ceri-Booms, Curşeu, & Oerlemans, 2017), for future research they recommended temporal leadership as independent variable with other mediators such as team performance (Gerpott, Lehmann-Willenbrock, Voelpel, & van Vugt, 2019).

Therefore current study have found the few important gaps in the literature, first the current study focuses on the direct relationship of temporal leadership and project success. The second gap of this study to check the mediating role of team performance in the presence of temporal leadership on project success. Third, the current literature is studying employee pacing style as a moderator between temporal leadership and team performance.

1.4 Research Questions

Considering the project based organization in Pakistan, we focus on the questions that what will be the impact of temporal leadership on project success, as we know that projects are also temporary time bound activities so by keeping in mind this concept to check how much temporal leadership is affective for time related activities. The focal point of this study is to answers the below questions. In view of the above expressed issue articulation, the present examination intends to look

for answers for the accompanying inquiries:

Research Question 1:

Is there any relationship between Temporal Leadership and project Success?

Research Question 2:

Does Team Performance mediate the relationship between Temporal Leadership and project Success?

Research Question 3:

Does Employee Pacing Style moderate the relationship between Temporal Leadership and Team Performance?

1.5 Research Objectives

The main purpose of this study is twofold. First is to examine temporal leadership in team performance in the context of project based organization, and also synthesizes the literature of employee pacing style will strengthen or weaken the team performance under temporal leadership. The overall purpose is to discover the proposed connection between the independent, mediating, moderating and dependent (Temporal Leadership, Team Performance, Project Success and Employee Pacing Style) is appeared in the exploration model of the investigation.

Specific objectives of the study are as follows:

Research Objective 1:

To find out the relationship between temporal leadership and project Success.

Research Objective 2:

To discover the mediating relationship of Team Performance between Temporal leadership and project Success.

Research Objective 3:

To find out the moderating role of Employee Pacing Style between Temporal Leadership and Team Performance.

1.6 Significance of the Study

Leadership style at site has always been a dominant area of concern for researchers because leader play significance role in projects and a leader can impact project either directly or indirectly. This whole research will be helpful for adding more theoretical content in project management literature as well as will provide concrete evidence how team performance play role towards project success under temporal leadership and how employee pacing style can affect team performance. In order to ensure team performance in projects through effective presence of the leader, this research will hold significance for the organizations to adopt temporal leadership in Pakistan. The individuals who are associated with the construction tasks and IT projects that will represent more realistic image of how lack of effective leadership has influenced our work practices. This study will help developing sector of Pakistan to realize the importance of temporal leadership style in projects because projects are time bound activity and temporary in nature for achieving desired outcome and temporal leadership orients teams to manage and complete time bound activities with in schedule and surrounded by limited resources.

The study will open new aspects of temporal leadership to be studied further in detail and will also open the different consequences of Employee Pacing style that may strengthen or weaken the relationship between temporal leadership and performance of project team as whole. Research on the Temporal leadership impact on project success is much needed area to be researched in our culture where the workers need effective leadership style that should concerned timely task completion and within allocated resources. This study introduces Team Performance as a mediator and Employee Pacing style as a moderator, hence developing of a model including factors and outcomes will hold great significance in theoretical literature of temporal leadership and related variables.

This study will be significant for project based organizations because most of the time whenever a project is launched specially in the second phase of project (implementation) numerous failures and obstacle are faced, due to time constraints or limited resources and could be because of other project related issues, temporal

leader will help team to manage the timeline of project and to develop the contingency plans for avoiding unnecessary delays in projects. This study will facilitate the project manager to realize the importance of temporal leadership style and how it plays vital role for improving team performance.

1.7 Supporting Theory

1.7.1 Social Exchange Theory

The current study relies on social exchange theory (SET) based on the principle that in response of leader's supportive behavior in the context of time bound activities, employees show positive reciprocity behavior, therefore the overall project success increases with temporal leadership. Blau (1964) also defined exchange associations as causally connected, while the trend of the causal arrow is slightly unclear. For instance, he claimed that "the character of the relationship between exchange partners" might "affect the process of social exchange" (p.97), connotation that the connection effects the sort of exchange. However, he also showed that positive exchanges can cause one person to become dedicated to another (p. 101), signifying that an exchange may from time to time effect affiliation that also help project employees to show high pacing style towards project activities. There is another notable characteristic of Blau's (1964) explanations. Moreover, project teams in the presence of leader's temporal leadership behavior, experience model performing behavior of leader, which in return engender project teams to show more active behavior in terms of project task completion.

The social exchange theory explained that when employee observe a model performing behavior and understand the outcomes of model behavior, they remember the event and outcomes of this behavior and use this process information for their learning improvement at workplace (Cropanzano & Mitchell, 2005). Whereas social exchange relationship developed at work place, in this study temporal leadership is one the effective leadership style that deployed in project based organization

to achieve their time bound tasks. Social exchange theory also shows the reciprocal relationship between leader and team members where employees of project team pay attention to put more focus on their pacing style to enhance the team performance that will leave the compound effect on overall project success.

Chapter 2

Literature Review

2.1 Temporal Leadership and Project Success

Project success is one of the most and frequently studied topic in Project management domain but the success criteria is very from person to person according to the need ([Ranawat, Bhadoriya, & Trivedi, 2018](#)). For achieving the success in any kind of project the manager need some appropriate knowledge and skills, thus researchers stated that leader and employee relation effect project success if it is healthy relation than that will enhance the performance output from subordinates ([Alias, Zawawi, Yusof, & Aris, 2014](#)). Team leadership plays a crucial role in the success of any team ([Aga et al., 2016](#)). Projects resource bond concept is an important area for concern but most of the researchers have neglected this important issue but for the project desired outcomes schedule is also most important pillar of proposed project success triangle in the project management literature.

Project needs to be supervised properly to achieve the outcome of the Projects. Multiple leadership styles has been chosen by project leaders during their administration. Optimistic behavior in the form of temporal leadership has been focus more and more in the last few decades ([Briker & Walter, 2018](#)). Project is the systematic combination of multiple activities which combine together to achieve the predefined objective and result as a unique product ([Tonchia, Tonchia, & Mahagaonkar, 2018](#)).

The current study aims to identify a relatively new type of leadership that is temporal leadership which is more concerned about the project completion with in allocating resources and schedule. [Mohammed and Alipour \(2014\)](#) proved that those leaders who set clear deadlines and share those deadlines with their employees through agendas, meetings, recaps and other actions are more likely to get maximum output from the project team. With the numerous variation in the demands of organizations, for temporal leadership behavior, it has become a critical role to engage all employees to coordinate efforts of team members.

Temporal leadership is explained as leader behaviors and attitude that encourage in structuring, managing and coordinating the style of task completion in a group of individual ([Connaughton & Daly, 2005](#)) and which consider the task related behavior of a leader of any organization instead of relationship-oriented behavior. Temporal leadership further explain about how leaders coordinate and facilitate the strong structure for team activities with the help of allocating temporal resources and scheduling in a team, also the temporal aspects such as the meeting deadlines, coordination with the members of team, the aim is to finish work on allocated time ([Casimir, 2001](#)).

Leaders must always avoid conflicts related to time and make sure the team performs well that's why temporal leadership can work well for project success ([Wu & He, 2018](#)). According to the time, interaction and performance theory by ([McGrath, 1990](#)), which defines the groups and their nature, the performance and the interaction, the diversity of the temporal orientations might produce ambiguity and teams conflict about pacing style ([Mohammed & Nadkarni, 2011](#)). This shows that managing time bond task in project ([Ong et al., 2016](#)) is very important for the success of any project.

Extensive research on Project Success has focused on different aspects of the project ([Weinkauff & Hoegl, 2002](#)). Project-oriented organizations with limited resources and temporary employment find it difficult to motivate the employees to deliver quality performance ([Awan, Ahmed, & Zulqarnain, 2015](#)). Hence, the lack of commitment often leads to project failures ([Cashman, 2017](#)). Many researchers

have shown that different impact factors that may affect project success in different ways and every individual success factor can vary through their stakeholders (Weinkauff & Hoegl, 2002), thus project could be a vague term. Researchers Bell and Kozlowski (2002) stated that different factor that may influence project success are, effectiveness of carrying the project with in allocated time and other necessary resources, customers checking the impact agreement of different participants of any company, suppliers, clients and sponsors etc. Weinkauff and Hoegl (2002) reveal that Organization's market image also associated with increasing success through increase worth of market share.

The ultimate of project is to achieve project success by satisfy their customers, leader is the one who lead the entire team to align customer requirements to organization portfolio and according to temporal leadership style temporal nature of leader could help projects to produce desired time bound outcomes of specific projects (Casimir, 2001), thus temporal leader with project success can be effective way to produce desired goals. Researchers also concluded that the performance of the project and enhancement of customer satisfaction can produced by the combine effort of the involved participants (Bjorvatn & Wald, 2018). In the world of competitiveness and challenging environment creates more complication in handling employee and making organizations profitable while satisfying there customer needs, whereas temporal leadership is one of the most effective leadership style that focuses on project timely tasks and within allocated resources and to complete its objectives with in stated project scope and to ensure the employee performance by creating deadlines for project milestones to avoid delays in projects (Awan et al., 2015) thus project success can more achievable by adopting temporal leadership style. Leaders use temporal leadership style to meet the project requirement that satisfy project customers need by putting his/her priority to time and resource bond tasks that ultimately help leader to set vision of the organization by putting combine effort form project team (Müller & Turner, 2007). In the last decade, in response to recent challenges for leadership, an emerging stream of academic temporal leadership playing a vital role in handling projects (Dvir et al., 2006).

Studies has focused on leadership types rooted in ethical, pro-social or people-centered behaviors, and in particular on different leadership styles that may affect project success in multiple ways (Anantatmula & Rad, 2018).

While researchers are beginning to find support for the relationship between different leadership styles and team performance or Organizational citizenship behavior that is ongoing process toward project success (Iqbal et al., 2015) and a little is known about the mechanisms that could explain the link between these variables (Sumner, 2018). However, recent research addressing the main role of leadership style has mainly determined on leader's effect, their emotional intelligence, and how effectively may be used to influence project success (Iqbal et al., 2015). Temporal leadership shows the view Literature Review 16 according to which a temporal leader set task deadlines and assign resources related to temporal issues and coordinates with the members (Mohammed & Nadkarni, 2011).

From last three decades, many researchers suggested different theories about the behavior of leadership i.e. Time, interaction and performance theory, social learning theory etc (Mohammed & Nadkarni, 2011). Temporal leadership has been familiar with categorically influence accumulate execution that produce results as project success (Prabhakar, 2005). The definition of project success could depend upon the different factor that pertain to project objectives (Anantatmula & Rad, 2018). Project success criteria included to meet project sponsors requirements, to complete project with in indicated budget, satisfying the proposed project schedule, to adequate the quality standards of specific projects and meeting the project end objectives that should be agreed according to project baseline (Prabhakar, 2005). There are many factors that could create obstacles for achieving project success (Akbiyikli, Dikmen, Eaton, & Akbiyikli, 2019), there are some major obstacles that could affect overall project for example: inadequate project baseline, wrong person as project leader/ manager, unaligned objectives of top management and project goals, unclear definition of project tasks, lack of understanding of project management techniques and tools that may make easy path towards project success (Calfas, Sallis, Oldenburg, & Ffrench, 1997). Unclear project deadline and planning of tasks are not defined clearly, lack of commitment and understanding

of project outcomes (Maumbe, Owei, & Alexander, 2008).

According to all these above factors management need to assess their lacking area and would suggested for appropriate planning for removing these hurdles. The preceding discussion revealed that beside everything role of a leader or a project manager plays very critical role for achieving desired objectives of project success. In the previous study scholars indicates that the temporal leadership behavior is positively associated with organizational justice and that shares the vision of organizational citizenship behavior which is ultimately positively effecting overall project success (Fisher, Pillemer, & Amabile, 2018).

Compare to the other leadership style temporal leadership is unique in a way of managing tasks project by dividing project activities in milestones and set deadline by considering project schedule and given resources that help team participant's strength and by more come together on employee's pacing style (Mohammed & Nadkarni, 2011). In the previous study the critical success factors have attained attention of researchers to identify key determinants of project success (Cooke-Davies, 2002). On the other hand, research indicates that success could be affected by control variables such as country, company size and project complexity (Shenhar, Dvir, Levy, & Maltz, 2001) thus to measure project success and what contributes towards achieving project success and failure is still a question mark for researcher.

In the world of competitiveness and challenging environment creates more complication in handing employee and making organizations profitable while satisfying there customer needs, whereas temporal leadership is one of the most effective leadership style that focuses on project objectives short term goal completion and it will create healthy environment for employees to be motivated and to be representor of their project tasks (Holley, Wu, & Avey, 2019). This temporal leadership approach attach your success with the success of project intrinsically motivates the employees to give their best by motivating them and providing them proper feedback, guidance and with timely reminder throughout the project execution. The outcome (success) is thus the credit of positive leadership that strengthens the project success by deploying temporal leadership skills (Cohen & Bailey, 1997).

Researchers and practitioners have tested both theoretically and empirically the relation of temporal leadership with different hazardous organizational outcomes like time pressure, team temporal diversity, job satisfaction, team invocation and team creativity. However, there are very limited evidence available on temporal leadership that what those variables in the organizational and project environments are that evokes the leader to show task oriented attitude (Bryde, Unterhitzberger, & Joby, 2018).

H1: Temporal leadership have positive impact on project success.

2.2 Team Performance and Project Success

Teams have developed as an eye-catching form for organizing project work as essentially as whole project work because they process information and activities at better level as compare to individuals, they put effort to help management of interdependence even under complex project tasks completion, and teams present their task level at more presenting way to integrate different sources of expertise by putting combine effort (de Carvalho, Patah, & de Souza Bido, 2015). Teams are supposed to work multiple tasks to be perform simultaneously, consecutively or mutually (Culp & Smith, 2001) thus teams works as a back bone of project success under effective guidance and can help leader to produce desired outcomes. However in the world of competitiveness organizations, leaders and teams are often under pressure to bring new idea to attract customers, in such condition teams should be selected by under multiple under pinning criteria and organizations should train their teams to be competitive to grab the current market demand (Forgues & Koskela, 2009), thus by putting more focus on team performance and for their development could help manager/leader to get ability to manage complex assignment in under defined deadlines (Bonner, Ruekert, & Walker Jr, 2002). While transition process, teams get engage in different tasks and project activities, like planning, reproductions, execution, and evaluation, to guide towards achieving project objectives (Kim & Burton, 2002).

According to teams may get involves in different types of planning to make sure

that things are well defined and contingency plans are developed for any (Wallace, Keil, & Rai, 2004) because through cautious and planning process team members discuss their formal action regarding next step for project work and tend to identify what type of contingencies should develop for avoiding unnecessary delays in project work (Braun, Peus, Weisweiler, & Frey, 2013). Contingency plans are developed to take alternative action for uncertain situation in projects where potential anticipated event is necessary in order to accomplish project task (Savelsbergh, Gevers, van der Heijden, & Poell, 2012). Reactive planning involves project uncertain moment in response to unexpected events that reflect team's ability to perform well to achieve its objectives (Sarin & McDermott, 2003).

Researchers also stated that team use transition processes to recognize and prioritize major goals and sub goals by setting milestones to achieve overall project objectives (Högl & Parboteeah, 2003) that's why teams play an important role for achieving project success. Teams are developed to create sense of collectivism, collective motivation, and to work as one union to help project leader to achieve project goal by getting combined effort from team members (Swing, 2007).

This is how teams are important for project leaders and for overall project success (Raiden, Dainty, & Neale, 2004). According to previous study where investigators argued that teams can better perform through motivation and confidence building, teams are supposed to represent whole organization (Cross & Baird, 2000) that will create sense of motivation about project goals. Management or leaders ways for handling teams reflects team's effort to regulate destructive emotions, for example frustration or anger and other type of emotions may occur during project execution or for the sake of task accomplishment (Springer et al., 2012) and failure to manage team members interpersonal concern has been discussed as a negative effect on team performance (Sarin & McDermott, 2003).

Teams working on the projects are the main assets for achieving success. It is very difficult for the organization to select those individual which are not abusive in the managerial position (Richard, Boncoeur, Chen, & Ford, 2018). On the other hand if organization selects any of individual which use to abuse on the managerial position effects the outcome of the Project? Hence studies prove that Good

supervision always has a gloomy impact on the organization and may impact on the new ideas within the team which enhance the productive behavior of the team (Ai-Hua, Yang, & Guo-Tao, 2018). Liang et al., (2018) concluded in his study temporal leadership not only impact on the job satisfaction of the employee but it has a greater impact on the team citizenship behavior towards project tasks. Employees that are more interested in getting social acceptance from their supervisor feel more from more comfortable while getting timely interaction with supervisors. Subordinates who are lower in power distance direction, rather than subordinates higher in power direction, are more influenced and effected by leadership style of the supervisor (Lin, Wang & Chen, 2013).

According to this research effectiveness of project work depends upon individuals that are being part of project work (Chiocchio & Essiembre, 2009) that's why project teams play vital role in managing tasks complexities pertaining to project work and team proficiency development. It is therefore important to analyze project team cohesiveness and performance that have direct relation with project success. Information exchange behavior in teams are very important that refers to conveying information to all team's participants that shows team members aren't engaged with disagreement and they are aware of others contributions (Raes, Kyndt, Decuyper, Van den Bossche, & Dochy, 2015) team decisional behaviors also reflects process management activities or procedures that required for teams to proceed further. Teams are supposed to take decisional behavior for judging or analyzing other team members contribution (Core, 2015) which reflect team cohesiveness which shows is important for mutual task effort (Lacerenza, Marlow, Tannenbaum, & Salas, 2018). Teams and its members are important for informational behavior and decisional behavior because both behavior reflects the way how team will leave impact on daily activities and project related operational tasks. That's how teams are supposed to consider an important project success element (Dong, Bartol, Zhang, & Li, 2017).

Many factors and team's individual skills matter for team, therefore interpersonal behavioral approach shows managing the relationship between team member and manager/ leader and also it's reflects relationship among team members (Driskell,

Salas, & Driskell, 2018). According to Müller and Turner (2007) project are different according to their size, complexity and uniqueness and success vary from project to project. According to Meng and Boyd (2017), stakeholders and individuals differently perceive project success context. Furthermore, project team performance is also different according to the nature of different industries (de Carvalho et al., 2015). According to (Aga et al., 2016) businesses are associated with the field of project management since half century but unfortunately only project management professional acknowledged its contribution. (Callahan & Kidd, 1986) reported that is no consistency between the researchers regarding project. It is believed that there are many other factors which can affect the success, like external project environment or organizations internal aspects may affect the project team performance which directly affect the outcomes and success of a project (Papke-Shields, Beise, & Quan, 2010).

The literature suggests project management is more related to the effectiveness and efficiency. (Rauniar & Rawski, 2012) stated that strategical project failure leads to minimization of competitive business growth. According to Papke-Shields et al. (2010) the concept of complexity in projects is due to lack of mutual agreement among of authors because as the concept of traditional dimension iron triangle is still considered as the main parameter for measuring the project success. Although (Agarwal & Rathod, 2006) justified the cost, time and quality criteria importance in evaluation the performance of soft projects but still several studies are conducted with the combination of other measurements. The relationship between project team performance and Project team success has been studied in different contexts. (Lodahl & Kejnar, 1965) define Project team performance as the extent to which the work performance of a person affects his self-esteem. Due to expeditious revolution of the world's economy, Project team performance gained more attention as it reflexes in the pathways of employee's profession (Figúeira et al., 2015).

According to (Jha & Iyer, 2006) project management construct is design to insure the project success. Carvalho (2014) stated project management as subjective concept which lies on the perception of an individual to evaluate that success.

According to [Shenhar et al. \(2001\)](#) it is reported in the previous literature that project success has four-dimensional framework and is also cited in many project management studies ([Bryde et al., 2018](#)) ([Sadeh et.al., 2006](#); . [Shenhar et al. \(2001\)](#) argue that projects are critical in nature and success should be estimated on project's long term and short-term objectives. Furthermore, they suggest that project success is associated with the competitive advantage which includes, efficiency, business success impact on customers and preparation for future. They also said that these four dimensions rely on time and technological uncertainty of any project. According to [Carvalho and Rabechini Junior \(2015\)](#) project management literature targeted the dynamic discussions of project success. Project management is also focusing on social and political approaches of project success ([Sage, Paterson, Lovitch, & Sharpe, 2014](#)).

The traditional view to evaluate project success is to use the iron triangle (time, cost and quality). ([Archer & Ghasemzadeh, 1999](#)) explain financial measurements to evaluate project performance which includes cost benefit analyses and economic return and profit margins ([Shenhar et al., 2001](#)). On the other hand, ([Patah & de Carvalho, 2007](#)), introduce another approach to evaluate the profits of projects management i.e. evaluate the profit by calculating the company current working projects. Project performance can be calculated at the end of project by scheduling and costing of operations which are being performed quiet repeatedly ([Ling, 2004](#); [White & Fortune, 2002](#)) and which also involved the harmony of financial issues ([Patah & de Carvalho, 2007](#); ?, ?)Thomas et al., 2002).

In spite of this, new dimensions have been explored in the context of project success ([Carvalho & Rabechini Junior, 2015](#); [Shenhar et al., 2001](#); [Müller & Turner, 2007](#)). Project Success is perceived as a different construct by different stake holders ([Davis, 2018](#)) ([DeVries, 2009](#); [Toor and Ogunlana, 2010](#); [Chou and Yang, 2012](#); as considered as a multidimensional construct ([Carvalho & Rabechini Junior, 2015](#)). According to ([Samset, 1998](#)), project success has five criteria, "Efficiency, Effectiveness, Impact of the project on the society, relevance to real needs and priorities in society and sustainability". These five criteria effect the project in

future. On the other hand, (Shenhar et al., 2001) recommend five different dimensions “Project efficiency, Impact on customer, impact on the teams, business and direct success” but these dimensions are related directly affect the environmental and social aspects.

In addition to this, from past few years, time, cost and quality criteria, which is generally known as tradition criteria has been criticized because of its inadequacy. Angus et.al. (2005) reported that some authors consider it futile, where others consider it insufficient. They also said that there have been various efforts made to overcome the reported deficiencies. Two different approaches are used, first is to explore more dimensions in traditional triangle like find out more variables that directly influence the success criteria, second or to minimize the other criteria to single evaluation criteria i.e. financial criteria and considering time and quality as project cost variables. Whereas this approach coordinates with first approach i.e. exploring more variables that effect project success.

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According to Barber (2004) businesses are associated with the field of project management since half century but unfortunately only project management professional acknowledged its contribution. Jha and Iyer (2006) reported that is no consistency between the researchers regarding project. It is believed that there are many other factors which can affect the success, like external project environment or organizations internal aspects may affect the project performance which directly affect the outcomes and success of a project (Papke-Shields et al., 2010). This is how the project team performance positively ensures project success.

H2: Project Team performance have positive correlation with project success

2.3 Temporal Leadership and Team Performance

Leadership in the field of project management is becoming gradually important, including the study of temporal leadership in the research domain of project management (Shi et al., 2012). In the field of project management most of the researchers trying to find-out positive approach for lifting up the project success by deploying positive approach, whereas other leadership categories are also identified important element of research like, transformational leadership, autocratic leadership, abusive supervision, over-controlling leadership and passive leadership (Balliet & Ferris, 2013) but still researchers are trying to identify more approaches for making project success as much as possible. Recent study reveal that transformational leadership and authoritarian leadership seems not necessarily negatively associated with the project success (Bakker, Boros, Kenis, & Oerlemans, 2013). This study will disclose the relationship of temporal leadership and team performance, whereas temporal leadership styles deals with the project schedule and time bond activities, this type of leadership is positively associated with team performance (Bakker et al., 2013).

The positive and negative personality traits of any employee are those human skills that influence success (Sun, Wang, & Kong, 2014) and project team performance (Dwivedula & Bredillet, 2010). Whether it is professional commitment or professional success, it is influenced by how project teams interpret the characteristics of the work that is assigned to them and relate themselves in relation to their job. In other words, project teams personality traits control the way they feel for the job – satisfied or unsatisfied; happy or unhappy; secure or insecure; valued or unvalued by their project managers/supervisors. The more stable, valued, competent an individual feel, the happier and more satisfied he/she is and this improves team performance (Dwivedula & Bredillet, 2010). The enriched team performance that guarantees professional commitment and project success has lead the researchers to construct a set of personality traits that manifest core self-evaluation.

In the literature of project management, project teams as a broader topic has received deserving attention. According to Barber (2004) defined project teams as “collective effort of individuals for achieving common goal of specific activity or

project. According to According to Müller and Turner (2007) project teams are considered to be essential domain for project success while for achieving project success behavior or personality traits of supervisor does effect team performance because effective supervision play role for project team performance that ultimately add value to over-all project success (Archer & Ghasemzadeh, 1999). An individual commitment towards his/her organization as well as their profession is first studied by (Driskell et al., 2018) that can be relate to over-all project team performance. According to his study, a professionally committed individual is decisive and takes work as a part of life.

It shows a strong relationship between the work and employee itself; this display of positive self-evaluation of employee generates a link with whole organization. According to (Archer & Ghasemzadeh, 1999) an individual who is professionally committed to his work, will actively participate in decision making which in return increases level of satisfaction and secure higher level of acceptance within the organization. Previous study by Connaughton and Daly (2005) leaders can perform an important role to develop a supportive environment that's good for project performance. Supportive environment refers to exhibiting the general support against the efforts of the project teams that they put during project execution, by encouraging their self -willpower, nominating them for taking more responsibilities. Therefore it is considered that the factor of secure base support has a direct link with enthusiasm, better commitment, more project teams self- efficacy and in return project team performance increases.

(Mohammed & Nadkarni, 2011). Reported that positive support acts like good parenthoods. Leaders provide positive leader support to motivate an individual towards exploration, which includes the availability and fulfillment of the needs of the employees, boost up the level of self-work dependence and shows more concerned about project work.

Many studies reported that various forms of temporal leader's behaviors can be predicted positively with leader support, it may be implementation of different notions/ideas and fruitful accomplishment of project goals. According to (Lim & Mohamed, 1999). Some case report that support may include "outcome-focused

elements” like recognition and compensation for the brilliant project team performance. According to (Ceri-Booms et al., 2017), there are three forms of supports that collectively compose secure base support and encourage investigation i.e. Accessibility, Non- interfering and growth praise.

According to Pandita and Bedarkar (2015), it has been investigated by distinct studies that leader support strengthens the practical behavior. According to Oldham and Cummings (1996) leader support boost up the sense of self- determination, it also build up the sense of competence and eagerness to take initiatives/actions in future and the focus of an individual turns to change (Pandita & Bedarkar, 2015). In the context of temporal leadership time aspect is very important to get done work by team on the schedule deadline and temporal behavior of a leader purely concerned about time bound activities that could be only possible when project teams are enough capable and willing to work to achieve desired outcomes of stated baseline of a project. Temporal leader style and project team performance can e effective to put positive impact on project best outcomes (Pandita & Bedarkar, 2015), that’s why teams and leadership behavior are mainly concerned and specially designed to carry-out time bound activities where project execution get flourish by combined team effort and through effective leadership style (Mohammed & Nadkarni, 2011). Several studies proved that temporal leadership style of a leader can positively affect team performance that help to project stakeholder to get desired out-comes from project team and over-all project output.

And other study reveal that temporal leadership style could make teams to adopt more achievable behavior and temporal behavior of a leader can create sense of responsibility in the individual team member through the timely reminder of temporal leader. That also enable them to show their effectiveness in-order to follow their leader. The collaboration among team member plays important role which result in innovative project outcome (Walker, Davis, & Stevenson, 2017). For effective collaboration among team members working on project, it is necessary to understand the factor which influence the team members and enhance the collaboration among members of team (Caniëls, Chiochio, & van Loon, 2019).

Most of the firms focus on the outcome produce by team working on the project (Sandvik, Croucher, Espedal, & Selart, 2018). Team member's behavior predict the attainment and disaster of project (?, ?). Outcome depend upon the motivational factors of the team which is main focus of the most of the project based organization working on projects but study on this prospect is narrow (Dwivedula & Bredillet, 2010). Efficiency of team members depend upon their own perception about the factors of motivational climate (Kavussanu & Stanger, 2017). Past research show the compatibility and incompatibility among these two motivational climate factor depends upon prosocial behavior which have impact on collaboration among team members, which effect the project performance (Caniëls et al., 2019). Past study on the dimensions of motivational climate show the mixed outcome like performance climate encourage to focus own personal recognition by performing outstanding their fore team member hide information and knowledge from each other for personal gain which result in negative outcome, in adequate behavior like low motivation, increase turn over and poor result (Beersma et al., 2003) Cerne et al., 2014).

Studies also suggest the positive impact of performance oriented leadership (Kuntz, Connell, & Näswall, 2017). Temporal leadership exhibit positive climate, coordinate with each other share knowledge to enhance the skills, develop trust on each other, efforts which increase intrinsic motivation (Harwood, Keegan, Smith, & Raine, 2015). In literature the team members with temporal leadership focus on self-development rather than goal (Bunderson & Sutcliffe, 2003). Collaborative Team performance mean helping other without any personal gain or intentions. Combine effort of team members also gain attention of researcher in recent past (Kavussanu & Stanger, 2017) and its impact on team member's behavior (Al-Yaaribi & Kavussanu, 2017). The temporal leadership behavior of team members has positive impact like increased motivational level which increase the performance level of team member as a result the output increases (Kavussanu & Boardley, 2009). Past study show the temporal leadership behavior is related to performance of team members which is positively related to their enjoyment and productivity.

According to existing research to measure the performance of project the success criteria is cost quality and time, due to a lot of spending over the project if the project meets the objectives the project is considered to be successful (Berssaneti & Carvalho, 2015). The performance increases when the motivation increases (Cerasoli, Nicklin, & Ford, 2014). The way team members behave or perform their everyday task depends upon their motivational level and the opportunities provided them to increase their performance (Aguinis & Kraiger, 2009). This increase the project team performance because team member has obligation to perform well without any intention to leave the work, the context in which they perform or its influence on output is comparatively undiscovered (Kraimer, Seibert, Wayne, Liden, & Bravo, 2011). The compatibility and incompatibility between the dimensions of effective teams and temporal leadership the encouraging conditions, learning focus and knowledge sharing whereas team performance the social comparison conditions may have negative influence over the outcome performance (Nerstad, Roberts, & Richardsen, 2013).

The both may exist at the same time and gave different value coordination, they may increase or decrease the performance outcome, and scholar relate these opinion of temporal leadership to the performance (O'Boyle Jr & Aguinis, 2012). The past studies define project team performance in term of project success which cover a number of its dimension like cost, quality, time, scope etc (PMI, 2008) and project performance is measured by these perimeters of project success (Radujković, Vukomanović, & Dunović, 2010). The members with high interaction with their leader level yield the high performance and produce innovative output at an individual level (Jasmand, Blazevic, & De Ruyter, 2012) thus temporal leadership style behavior is mainly emphasis on timely reminder and interactions with the project team members. As per literature and researcher findings, this is how temporal leadership have positive correlation with team performance to meet the schedule requirements of project.

H3: Temporal leadership have positive impact on Team Performance.

2.4 Mediating Role of Team Performance

The relationship between temporal leadership and Project team performance has been studied in different contexts. Due to expeditious revolution of the world's economy, Project team performance gained more attention as it reflexes in the pathways of employee's profession (Brown, 2007). In a context of high instability at workplace, other forms of commitment expected in addition to organizational commitment.

(Calvo de Mora Schmidt et al., 2013) define Project team performance as the employees combine effort on a project or task to achieve organizational goal and put value addition to organization's good will. This effort of employees depend upon the behavior and leader's way to treat and guide his employees for achieving daily tasks. Al (Singh, Burgess, Heap, & Al Mehrzi, 2016) reported Project team performance as the degree to which an individual focus on planning and executing his daily task and how individual member is focused and stable at work place, where his career based on his prevailing profession and explore the meaningfulness of the profession towards achieving his personal goals as well.

An individual commitment towards his/her organization as well as their profession is first studied by (Reich, Ullmann, Van der Loos, & Leifer, 2009). According to his study, a professionally committed individual is decisive and takes work as a part of life. It shows a strong relationship between the work and employee itself that multiply team's effort for achieving project team goal ; this display of positive self-evaluation of employee generates a link with whole organization and the leader that headed for leading a team, thus it's been analyzed that project team leader also play vital role for achieving project success. According to Boyle (2005) an individual who is professionally committed to his work as a leader will also guide his team for betterment of the of organization where temporal leadership is one of the desired leadership style for time bond activities and projects are itself time bonded because of project's time based organization, where positive leadership will actively participate in decision making which in return increases level of satisfaction in over-all team and secure higher level of acceptance within the organization.

Edmondson (1999) generally conceptualize Project team performance as a group of people they worked together and assigned to a task or tasks for a same project, where individual work for having same goal but with different expertise and tasks. It is reported by some researchers that fewer studies were conducted on Project team performance in contrast to temporal leadership in the interim of late 80s (Cohen & Bailey, 1997), project team performance was perceived as an attachment of an individual effort for his profession (J. E. Mathieu, Heffner, Goodwin, Salas, & Cannon-Bowers, 2000). Classify Project team performance as the dedication of an individual towards its professional career, goals and acceptance of professional ethics by utilizing his/her skills and abilities to produce desired outcome (Kozlowski & Ilgen, 2006). The higher the Project team performance the greater chances of project success increases (J. Mathieu, Maynard, Rapp, & Gilson, 2008).

(Ilgen et al., 2005) defined a good Project team as a belief to accomplish the ambitions of organization and to achieve project success and it help to develop passion to be the part of some specific profession and eager to attain significant achievement in that profession through learning team process by coordinating with diverse individual that having multiple skills. It is stated by the (Kozlowski & Bell, 2003), that project workers are not only committed to profession as they acquire a specific knowledge and skill, but as well committed to their organization this help to develop team cohesiveness (Kozlowski & Ilgen, 2006). The term Project team performance is generated to assess the knowledge and skills of an individual who is motivated to commit with his profession and organization as well being part of specific team (Kozlowski & Ilgen, 2006).

A study was conducted on the commitment of knowledge worker towards his profession as occupation as well organization (Van Knippenberg & Schippers, 2007) There is an argument raised by (Somech & Drach-Zahavy, 2013), That knowledge worker use market is action power. It is an approach to develop and to enhance the competency level of individual that help to develop and enhance project teams that creates link between positive leadership approach and project success. Thus project team performance attach individual success with the success of project that

fundamentally motivates the employees to give their best. The outcome (success) is thus the credit of positive supervision that strengthens professional commitment of project teams by guiding them through timely reminder and proper guidance by adopting temporal leadership approach. Researchers reported three dimensions of team performance. First dimension is called team purpose. It refers to the recognition, engagement, and willingness to achieve specific stated goal with any profession, 2nd dimension team organization that refers to how team is organized in order to achieve goal for having verity of skills in team members to perform tasks 3rd and last dimension is team leadership which plays vital role to guide and schedule teams according to project timeline (Aritzeta, Swailes, & Senior, 2007).

H4: Team Performance positively mediate the relation between temporal leadership and project success.

2.5 Moderating Role of Employee Pacing Style

Pacing style is a term that refers to individual effort towards achieving specific goal or how much effort an individual participate in early time finishing tasks to meet the stated deadline of work (Shipp & Cole, 2015). As a comparatively constant behavioral tendency, pacing style is characterized as a continuum of how closely the amount of effort is paced to the deadline (Mohammed & Alipour, 2014). At the start of the continuum is early action of an employee which means an individual putt more effort at the beginning of the task and will put less effort at the end or near the deadline, this kind of behavior of workers can create working environment to stay busy at the start of the work instead of working hard or in hurry near the deadline (Mohammed & Alipour, 2014). At the end of continuum means late action, which shows employees late working action or employee may shows procrastinating behavior that escalating their effort only as the deadline gets close. Deadline-action individuals tend to overstate activity execution and stimulate and strengthen themselves and others to maximize efficiency at the last moment (J. M. Gevers, Rispens, & Li, 2016).

In recent study scholar (Mohammed & Nadkarni, 2011) stated that in amongst the two ends is the moderate pacing dispersal represented by a fast-action style for complete work. Fast-action employee tend to spread out effort over work activities uniformly, they keep activities well prepared, have a strong sense of direction, and constantly set milestone for completion of activity and observe others' work progress over time.

Neither early-action nor deadline-action-style employees get long-lasting quick output about meeting deadline requirement (Jahanshahi, Brem, & Bhattacharjee, 2017). Researchers also stated deadlines are as much as important motivational factor that highly influenced the working behavior of individuals who are working in the time-bound tasks and provide direction to employees (Hernández-Linares, Kellermanns, & López-Fernández, 2018). Recent research dynamic behavior pattern of employees have been focused for identifying procrastinating behavior that lead to negative consequences for distracting leader for achieving his/her desired goal (Keefer, Stewart, Palitsky, & Sullivan, 2019).

However there are lot of different studies available in which they describe variety of working styles of employee for achieving deadline (Kunisch, Bartunek, Mueller, & Huy, 2017). For example, some individual wait until the deadline is near and most of the time has been gone (that reflects deadline-action) another type of pacing style is begin tasks by employees soon after the task have been assigned (that reflect early action behavior of employee and 3rd form of pacing style is individuals those who spread their working effort evenly over the located time for achieving project objectives. While another form of pacing style is hybrid that is combination of various pacing style (it's also called U-shaped style, in U-shaped section style more effort is deployed at the start of the work and at the end of the execution of the deliverables and break in between start and end of the task) (J. Gevers et al., 2015).

The literature on temporal behavior of employee alterations has inclined to ignore pacing style long before deadline, the researchers shows more interest on goal directed behavior has de-emphasized employee's differences other than procrastination (Covin & Wales, 2019). In recent study scholars (Karami & Tang, 2019)

also explored Project planning research has also addressed as identifying task pacing, its aim to focus on which employees pay more attention and plan their work according stated timeline of project, even not when the work is done (i.e early, steady and late).

Projects are set of unique activates that combine to achieve the overall objective, they are well defined and time on which they need to be finished (J. Gevers et al., 2015). Employee pacing style plays important role for meeting its deadline (Long et al., 1996). Project conditions are bound and they need to be completed in respect of their predefined time, cost, quality and scope. Time and cost bounding is the most challenging as well as the most demanding in the literature of Project Management. We have observed that in project based organization, Project execution is the challenging task in the context of meeting deadlines. Time, Cost, Scope, assessment, Communication, conflict management, Planning are the internal and external factors that acts on the implementation of project activities (Patrick et al., 1994).

Factors other than above mention can be the culture, relation with subordinate and leader, managers are also the influencing factors that lead the project to be completed in the specified pre allocated budgets and predefined time (Calfas et al., 1997). Unavailability of infrastructure and other key resources makes it challenging to achieve the milestones, defined goals which lead to unsuccessful Project objectives (Somannavar et al., 2008). Leadership is also a key factor which leads the project towards its success and can also eventually lead it to its failure (Maumbe et al., 2008). Project owners or leader measures the progress of the project by applying some specific set to tools and techniques for controlling the schedule and budget allocated to the project (J. Gevers et al., 2015). Temporal leadership is leadership style where leader is especially concerned with time bound activity and this leadership style uses positive approach for managing project teams (Massey, Montoya-Weiss, & Hung, 2002).

Those tools and techniques are applied but yet the industries are unable to control over that issue where the main issues are time overrun, cost overrun and regular changes in the defined scope (Maumbe et al., 2008). Many tools and techniques

are introduced but projects are yet missing the defined track and time duration as they used to miss in almost last 40 years (Munns & Bjeirmi, 1996). That issue can be overcome if the employee performance increases. Positive relationship exists between employee performance and Project performance. Multiple studies have been carried out that measure their impact on project performance and employee performance and most recent study has been carried out which concluded that negative relation exist between project performance and Abusive supervision (Siddiquei et al., 2018). Its explain that supervision has a high impact on Project objective and Performance of employee (J. Gevers et al., 2015).

H5: Employee Pacing Style moderate the relation temporal leadership and Team Performance.

2.6 Theoretical Framework

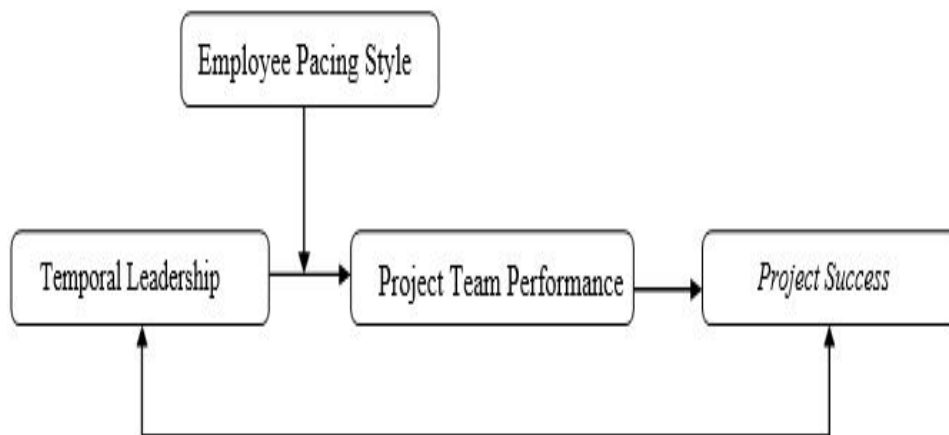


FIGURE 2.1: Research Model

N=220; full path model showing direct, mediating and moderating effect. Mediation relation running temporal leadership to project success through project team performance. Employee pacing style acts as a moderator between independent and mediator. Standardized regression weight values on paths and asterisk indicate significance value.

Chapter 3

Research Methodology

This chapter emphasizes on the methodology that will be used to explore the relationship of the temporal leadership, Project Team Performance, Employee pacing style and Project success. This chapter will also focus on the other aspect of methodology that is analysis of the data, Population, Sample size, unit of analysis, sampling techniques and instrument used for analysis etc.

3.1 Research Design

The approach is used for collecting, gathering information and data of the research question however, research questionnaire is known as tool that help to gather required information. A group of procedure that is used for analyzing the collected data of different variables used in the research model is called research design (Groenewald, 2004).

Furthermore, survey procedure was executed to collect data that involves the utilization of questionnaire For managing the process of the research, it is a detailed process and included the study details with respect to type of study, study settings, unit analysis and time horizon explained in detail below.

3.1.1 Type of Study

The current study is an ‘explanatory study. This is a causal/relational study in which the influence of temporal leadership on project success has assessed based on respondent self-reported perception about these Variables. The present study is a field study because participants, i.e. employees and their supervisors of public and private project based organization were approached on their job and they filled the questionnaire in their natural work environment.

3.1.2 Unit of Analysis

Each and every member working in an organization is considered as an individual unit. The unit of analysis can be individual, a group, organization and culture. For current study unit of analysis are individual who are working in project based organization in different cities of Pakistan (Islamabad and Rawalpindi).

3.1.3 Time Horizon

The method adopted for data collection for this study were cross sectional. The data collection took approximately 1 month. The reason for adopting cross sectional method is due to time shortage, because in thesis the time is short and one must have to complete the thesis in required time.

3.2 Population and Sample Size

The population included for this study was project based organizations. To make sure that the study represents variety of projects, the data has been collected from multiple organizations and from different type of projects. For this research data was collected from subordinates and supervisors/leaders/manager working in different projects in NGOS and software houses of Rawalpindi and Islamabad. Organizations included for data collections are mentioned in the table below.

TABLE 3.1: List of Organizations

Organization	Locations
Idea Tech	Rawalpindi
Eziline Software House Pvt. Ltd	Rawalpindi
Elixir House	Islamabad
MASIA Software House	Islamabad
Dera IT Solutions	Islamabad
Web Matrix	Islamabad
Batool Welfare Trust	Rawalpindi
RAHMA Islamic Relief	Rawalpindi
JNT-Jawad Nazir Trust	Rawalpindi
Saba Trust	Rawalpindi
SOS Children's village	Rawalpindi

Data for Temporal leadership (Independent Variable), and Employee Pacing style (Moderator) were collected from subordinates. Whereas Project Team Performance (Mediator) and Project Success (Dependent Variable) were filled by supervisor/ Project Manage/leader. Calculation of the sample size has been given below.

$$n = \frac{Z^2pq}{e^2}$$

Assuming that 83% serve as an employee as developer and Programmers in the software sector and in NGOs. That is why value of p=0.83 as p is the estimated or assumed population. 95% of confidence level with plus or minus of 5% were selected as margin of error so Z=1.96 and e = 0.05 respectively. By subtracting the value of p from 1 we calculated the value of q as q= 0.17 as the formula of q is q= 1- p.

$$n = \frac{(1.96)^2(0.83)(0.17)}{(0.05)^2}$$

N=216

Above value of $N=216$ gives us threshold of minimum sample size should near to 216, for this study our sample size is 220 which is quite representable. Almost 400 questionnaires were distributed through printed questionnaires. Out of those 400 questionnaires only 280 questionnaires were received back. Among those 280 responses 220 were completely filled and considered for the analysis purpose.

3.3 Sampling Technique

Data cannot be collected from whole population because population is almost infinite. For this purpose a proper sampling technique is used for collection of the data and analysis. This research adopted a quantitative approach which involved the use of a questionnaire which is the well-organized and formal process that describes the relationship among variables. Required questionnaires were distributed in between the month of august 2019 and it took 1 month to complete data collection process.

A small subset from total population can be drawn by Probability or non-probability technique which is known as Sample. Employee working in Project based organization (Software sector and NGOS) was contacted for analyzing data by using convenience sampling technique and 400 questionnaires were distributed and 220 were considered for analysis. For data collection I visited different project based organization and explains the purpose of collecting data and ensured them that the data will be kept confidential and will only be used for research.

3.4 Instrumentation

Adopted questionnaires were used to collect data All the items were measured using a 5-points scale where 1 stand for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree. Questionnaires also contain the few demographic variables which include information about the respondents. Those demographic variables contain respondent age, experience, gender and qualification.

3.4.1 Temporal Leadership

Temporal leadership was measured using a 7 item scale developed by (Mohammed & Nadkarni, 2011) Scale was developed to observe the leader behavior to what extent does a leader remind their teams to finish subtasks on time and the scale revealed good Reliability ($\alpha=0.81$).

3.4.2 Project Team Performance

Project team performance represent as mediator variable in this research. It includes 8 items in scale which describe different aspects related to project team Performance. Those questionnaires were developed by (Barrick, Stewart, Neubert, & Mount, 1998) and we adopted questionnaires from (Shaw et al., 2011) because it was latest and refined. Questionnaire was developed to check the team always do the quality work, team members have knowledge of task? Team member takes initiative for tasks? Etc. This scale demonstrated good Reliability (Alpha 0.815).

3.4.3 Employee Pacing Style

Employee pacing style represent as moderating variable in this research. It includes 9 item scales those questionnaires were developed by (J. Gevers et al., 2015). This scale regarded as the pattern of distribution of effort over the time available for team to complete a tasks, i.e “an individual’s style of doing the tasks which include their early action and late action deadline. Reliability of the scale was 0.93.

3.4.4 Project Success

Project Success represent as dependent variable in this research. It includes 11 item scales which describe Project success. Those questionnaires were developed by (Lean, Zailani, Ramayah, & Fernando, 2009). A Five-Point Liker scale was utilized, extending from 1 strongly Disagree to 5 that is strongly agree. The

sample items include “The project has completed on time”.” The Project was used by its intended clients and I am satisfied with the process by which the project was implemented” etc. Reliability of the scale was 0.934.

TABLE 3.2: Items in Questionnaires

Sr.No	Variable	Source	Items
1	Temporal Leadership	Mohammad and Nadkarni 2007	7
2	Project Team Performance	Shaw et al 2011	8
3	Employee Pacing Style	Gevers et al 2004	9
4	Project Success	Zailani and Fernando 2009	11

3.5 Data Collection Technique

For ensuring confidentiality of information provided by respondents a cover letter was attached to the questionnaire. The cover letter with no doubt exhibited that the study is being carried out for scholarly purposes. Respondents were pledged of the privacy of their names and responses in order that the respondents do not feel hesitation to fill the questionnaire decisively.

Data for independent variable (temporal leadership) and moderator variable (employee pacing style) and were collected from subordinates/employees. To see their team performance data on mediator variable (i.e. project team performance), dependent variable (i.e. project success) were reported by the supervisors/leader/-manager Similarly, the questions included in this specific variable is for subordinates to rate their supervisors. Data was collected by utilizing 1/1 ratio. The leader was assigned specific code which was later on matched with leader/manager subordinate data form.

The software SPSS and AMOS were used to evaluate the data that has been collected through close ended questionnaires the data has been tested for correlation analysis and regression analysis.

Different statistical test was performed like Descriptive statistics, ANOVA, reliability, Confirmatory factor analysis (CFA), correlation analysis and regression analysis were carried out through two different software SPSS and AMOS. SPSS is often used to perform different descriptive test because it's considered one of the best software to perform such type of test. Correlation, Reliabilities and ANOVA were also performed through SPSS software. Confirmatory factor analysis was carried out through AMOS in order to check the fitness of 7 factor model its results are portrayed in next chapter.

3.6 Data Analysis Technique

For the current research, two questionnaires were designed. Supervisors filled one questionnaire and the employees and subordinates of that supervisor filled the other questionnaire. The demographics investigated in this research was gender and age of the supervisor and subordinates of the project based organizations. Similarly, other demographics that were included were experience and qualification of supervisors and subordinates.

The software SPSS and AMOS were used to evaluate the data that has been collected through close ended questionnaires. The data for 220 respondents was then analyzed in SPSS software version 21. A number of procedures while analyzing 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 questionnaires 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 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. 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.
9. Through correlation and Preacher and Hayes method, the intended hypotheses were tested to check the rejection and acceptance of the proposed hypothesis.

3.7 Sample Characteristics

For the current research, two questionnaires were designed. Supervisors filled one questionnaire and the employees and subordinates of that supervisor filled the other questionnaire. The demographics investigated in this research was gender and age of the supervisor and subordinates of the project based organizations. Similarly, other demographics that were included were experience and qualification of supervisors and subordinates. The detailed characteristics of samples are following. In the first section, we will discuss the sample characteristics of supervisors and in the next; we will discuss the subordinates sample characteristics.

3.7.1 Leaders Gender Distribution

Gender is a component, which rest in spot aiming to retain gender equality. Therefore, it is also contemplated as vital element of demographics. The reason is it distinguishes between male and female in a given sample. In current study, it has been tried to make sure gender equality but still it has been seen that male supervisor ratio is much greater than female supervisors are.

TABLE 3.3: Leaders Gender Distribution

Gender	Frequency	Percentage
Male	157	71.4
Female	63	28.6
Total	220	100

Table: 3.3, depicts the information about gender. Table revealed that the more respondents were male supervisors comprised of 71.4% and the remaining 28.6% were female supervisors.

3.7.2 Leaders Age Distribution

For current study, first demographic is supervisors age and respondents sometimes feels hesitation to reveal their ages, so for their easiness and relaxation range was given.

TABLE 3.4: Leaders Age Distribution

Age	Frequency	Percentage
18-25	33	15
26-33	152	69.1
34-41	18	8.2
42-49	15	6.8
50-above	2	9
Total	220	100

The **Table: 3.4**. delineates that maximum respondents were age “between” 26-33 as it constituted for about 69.1%, 8.2133% were those respondents having age range “between” 34-41, furthermore, 15% of the respondents had an age between 18-25, 6.8% were the respondents having age range among 42-49 and 9% of the respondents were having age between 50 and above.

3.7.3 Leaders Qualification Distribution

Education is the vital element that accords towards prosperity and success of entire country as well as for competing globally. Therefore, after gender, education is essential element of demographics.

TABLE 3.5: Leaders Qualification Distribution

Qualification	Frequency	Percentage
Bachelor	26	11.8
Master	150	68.2
MS/M.Phil	30	13.6
PhD	14	6.4
Total	296	100

Table: 3.5, represents information regarding qualification of the respondents. Majority of the respondents had an education of master comprised of 68.2%, 11.8% of the respondents having qualification of bachelor, 13.6% of the respondents had education of MS/M.Phil and 6.4% of the respondents were those who had qualification of PhD.

3.7.4 Leaders Experience Distribution

To collect data about respondents experience different ranges were set so that the respondents can easily answer about their experience.

TABLE 3.6: Leaders Experience Distribution

Experience	Frequency	Percentage
0-5	33	15
06-10	156	70.9
11-16	19	8.6
17-22	10	4.5
23-28	2	0.9
Total	220	100

Table: 3.6, revealed the information regarding experience of the respondents. Table shown that more respondents had an experience of 6-10 comprised of 70.915% of the respondents were those having an experience of 0-5, 8.6% were those respondents who had experience of 11-16 and 4.5% of the respondents had experience of 17-22, and 23-28 had. 9%. As the table shows that most of the respondents had experience of 6-10 years.

3.7.5 Employees Gender Distribution

As the data were collected from two different respondents. Therefore, mentioning the employee and subordinate characteristics is very important. Gender represents that how much male and female respondents took part in the study.

TABLE 3.7: Employees Gender Distribution

Gender	Frequency	Percentage
Male	170	77.3
Female	50	22.3
Total	220	100

Table: 3.7, depicts the information regarding employee's gender. As it has shown that the majority of the respondents were male constituted for 77.3% and the remaining 22.3% were female respondents.

3.7.6 Employees Age Distribution

For collecting data about employees age different range were set for the respondents easiness as sometimes people shows hesitation while responding towards age.

TABLE 3.8: Employees Age Distribution

Age	Frequency	Percentage
18-25	28	12.7
26-33	151	66.8
34-41	22	10
42-49	19	8.6
Total	220	100

Table: 3.8, revealed information regarding respondent's age. As the table shows that most of the employees were between 18-25 constituted for 12.7%, 66.8% of the respondents were those who had age ranging between 26-33, 10% of the respondents had an age between 34-41 and 8.6% of the respondents were age between 42-49.

3.7.7 Employees Qualification Distribution

Education is the pivotal constituent of demographics. As education plays vital role in the country development and progress. The table below contains information regarding qualification.

TABLE 3.9: Employees Qualification Distribution

Qualification	Frequency	Percentage
Bachelor	22	10
Master	157	71.4
MS/M.Phil	22	10
PHD	19	8.6
Total	220	100

Table: 3.9, exhibits information related to respondent's qualification. As the table indicated that majority of respondents had qualification of master comprised of 71.4%, 10% of the respondents were those who had qualification of bachelor, 10% of the respondent's qualification were MS/M.Phil and 8.6% respondents had qualification of PHD.

3.7.8 Employees Experience Distribution

This particular contains information related to respondent's experience. To make it easy for respondents so that they can easily respond to the demographic different ranges were provided.

TABLE 3.10: Employees Experience Distribution

Experience	Frequency	Percentage
0-5	28	12.7
06-10	160	72.7
11-16	19	8.6
17-22	13	5.9
Total	220	100

Table: 3.10, shows information regarding employee's experience. Majority of the respondents had an experience of 6-10 constituted for 72.7%, 8.6% of the

respondents were those having qualification ranging from 11-16 and 5.9% of the respondents were those who had experience “between” 17-22.

3.8 Reliability Analysis

Under table mention the Chronbach’s Alpha; it is the internal reliability and consistency of the scale. It was developed by (Cronbach, Bradburn, & Horvitz, 1994). Chronbach’s Alpha or Coecient alpha must be greater than the minimum threshold that is 0.70 to provide good estimates to retain the items (Nunnally & Bernstein, 1994).

TABLE 3.11: Reliability Analysis

Viable	No of items	Cronbach’s alpha
Temporal leadership	7	0.714
Project team Perfor- mance	8	0.733
Employee pacing style	9	0.808
Project Success	10	0.815

Reliability test refers to the degree where the stability and consistency is use to analyze what -is expected from measurement. Reliability test is a common test used in the research to measure the validity of the scale used for the research. Reliability measurement states from value of 0 to 1 for measuring the scale internal validity and it is known as Cronbach Alpha. Higher the value of Cronbach Alpha, higher the reliability of the scale. Lower the value of Cronbach Alpha lower the reliability of the scale. Cronbach Alpha is also used to measure the correlation among the internal variable variables of the research. Minimum value considered for the good reliability is 0.7. Value lower than 0.7 is considered to be low reliability of the scale used for the research. Under table mention the details of Cronbach Alpha Coefficient. Coefficient Alpha of temporal leadership is measured 0.714 with 07 items, Coefficient Alpha of project team Performance is measured 0.733 with 08 items, Coefficient Alpha of employee pacing style is measured 0.808 with 09 items and coefficient Alpha of Project success is measured as 0.815 with 10 item included in the scale.

Chapter 4

Results

To investigate association among all theoretical variables, descriptive statistics, Pearson correlation, moderation and mediation was performed by using different software such as SPSS and AMOS. Furthermore confirmatory factor analysis being the first one, where we validate the measurement model and multiple regression analysis is the second one (Arbuckle, 2003; Lomax & Schumacker, 2004). CFA is conducted to know the distinctiveness of the variables and to check the fitness of model.

4.1 Descriptive Statistics

Descriptive statistics analysis of proposed variables such as, Temporal Leadership, Project Team Performance, project success and Employee Pacing style are shown in the table. For the purpose of descriptive statistics of all variable mean and standard deviation were calculated by using SPSS and mean and standard deviation are shown in the table below. Mean of variables shows respondents agreement and disagreement with survey questions. The greater mean value depict agreement attitude of the respondents and lower mean value exhibits tendency of respondents attitude headed for disagreements of proposed survey questions.

Descriptive statistics of all theoretical variables i.e., temporal leadership, project

team performance, employee pacing style and Project success are presented in the following table.

TABLE 4.1: Descriptive Statistics

Variables	Mean	Standard Deviation	N
Temporal Leadership	3.168	0.697	220
Employee Pacing Style	3.2716	0.634	220
Project Team Performance	3.466	0.592	220
Project success	3.261	0.542	220

The means and standard deviation of all variables are presented in **Table: 4.1**. If the mean values are on the higher end, it shows inclination towards agreement, but if the mean is on the lower end it represents disagreement with the statements. The independent variable (Temporal Leadership) has the Mean value of 3.168 and standard deviation is .697). The moderator (Employee Pacing Style) has Mean value of 3.27 and SD is .634. The mean value of mediator Project Team Performance (Mean =3.46, SD =.592). The mean value of dependent variable Project success (Mean = 3.26, SD = .542).

4.2 Control Variables

For control variables, one-way ANOVA test was run in SPSS. The main aim of conducting one-way ANOVA is to see that whether the demographic variables have any impact on dependent variable, which is project success. Hence, our main purpose is to see the relationships, which were proposed in the model and their influence. For this study respondents were employees/subordinates and leader/project managers both and ANOVA was run to check these demographic effects on dependent variable which is project success. If any demographic variables effects the dependent variable, its influence will be control then. The table 4.2 and 4.3 revealed information about leaders and their subordinate's demographics effects respectively.

TABLE 4.2: Leaders Control Variables

Control variables	F-Value	Significance
Gender	0.635	0.593
Age	9.196	0.003
Qualification	4.049	0.003
Experience	1.658	0.177

Regarding control variables. As result exhibits different values of demographics like, gender (F=0.635, p= 0.593), age (F=9.196, p= 0.003), qualification (F=4.049, p=0.003), experience (F=1.658, p= .177). Hence, only leader's age and qualification shows significant values and other demographics values showed insignificant relationships, it means that there is no need of controlling any insignificant values demographic because no demographic effect the dependent Variable. Only leader's age and qualification demographics will control during further analysis. Regarding

TABLE 4.3: Employees Control Variables

Control variables	F-Value	Significance
Gender	0.635	0.593
Age	9.196	0.003
Qualification	4.049	0.003
Experience	1.658	0.177

control variables. As result exhibits different values of demographics like, gender (F=0.635, p= 0.593), age (F=9.196, p= 0.003), qualification (F=4.049, p=0.003), experience (F=1.658, p= .177). Hence, only leader's age and qualification shows significant values and other demographics values showed insignificant relationships, it means that there is no need of controlling any insignificant values demographic because no demographic effect the dependent Variable. Only leader's age and qualification demographics will control during further analysis.

4.3 Correlation Analysis

Correlation analysis is used for discover the link between variables. The purpose of Correlation analysis for current research is determine the correlation among

temporal leadership and project success, the mediating role of Project Team Performance and moderating role of Employee Pacing style in order to check the validity of proposed hypothesis. Correlation analysis was run to know the nature of variation between two variables and to see that variables vary together or not. Pearson introduced correlation analysis to determine the nature of strength of relationship among variables via Pearson given correlation rang -0.1 to 0.1. Both positive signs of rang depict different results such as positive sign shows variables are moving in same direction and negative sign of correlation range shows variables are moving in opposite way. Moreover, “r” value represent the strength of association of variables. Value of correlation coefficient exhibit different consequences like, if the value of Pearson coefficient is range of between .1 to .3 its means there is weak correlation, the value range of coefficient is .3 to .5 it is signifies moderate correlation and if the is greater than .5 it represents high correlation.

Correlation among all theoretical variables is represented in table 4.2. The correlation values of Temporal Leadership was positively and significantly correlated with Employee Pacing Style ($r = 0.42^{**}$, $p < .01$), Project Team Performance ($r = 0.322^*$, $p < .01$), Project success ($r = 0.326^{**}$, $p < .01$).

Employee pacing style was significantly correlated with Project team performance ($r = 0.230^{**}$, $p < .01$), While Employee Pacing style was significantly related with Project success ($r = 0.424^{**}$, $p < .01$). The correlation of Project team performance positive and significant with Project success ($r = 0.322^{**}$, $p < .01$). The Correlation Analysis is presented in table 4.4.

TABLE 4.4: Correlation Analysis

Variables	TL	EPS	PTP	PS
TL	1			
EPS	.322**	1		
PTP	.424**	.230**	1	
PS	.326**	.435**	.629**	1

** $p < .05$, * $p < .01$, TL=Temporal Leadership,

EPS=Employee pacing style, PTP=Project team performance, PS=Project success.

4.4 Regression Analysis

For analyzing the presence of links among variables correlation analysis were carried out but it only infer the presence of relationships among variables via insufficient support and provides no evidence about the causal relationships between variables. Therefore, for finding out the causal relationship regression analysis has conducted to validate the dependency of one variable on another variable. Regression analysis has two types, one is simple regression and the other is multiple regression. Simple regression or linear regression has conducted for this study. Below two tables presented simple regression analysis.

4.4.1 Simple Regression

TABLE 4.5: Regression Analysis of H1

Project Success			
Predictor	β	R^2	Sig
Temporal Leadership	.326***	0.106	0.000

Hypothesis 1 enunciates that temporal leadership have positive impact on project success. For this hypothesis, the results provided in the table provided strong justification. Results suggested that there was only 2 demographics leader's age and qualification need to control variable because only these two demographics shows significant impact on project success . Results shows that temporal leadership has positive and significant link with project success as exhibited by the regression coefficient ($B=.326$, $p < 0.000$). In addition, the value of ($R^2 .106$) depicts that temporal leadership brings 10% variations in project success.

TABLE 4.6: Regression Analysis of H2

Project Success			
Predictor	β	R^2	Sig
Project Team Performance	.435***	0.189	0.000

Hypothesis 2 states that Project Team performance has positive impact on project success. For the mentioned hypothesis the results in above table gives strong justification. Results depicts that project team performance has positive and significant relationship with project success as indicated by regression coefficient ($\beta=.435$, $p<0.000$). Similarly, value of ($R^2 .189$) delineates that project team performance brings 18% variations in project success.

4.5 Validity Analysis

To validate the theoretical model, confirmatory factor analysis was conducted.

4.5.1 Confirmatory Factor Analysis

The measurement of model was analyzed by using IBM AMOS. The model were checked through fit statistics, that involve multiple indices, such as Root Mean square error of Approximation, chi square, comparative fit indices(CFI), Adjusted Goodness of fit index(AGFI) and Goodness of Fit Index(GFI). Moreover, Confirmatory factor analysis seeks to determine if the number of factors and the loadings (relation of measured item to underlying construct) conform to what is expected on the basis of pre-established theory, model, or rationale. Indicator variables are selected on the basis of prior theory and Confirmatory factor analysis has been performed by using Amos 23 before testing the hypothesis which have been proposed in the current study.

The Measurement Model has value of chi-square statistic and degree of freedom.

The value of chi-square is sensitive to the sample size and is accompanied with degree of freedom to give a robust measurement. Satisfactory model fit is indicated by ratio of chi-square goodness of fit to degrees of freedom no greater than two (Browne, Cudeck, et al., 1993). The proposed model consist on four variables.

TABLE 4.7: Confirmatory Factor Analysis of the Measurement Model

	Chi Square	Df	CMIN/DF	RMSEA	IFI	TLI	CFI
Initial Model	995.08	521	1.91	0.064	0.779	0.758	0.775
Modified Model	604.68	486	1.244	0.033	0.954	0.946	0.953

The confirmatory factor analysis of 4 factor model represented a good fit (see Table 4.3). All values presented a good fit having ($\chi^2 = 604.68$, $df = 486$, $\chi^2 / Df = 1.244$, $p < .000$ RMSEA = .33, IFI=.954, TLI=.946 and CFI=.953).

For achieving better model fitness a few modifications have been performed, although original model wasn't meeting the minimum criteria of model fitness the error terms were covaried. Hence, modified model fits the data better because all values are meeting threshold proposed by (Hair, Black, Babin, Anderson, & Tatham, 2009). RMSEA is .033 which is less than 0.05 which indicates a good fit, IFI= 0.954 which is closer to 1 illustrates a good fit, TLI=0.946 and CFI=0.953 again represents good fit.

Before going ahead for the interpretation of the above figure, it's important to know about the variables of the below figure. The PROO underlying variables indicates TL is Temporal leadership, PTP indicates Project team Performance, EPS discovers Employee Pacing Style and PS indicates dependent variable Project success.

The below figure disclosed the results for the model fit, where for getting model fit certain changings were deployed like linking error terms. Fortunately above figure revealed all the values that meet the threshold values which are suggested

by Hair et al, hence overall results of four factor model values is good enough for representing model fit.

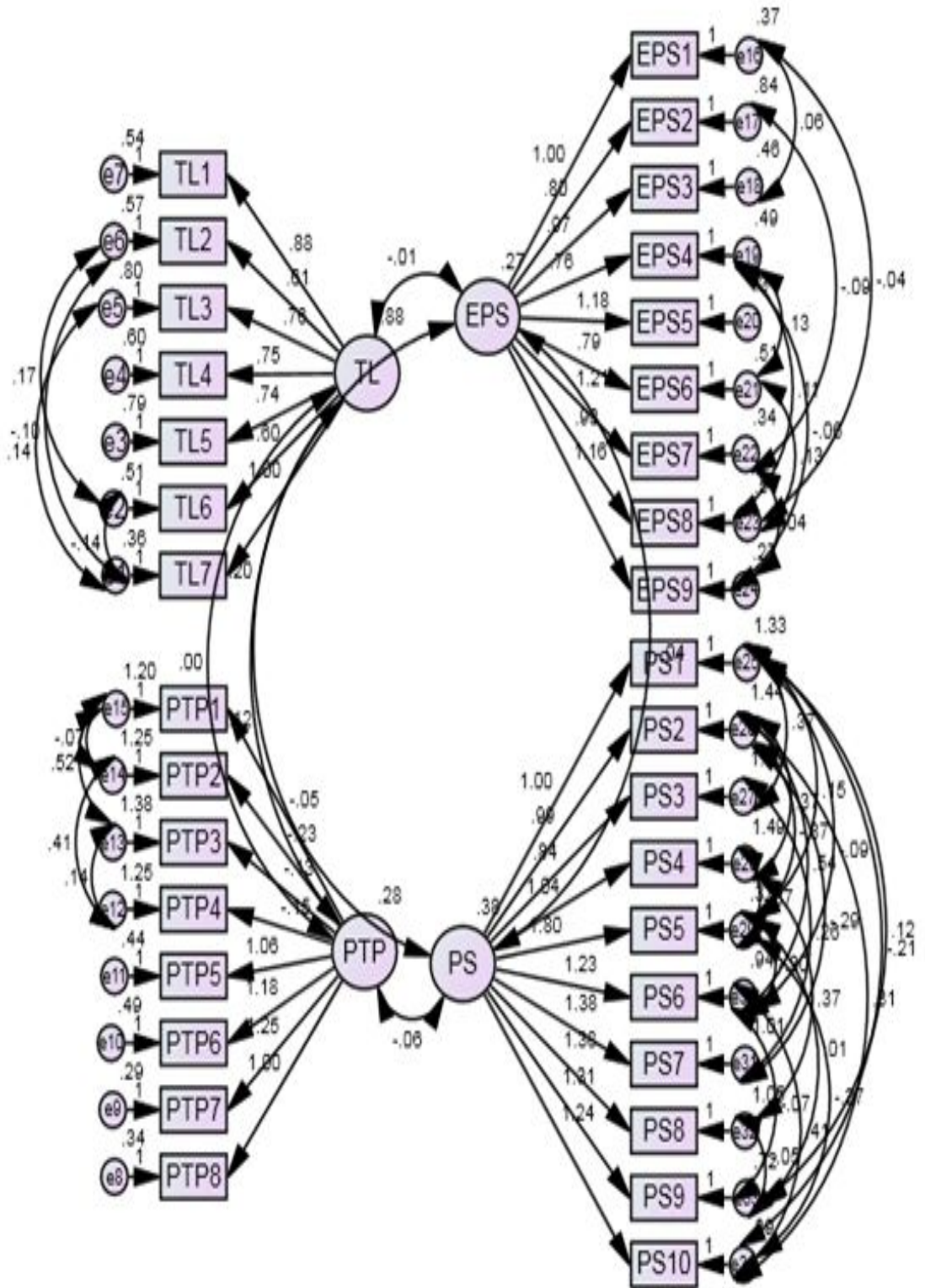


FIGURE 4.1: Confirmatory Factor Analysis

4.6 Hypotheses Testing

4.6.1 Test of Hypothesis 1, 2 and 3

H₁: Temporal leadership have positive impact on project success.

H₂: Temporal leadership have positive impact on project team performance.

H₃: Team performance have positively correlation with project success.

TABLE 4.8: Standardized Coefficients for Structural Paths

Structural Path			Estimate	SE	T	P Value
TL	→	PS	0.1591	0.0526	3.0268	0.0028
TL	→	PTP	0.2775	0.0643	4.3793	0.000
PTP	→	PS	0.317	0.0702	4.5155	0.000

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

H1: Temporal leadership have positive impact on project success. The first path tested was from Temporal Leadership to project success is ($\beta = 0.1519$) +, $p < 0.0028$) shows that Temporal Leadership is significantly associated with Project Success. Hence, hypothesis H1 which proposed that Temporal Leadership has positive relationship with Project success is accepted.

H2: Temporal leadership have positive impact on project team performance. The second path tested was from temporal leadership to project team performance and the ($\beta = 0.2775$, $p < 0.000$) shows that core temporal leadership is positively and significantly associated with project team performance. Hence, hypothesis H2 which proposed that temporal leadership have positive impact on project team performance is accepted.

H3: Team performance have positive correlation with project success. The third path tested was from project team performance to project success and the ($\beta = 0.317$, $p < 0.000$) shows that project team performance have positive correlation with Project success. Hence, hypothesis H3 which proposed that team performance have positive correlation with project success is accepted.

4.6.2 Test of Hypothesis 4

H4: project team performance positively mediate the relation between temporal leadership and project success.

TABLE 4.9: Standardized Indirect Path Coefficients Mediation Analysis

Indirect Paths	BC 95% CI			
	Indirect Effect	Lower Limit	Upper Limit	P
TL→PTP→Pro Success	0.1754	0.1016	0.2611	0.000

Note: n=264; Bootstrap sample size=2000, BC 95% CI= Bootstrap confidence Intervals *p<.05, **p<.01,***p<.00.

The mediating role of PTP in the relationship between TL and Project success was proposed and tested in Hypothesis .The true indirect effect was estimated to lie between the upper and lower limits are .1016 and .2611 which is significantly different from zero, p<0.001. Therefore, Hypothesis 4 is accepted.

4.6.3 Test of Hypothesis 5

H5: Employee Pacing Style positively moderates the relation temporal leadership and Team Performance.

TABLE 4.10: Moderation Analysis

Structural Path	Estimate	SE	P-Value
TL → PTP	0.2775	0.0643	0.001
EPS → PTP	0.1123	0.0763	0.155
INT (TLEPS) → PTP	0.5534	0.113	0.000

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

Dependent Variable: Project Team Performance

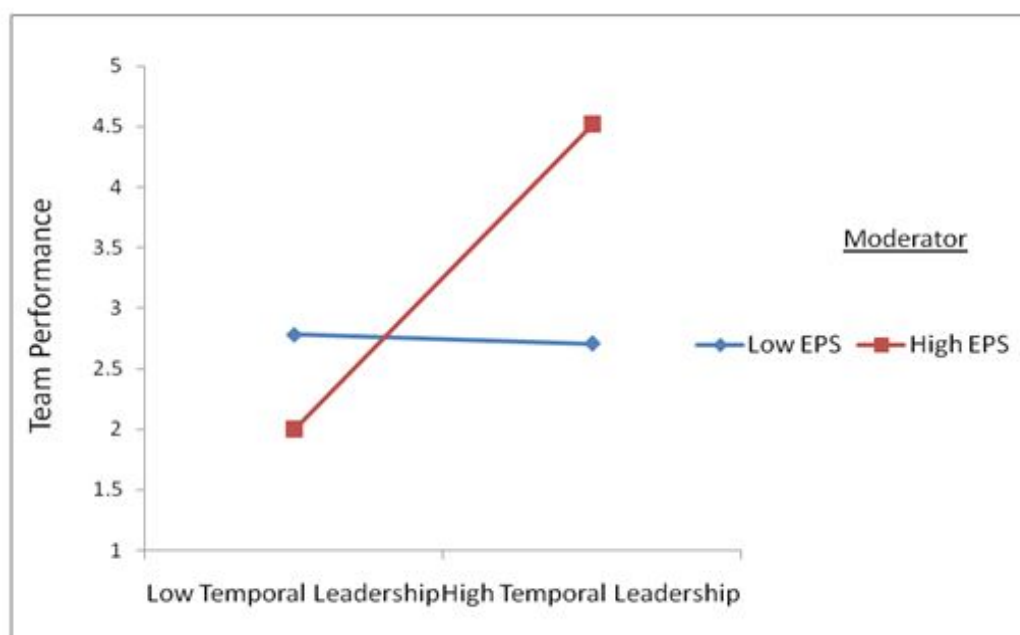
Independent variable: Temporal Leadership

Moderating Variable: Employee pacing style

4.7 Mod Graph

Mod Graph was calculated to check the moderating effect of Employee Pacing Style on the relationship of Temporal Leadership style and Project Team Performance. The results are according to the expectations, of Employee Pacing style support positively moderate the relationship between Temporal Leadership and Project team Performance. As the figure represents that the relationship between Temporal Leadership and Project Team Performance is positive at low Employee Pacing style (Late action to deadline) but in case of high Employee Pacing Style (early-action, far away from deadline) relationship between Temporal Leadership and Project Team Performance becomes stronger. It depicts the enhancing effect of moderator. Hence hypothesis 5th of the study was accepted.

FIGURE 4.2: Mod Graph



Dependent Variable: Temporal Leadership

Independent variable: Project Success

Moderating Variable: Employee Pacing Style

TABLE 4.11: Summary of Hypothesis

Hypotheses	Status
Hypothesis 1: Temporal leadership have positive impact on project success.	Accepted
Hypothesis 2: Project Team performance has positive impact on project success.	Accepted
Hypothesis 3: Temporal leadership has positive correlation with project team performance.	Accepted
Hypothesis 4: Team Performance positively mediate the relation between temporal leadership and project success.	Accepted
Hypothesis 5: Employee Pacing Style positively moderates the relation temporal leadership and Team Performance.	Accepted

Chapter 5

Discussion and Conclusion

This chapter include the overall discussion of the study and the relevant questions that were needed to address during this research, moreover this chapter will also discuss the hypothesis acceptance and rejection on the basis of results that were being discussed in the previous chapter. This chapter will also discuss the limitations, future implications and viable future recommendations.

5.1 Discussion

The main tenacity regarding this was to explore the gray area of temporal leadership that are still need to explore and study in the domain of project management. Teams are made-up by individual's variety of skills and their working way to make a project successful. This study was conducted to check the intensity of temporal leader on project success and how the project team performance (mediator) plays role for making success of the project more possible. Does employee early-action make any difference in project team performance or employee late-action(near deadline) make team energized, enthusiastic and focused for achieving project goal. For the purpose of checking this analysis of was carried-out and data was collected specifically from project based organizations.

After analysis mechanism the results shows that relationship of temporal leadership and project success positively associated and project team performance

significantly mediate between temporal leadership and project success. It was also found that employee pacing style significantly moderate between temporal leadership and project team performance, as all the values shows significant result for ensuring the proposed model fitness.

Another aim of this study was to investigate the relationship of this proposed model variable in the context of Pakistan and how temporal leader is beneficial for the project based organizations. Is this temporal behavior of the leader plays an important role to make project teams more focused and temporal style refers to timely reminder, getting feedback and highly concerned about time bond tasks? This study was carried out to provide an evidence to the Pakistani project based organizations how to minimize time related issues.

According to our study findings and hypothesis acceptance shows that temporal leadership style is vital for project manager/supervisors to manage their team performance and this study also provide the evidence of time can be reduced by adopted temporal leadership style in project based organizations because according to traditional project triangle time/schedule is one of the major attribute of project success. If a manager fails to deliver a project on stated schedule it can cause of cost over run, miss commitment, show irresponsible attitude of project manager/supervisor and incapable project team. Thus temporal leadership plays vital role in all aspect for making project success more achievable.

The detail discussion of hypothesis acceptance and rejection is discussed below.

5.2 Temporal Leadership have Positive Impact on Project Success

Pertaining to the relationship between temporal leadership and project success, the findings were in line with the H1 that suggested positive association between temporal leadership and project success. Temporal leadership considered as positive attitude of a leader that constantly guiding and getting feedback from teams and strictly associated with time bond activities which is important for project success to achieve milestones for accomplishing target of the project.

The findings were also in alignment to the previous studies which have established project success can be predicted through leadership style, where in latest previous study reveal that temporal leadership is kind of task-oriented leadership which is important for achieve success of projects(time-bond objectives), (Siddiquei et al., 2018) and in their study also stated that for achieving project success team plays vital role and teams can perform well by leaders adopting temporal behavior (project initiation through temporal planning and temporal reminder throughout project execution) which is objectively important for success. After reviewing numbers of articles and through findings of this research we can suggest that temporal leadership which is task-oriented in nature can show viable results by temporal planning attitude for structural initiation and for delivering deliverables according to schedule.

Another reason of positive relationship between temporal leadership and project success is verified by the way temporal leadership help project team members for managing their tasks to achieve project success by finishing their time related tasks on time (Maruping et al., 2015), thus our finding also supported by the previous study (Akbiyikli et al., 2019). The findings of the current study also testified that the way temporal leadership put time-oriented approach with reference to project success plays an imperative role towards making success more viable. This establishes and maintains the relation between temporal leadership and project success.

5.3 Temporal Leadership have Positive Impact on Project Team Performance

The assumption was accepted that temporal leadership and Project Success positively correlate with each other because of many temporal factors that needed while project execution, temporal leadership help project teams in many context like, initiation temporal planning continuously guidance and timely feedback and temporal nature show high concerned to achieve time bond project tasks that behavior of a leader ultimately energize teams to stay focused. Our proposed

hypothesis have been accepted by providing significant result of the hypothesis values that is evidence of relationship existence between temporal leadership and project team performance. The result are also been supported by past studies. In fact previous studies showed empirical results where researchers stated that temporal leadership has positive effect on team learning and innovation (Taylor, 2019). Where teams are more active and energized under temporal leadership (Wu & He, 2018). In another previous study scholar stated that repaid changings in the organizational demand, team leasers need to adopt temporal leadership behavior in order to coordinate with teams and acknowledge their efforts by interacting with teams (Gerpott et al., 2019) and team coordination help to minimize conflict related issues and to ensure that teams are performing well, where team performance is a reflection of leadership (Santos et al., 2016).

Where temporal leadership is indication of project team learning and innovation that shows temporal leader style will enhance the project team performance (Lee & Farh, 2019). Through our findings and support from previous studies assumption of current research have been proved right and proposed hypothesis H2, Temporal leadership have positive impact on project Team Performance have been accepted.

5.4 Team Performance has Positive Correlation with Project Success

Regarding relationship between project team performance and Project Success, the hypothesis H3 assumed that project team performance has positive relationship with Project Success. The findings of the study were also in line with the expectation this research shows positive correlation between project team performance and project success and the assumption was accepted that project team Performance and Project Success positively correlate with each other. Result of the hypothesis were also presented significant values that is evidence of relationship existence between them. The result are also supported by previous studies (Rego et al., 2019). Project success depends over the project team performance and they positively correlate with each other where Scholars document the value of

team member dedication and cooperation to increased project team performance (Aronson, Reilly, & Lynn, 2019).

Scholars (van der Vliet et al., 2019) stated in recent study on project team performance where they revealed that team is an inevitable part of every successful organizations in the world but managing a project needs great deal of efforts and understanding among group members this is how teams plays significant contributors to the project success (Mathur, Banerjee, & Kushwah, 2019). Project team effectiveness help to enhance project effectiveness. Project success may depend upon many factors but teams are most important factor and play key role as back-bone of the Project success. Project team performance can assess through previous objective achieved and through organization's market image. Now after reviewing previous studies and our findings revealed that project team performance plays vital role for achieving project success and our proposed hypothesis H3, project team performance has positive correlation with project success, have been accepted by analyzing results of our research.

5.5 Project Team Performance positively Mediate the relation between Temporal Leadership and Project Success

The project team performance positively mediate the relationship between temporal leadership and project, and it is proved by the acceptance of H4, Project Team Performance positively mediate the relation between temporal leadership and project success by our findings of current research. The results of the hypothesis show signify cant results, Bootstrapped 95% interval in indirect effect of relationship between temporal leadership and Project success through project team performance show no zero existing between them this indicate that project team performance mediate the relationship between temporal leadership and Project success.

The assumption for the meditating role of project team performance was proved

by our findings of the current study test, where the results shows significant values that is evidence of mediation existence between temporal leadership and project success, hence the mediating role of project team performance have been proved and through results of the current study and from the support of previous research (Rego et al., 2019). In recent study scholar stated that Project team performance as the employees combine effort on a project or task to achieve organizational goal (Hill, Offermann, & Thomas, 2019), and put value addition to organization's good will (Zhang, 2019). This effort of employees depend upon the behavior and leader's way to treat and guide his employees for achieving daily tasks and the effort of temporal leader teams is a way to achieve project success (Calvo de Mora Schmidt et al., 2013).

5.6 Employee Pacing Style positively Moderate the relation Temporal Leadership and Team Performance

The assumption was accepted that employee pacing style moderates the relationship between temporal leadership and project team Performance. The results shows the significant values to provide the evidence for moderation existence. Significant impact of employee pacing style over project team performance in the presence of temporal leadership, hence it's been proved that hypothesis 5 "Employee Pacing Style positively moderate the relation temporal leadership and Team Performance" have been accepted by the findings of the current study.

The assumption for the moderating role of employee pacing style between temporal leadership and project team performance also supported by previous study (Sirén, Parida, Patel, & Wincent, 2019). In recent study scholar stated that employees early-action pacing style help to achieve success (Haugnes, Torvik, Ettema, Kocbach, & Sandbakk, 2019), productive environment at work place (S. H. Oh, Shin, & Kim, 2019).

5.7 Theoretical Implication

This study open a new domain in the previous literature available where temporal leadership has been studied with different variables. Although a handful study have shown the Shared temporal cognitions as substitute for temporal leadership and shown the analysis of their effects on temporal conflict and team performance (Santos et al., 2016). Current study aims to advance the literature of temporal leadership with different variables in the domain of project management literature. As previously various studies demonstrated temporal leadership with time urgency, team temporal leadership and team creativity and focused to assess the timeline of the projects.

Only current research mainly shows temporal leader's impact on project success whereas employee pacing style were a new variable that haven't studied before in the context of project team performance. Regardless of some advancement, literature on temporal leadership still deprived of a vigorous theoretical framework that answer and addresses the question of what could be effect of temporal leader as an independent variable direct effect on project success whereas how team performance is important for achieving project success. Consequently, we tried to advance the research on temporal leadership by exploring teams effect on project success and employees play vital role in team performance the way they perform their daily tasks and their working styles impact on project team performance, and project teams are major source of success for any organization, more this study aim was to assess the variables in the context Pakistani culture specifically in project environment.

5.8 Practical Implications

This study is not only important for the supervisor but also important for the employees, subordinates because Pakistan is facing a high level of failure in achieving project success. This study will help project based organizations to understand the diversity of employee pacing style and they will analyze and asses how employees

spacing style impacting team performance. In the context of project management literature it will help scholars to understand the underpinning situation that may effecting project team performance and temporal behavior of a leader specifically shows the task oriented attitude that help teams to be more focused and energized for achieving their goals, where success is combine effort from individual, teams and of a leader. This research open new perspective for researchers to assess project success from the perspective of individual employee spacing style, as teams and how task oriented leadership making success possible.

5.9 Limitations of the Study

Like all studies, the current study had some limitations too.

In this study, there is small sample size as data were collected from only three cities of Pakistan. The 220 participants might not be considered as a complete representative of the data.

Secondly, data were gathered from various NGOs and Software houses. This would threaten the generalizability of study results due to its small sample size, limited geographical and sector-wise sampling procedure.

Thirdly, the study was conducted only in Pakistan that could raise the question of cultural influence. So, future researchers can test these relationships in other cultures or countries.

5.10 Future Research Direction

There are always some gaps because research is never ended thing in the world of competitiveness which provide us way for future directions. The current study was conducted to check the temporal leadership impact on project success with team performance was used as mediator for creating stronger link between them.

- Current study was conducted to check the perceived temporal behavior of a leader but future research can assess the temporal leadership style as actual.
- Another future direction could be conducted by utilizing different research design such as longitude because current research used cross sectional research design.
- Furthermore, the current study explains the temporal leadership impact on project success with mediating role of project team performance for future scholar can study with other moderator , innovative learning, inter organizational interaction and team stability etc.
- The number of respondents should be increased to conduct a large scale study to see the efficacy of all four hypotheses.
- Future research should take the advantage of additional team skills enhancement under temporal leadership by examining other affective mediator like project team innovation, project role conflict and project team diversity could likely instigate temporal leader in project environment.

5.11 Conclusion

The four variables – Temporal Leadership, Project Team Performance, Project Success and Employee Pacing Style – were deeply studied to find out their significance in the project management. The findings were in line with proposed hypothesis with significant values various results and model fitness by utilizing different research software such as SPSS and AMOS: To make the work environment less challenging and more motivational, the positive personality traits need to be checked frequently since the negative affect can influence the quality of performance and motivation for project team performance that is highly related able

for achieving project success. Hence temporal leadership in terms of task oriented behavior is an influential variable that qualifies for project team performance and project success.

For the purpose of data for check the fitness of model and significant of the model we conducted survey by distributing 400 questionnaires in project based organizations however, only 220 were used for the analysis because those were completely filled and provide all the required information. The hypotheses are supported by social exchange theory. The main contribution of the study was to find the impact of temporal leadership on project success with project team performance as a mediator. Employee pacing style as a moderator is also analyzed between temporal leadership and project success.

In this study there were 5 hypotheses, that were analyzed and tested in the context of Pakistani culture, all hypothesis were accepted with significant values which is discussed above. Results of hypothesis shows there is positive correlation between temporal leadership which shows in the presence of temporal behavior project success chances are high. Results also shows project team performance mediate between temporal leadership and project success that shows in the presence mediator (project team performance) success of project get increased. In the other hand employee pacing style early-action of teams help project teams to better perform.

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Appendix-A

5. Questionnaire

ID- - - - -

(By a Leader)

Dear Respondent

My name is Atiqa Shahzadi. As a MS research scholar at Capital University Science and Technology, Islamabad, I am collecting data for my research paper. Title: Impact of Temporal Leadership on Project Success with Mediating Role of Team Performance and Moderating Role of Employee Pacing style. It will take your 10-15 minutes to answer the questions and to providing the valuable information. I assure you that data will be strictly kept confidential and will only be used for academic purposes. Thanks a lot for your help and support!

Sincerely,

Atiqa Shahzadi.

MS (PM) Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section: 2	
Gender:	1- Male 2- Female
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 (0-5), 2 (6-10), 3 (11-16), 4 (17-22), 5 (23-28), 6 (29 and above)

Section 3: Team Performance

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

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

Section 4: Project Success

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

1	The project was completed on time.	1	2	3	4	5
2	The project was completed according to the budget allocated.	1	2	3	4	5
3	The outcomes of the project are used by its intended end users.	1	2	3	4	5
4	The outcomes of the project are likely to be sustained.	1	2	3	4	5
5	The outcomes of the project have directly benefited the intended end users, either through increasing efficiency or effectiveness.	1	2	3	4	5
6	Given the problem for which it was developed, the project seems to do the best job of solving that problem.	1	2	3	4	5
7	I was satisfied with the process by which the process was Implemented.	1	2	3	4	5
8	Project team members were satisfied with the process by which the project was implemented.	1	2	3	4	5
9	The project had no minimal or start-up problems because it was readily accepted by end users.	1	2	3	4	5
10	The project has directly led to improved performance for the end user/target beneficiaries'.	1	2	3	4	5
11	The project has made a visible positive impact on the target.	1	2	3	4	5

Appendix

ID- - - - -

(By team Member)

Dear Respondent

My name is Atiqa Shahzadi. As a MS research scholar at Capital University Science and Technology, Islamabad, I am collecting data for my research paper. Title: Impact of Temporal Leadership on Project Success with Mediating Role of Team Performance and Moderating Role of Employee Pacing style. It will take your 10-15 minutes to answer the questions and to providing the valuable information. I assure you that data will be strictly kept confidential and will only be used for academic purposes. Thanks a lot for your help and support!

Sincerely,

Atiqa Shahzadi.

MS (PM) Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section: 2 (For team Member)	
Gender:	1- Male 2- Female
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 (0-5), 2 (6-10), 3 (11-16), 4 (17-22), 5 (23-28), 6 (29 and above)

Section 1: Temporal Leadership

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

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 nished on time?"	1	2	3	4	5
	To what extent does your project leader urge members to nish 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 3: Employee Pacing Style

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

1	When performing a task or project, I start right away and finish the work long before the deadline.	1	2	3	4	5
2	When performing a task or project, I do quite a bit of work at the start so that I can relax a little towards the end.	1	2	3	4	5
3	I would rather turn work in early than risk being late.	1	2	3	4	5
4	I do not get much done on a task or project until the due date is close.	1	2	3	4	5
5	I do most of the work on a task or project in a relatively short time before the deadline.	1	2	3	4	5
6	I put in more effort towards the end of a project than at the beginning.	1	2	3	4	5
7	When working on a project, I work steadily on tasks, spreading my work out evenly over Time (e.g., 3 h per week until the deadline).	1	2	3	4	5
8	The amount of effort I put into a project is fairly consistent over time from start to finish.	1	2	3	4	5
9	I do small chunks of work over time rather than a large chunk at one time.	1	2	3	4	5