Impact of Transformational Leadership on Project Success: Mediating Role of Team Work and Moderating Role of Project Culture

by

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Dedicated to my father, mother and siblings for their never-ending love, support and motivation.

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 study emphasizes the relationship between transformational leadership and project success (involving 5 dimensions which are project efficiency, organizational benefits, project impact, future potential and stakeholder satisfaction) with the role of team work as mediator and project culture as a moderator in order to see the increased impact of these constraints in term of project teams working in project-based organizations of Pakistan. Data was gathered from National logistic Cell subsidiaries via online survey and the in total 276 response were considered for the study which is 44.15 percent of 625. The data was analyzed in SPSS and results were significant. The current study has practical and theoretical implications that significantly contributes towards the effectiveness of teamwork by incorporating project management practices within the boundaries of Pakistan.

Keywords: Transformational Leadership, Team Work, Project Culture, Project Success, Project Efficiency, Organizational Benefits, Project Impact, Future Potential, Stakeholder Satisfaction.

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List of Abbreviations

FP	Future Potential
OB	Organizational Benefits
PBOs	Project-Based Organizations
PC	Project Culture
PE	Project Efficiency
PI	Project Impact
PS	Project Success
SS	Stakeholder Satisfaction
TL	Transformational Leadership
TW	Team Work

Chapter 1

Introduction

Transformational leadership (TL) is a type of leadership in which leader inspires, motivates his followers to incorporate changes by providing better working environment, satisfaction of needs and new creative ideas and solutions to the problems. Leadership style really matters for success of project; past literature shows that various leadership styles impact in a different way towards success. The Study suggest TL enhance the performance, efficiency and Project Success. These leaders play significant role in the organizations at different levels, without effective leadership it is difficult to incorporate all the require changes. It is witnessed, this leadership style is different, unique and most effective among other styles as it helps to achieve the competitive advantage around the globe in every discipline including project management. In project-based organizations, transformational leadership is practiced and the results are outstanding (Ghasabeh, Soosay & Reaiche, 2015). In a meta-analysis the research deposits that transformational leader is more open and confident which is a positive sign towards ethical work outcomes. And employees also follow the leader and their tasks also reflects ethics and honesty (Banks, McCauley, Gardner & Guler, 2016). It is the primary responsibility of a leader or manager to facilitate its team members and provide friendly culture where they can polish and enhance their skills, able to cope up with modern challenges and can able to contribute in Project Success (Anantatmula, 2010).

Project managers who opted transformational leadership style tends to be more productive and are successful in providing workplace environment that promotes

safety, care and well-being of employees (Boamah, Laschinger, Wong & Clarke, 2018). TL style is applicable at both levels i.e. individual and group and helps to motivate the groups and individual members in a way that, they align their goals with the organizational goals and objectives. TL is associated with the individual perception towards his leader and this perception leads towards attainment of project success in project-based organizations and helps in attainment of desire goals (Herman & Chiu, 2014).

In project-based organizations, employees work on multiple projects, under the supervision of project manager (TL). It is witnessed that project manager acquiring the traits of transformational leader, are able to satisfy the employees and complete the deadlines on time. Because, employees trust and respects such managers more than others (Boamah et.al, 2018). In project management literature, TL has emerged as a unique and most accepted leadership style which guarantees success. TL and its different dimensions play a leading role in improving the team collaboration, performance of employees and influence team members to achieve the desired tasks. Hence, rate of project success is higher (Amin, Kamal & Sohail, 2016).

Hassan, Bashir and Abbas (2017) stated that project manager personality dimensions play important role towards determining the project success. If the project manager is cooperative and supportive, employees will feel comfortable and work hard to achieve the goals and in case of non-cooperative and strict managers employees fear, stress which will restrain them from achieving their goals. In past literature, researcher found that transformational leadership is positively associated with the project success (Aga et al., 2016). In project-based organizations, portfolio managers are very important, they help to achieve the desired targets. When they acquire the qualities of a transformational leader, they become more efficient and effective (kissi, Dainty & Tuuli, 2012). Trust and teams are correlated with each other and is positively related to transformational leadership (Gundersen, Hellesøy & Raeder, 2012). To achieve the desired team work, team building should be done in a way that have goal clarity, strong relationships, sincerity,

commitment and clarity of their roles and duties. Good team building has strong positive connection with the project success (Aga et.al, 2016).

In spite of the fact that it has been settled that transformational authority predicts project success (PS), there was no unmistakable proof that this relationship is kept up under the state of never-ending alteration in which representatives are presented to delayed vagueness, vulnerability and tension (Boga & Ensari, 2009). Project manager's skills, transformational leadership has a direct positive relationship with the project success (Maqbool, Sudong, Manzoor & Rashid, 2017). For the successful management of project, the project manager has to clearly identify the role and responsibilities associated with all the stakeholders and along with that there should be open channel for communications among all the stakeholders (Anantatmula, 2010).

Ooko (2013) defined team work (TW) as a collective effort or group of distinct people who are working together on a certain project, task or for achievement of desired organizational goals. TW is considered significant in past as a lot of researchers have worked on it and those finding are important for the future scholars. Now-a-days project managers working in project-based organizations make teams for different projects. Every project has its own team, who is responsible for success and failure of the particular project. TW lay significant impact on employees' commitment and dedication towards their projects, if there is friendly and cooperative team work culture. Moreover, TW make the employees autonomous and lead towards enhanced satisfactions level (Hanaysha, 2016). In a study, the researcher states that, if teams want to be effective and efficient, it is important to focus on team work and task work. Teams perform the task collectively and they must be according to the skills and expertise of the members (Burke, Wilson & Salas, 2003).

For successful team it is advisable to consider and practice the 9C's which are: cooperation, conflict, coordination. communication, coaching, cognition, composition, context and culture. All these C's collective help an organizations (PBOs) to make an effective that make the project successful (Salas, Shuffler, Thayer, Bedwell & Lazzara, 2015). It is suggested that if the teams are facing issues or not

effective due to any reason then the management should alter them. This alteration will enhance the team work and cohesion (Driskell, Salas & Driskell, 2018). Transformational leadership style plays significant role in increasing team effectiveness and work, team gets inspire and follow the actions of leader, ultimately leads towards project success. Under TL team flourish and practice new ideas and creativity that make the employees more productive and dedicated towards particular organization, which indirectly and directly grantee the achievement of success of particular project (Tabassi, Roufechaei, Bakar & Yusof, 2017).

In past literature, team work is positively influencing the project success (Yang, Huang & Wu, 2011). Sohmen (2013) suggested that leadership and team work needs to be balance at the two sides of a coin, both have the equal probability. In the emerging trend transformational leadership is transforming the employees towards collective decision making, goal achievement and bringing the change at the organization level through the shared vision (Ghasabeh, Soosay & Reaiche, 2015). Through learning, organizations can adapt the changes and bring innovations that leads toward the organizational success in term of goal achievement (Morales, Barrionuevo & Gutiérrez, 2012).

In project management, project culture and organizational culture has vital role and researchers have given emphasis on them. There are sufficient evidences in the literature that reflects the importance of project culture helps to incorporate project management strategies and principles within the project-based organizations.PC plays significant role towards project success (Vaidyanathan, 2016). It is essential for the project-based organizations to work on PC in order to make their project successful. In another study the researcher has compared the culture with vitamin. The way vitamins are essential for the human body similarly PC is essential for the project-based organizations (Jensen, 2019).

Project culture is pattern having certain assumption that individuals have perceived, discovered and developed through past experience, while handling multiple projects. It also includes shared beliefs, values, attitude and behaviors (Nitzsche, Jung, Kowalski & Pfaff, 2014). According to the study conducted by Sinaga, Asmawi, Madhakomala& Suratman (2018) transformational leadership, project

culture has strong connection with each other. Culture is helpful in creating mutual bond between project managers and employees, it is necessary to built a culture of an organizations through TL, as these leaders are skilled and expert in inspiring the employees through following the norms, belief and values. It also ensures the practice of change management strategies within the organization.

The cultural aspect within any organization is gaining importance day-by-day. And from this project culture is derived, as all the innovation are done through the existing culture. It is basically the environment in which top, middle and lower management interact and is through this value, norms are shared among all. If the TL is there in such environment then the employees and project managers works together with full zeal and zest. The rate of project success is also higher and the culture itself compose of team work. So, TL and PC have direct significant association with each other (Pelenk, 2018).

Team working on small projects can enact the organization culture because mostly project culture is defined at organization level, so this finding suggests that cultural factor and project performance are positively influencing each other (Gu, Hoffman, Cao & Schniederjans, 2014). Ghorbanhosseini (2013) finds out that team work and project culture are important for the organization in creating the qualities, values, commitment and frame of perception for the employees. Also, it was found that culture matters a lot while team development, if the culture is non-corporative it can affect the project performance. Culture has to be very corporative and according to every stakeholder in order to make the project successful (Chipulu et.al, 2014).

The goal of this study is to fill the void by finding out the relationship between transformational leadership, project success, project culture and team work. And see how transformational project manager impact on project success, whether it is positive or negative. This research has three parts. Firstly, examine the impact of transformational leadership on project success. In this context, study suggested that transformational leadership is suitable for project management domain and by making improvements in this leadership style can improve the team work, which ultimately helps in the achievement of projects success (Oh, Lee & Zo, 2019).

Second part of the current study is to assess the impact of team work on project success and its dimensions, where team work plays the role of mediator. Third part is to examine the role of project culture as moderator in relationship between transformational leadership and project success.

This study will be a significant contribution in the research paradigm in many ways because it involves the review from the recent paper published in the domain of transformational leadership, team work and project success (Oh et al., 2019). The evidences provided through the above literature suggested that, if the project manager opts the qualities, attributes of transformational leadership then the project can be successful. And also, in project-based organizations there is a need to give the importance to the transformational leadership and due to that projects can be completed on time, within scope and budget constraint.

Transformational leadership can even be more successful in project-based organizations, for the success another variable plays an important role that plays the role of mediator between the transformational leadership and project success that is team work. Teams are helpful in achieving the organizations and individual goals. Along with this, the major reason for project failure is when there is poor management and leadership (Sage, Dainty & Brookes, 2014). This study includes the moderating impact of project culture in context of project-based organization.

1.1   Research Gap

Research gap is a research question or a problem that is not being considered in the past completely or sometime partially. It is important for the domain specific researchers to work on that gap. Similarly, transformational leadership is type of leadership that is center of attention in many industries and organizations specially in project management. Hoch, Bommer, Dulebohn and Wu (2018) stated in meta-analysis that TL has different dimensions and aspects, it is difficult to cover all those in one research study. Hence, there is a need to work on this leadership style in context of project management. Moreover, TL plays an important role in polishing the employee's creativity to handle organizational problems and issues.

For that in future it is important to find out the personality traits of a leader that influence the individual creativity. In a recent study regarding transformational leadership researcher suggested to work more in order to explore the details associated with TL and team work in order to achieve the project success (Oh et al., 2019).

In another study it is suggested to explore the transformational leadership qualities and its significant influence in on the organization and on individual (Yavuz, 2020) and also need to explore the TL in terms of team work to make the projects successful initiated in project -based organizations (Weller, SuB, Evanschitzky & Von wangenheim, 2019). Here the gap exists which is addressed in the study.

Moreover, Buil, Martinez and Matute (2019) suggested a need to emphasize on employees and their skills and how they perform in form of teams. The impact of teams on the organizations and project managers needs to be identified. Also need to explore the different dimensions of project success in term of TL, PC and TW and there is need to examine these variables in Asian countries along with Pakistan.

1.2 Problem Statement

The project-based organizations are gaining popularity day by day with limited time frame and finances, there is need to explore various constraints and leadership styles which can help the project teams adopt for optimum performance and to achieve the ultimate objective of project success. The idea of transformational leadership is not new in organizational structure of Pakistan but it requires a lot of emphasis and due to this it has not grasped the acceptance and popularity that it should have gained. As compare to the traditional concept of hierarchical leadership style (top to bottom), where there is one leader who has the absolute power over organization and its teams and this hierarchy depict the narrow-minded and non-cooperative culture. The problem of this study is to find the impact of transformational leadership on project success, in project teams, with mediating

role of team work, being moderated by project culture to the team. This quantitative research study will explore the horizontal leadership styles being adopted in project teams of Pakistan based organizations and effectiveness of transformational leadership within teams. The data to be gathered in the study may be provided by the project managers, leaders and employees working on teams on different projects within project-based organizations. In a ways to achieve maximum output from project teams by using transformational leadership to be encouraged in team environments to get most out of the members skills and abilities and keep the motivation level of team high by strengthening the team work and project culture.

1.3 Research Question

Question 1:

Does transformational leadership impact project success?

Question 2:

Does team work mediates the relationship between transformational leadership and project success?

Question 3:

Does project culture moderates the relationship between transformational leadership and team work?

1.4 Objective of Study

1. To determine the relationship of transformational leadership impact project success.

2. To determine the mediating role of team work between transformational leadership and project success.

3. To determine the moderating role of project culture between transformational leadership and team work.

1.5 Significance of Study

This study has a significant contribution in the literature of project management. This study will provide evidences that will show the different aspect and qualities of transformational leader needed for project-based organization. Also, will analyze the interaction of a leader with the team and how collectively employees and leader can make project successful. Moreover, other variables project success, team work as a mediator and project culture as a moderator will also be explored in this study. Altogether, all these variables will contribute towards the achievement of organizational goals and objectives.

The theoretical contribution includes, the contribution of variables having direct relationship between transformational leadership and project success with mediating role of Team work. And moderating role of project culture. Project culture plays an important role, if the culture is friendly and cooperative then it's easy for the employees to adjust and work. In strict organization employees are always afraid and their creativity skills are also ignored, they are only focusing towards the achievement of goals by the old techniques in order to avoid the mistakes.

By considering the practical contribution, researcher discussed the evolving role of TL in different industries. Transformational leader work in form of team to incorporate the changes and for achievement of goals. The leader inspires and motivate teams and employees in such a way that they can handle the organizational issues in an effective way, and in such cases, employees become creative and find out solution by themselves. Hence, polish creativity skills (Ghasabeh et al., 2015). TL is very successful in organizations, to make it make successful team work plays significant role as a mediator between TL and PS. Cha, Kim, Lee and Bachrach

(2015) stated that teams under transformational leaders are produce more quality work and have higher collaboration than the other teams.

Current study will motivate future researcher to analyze different dimensions of transformational leadership and project success. Researchers can also view the positive outcomes of teams working in project-based organization, which helps to achieve the successful project through team work. This kind of leadership influence employees to work in form a team by ignoring all the negative feelings and only considering the positivity. This study will also help the theorists and researchers to check the ultimate effect of team focused leadership by different aspects and considering different concepts like team work and project culture etc. To find out something unique and worthy.

1.6 Supporting Theory

Transformational leadership theory is used in this study, which covers all the variables.

1.6.1 Transformational Leadership Theory

Transformational leadership theory is proposed by James McGregor Burns in 1978. Burns (1978) defined this theory as the result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents (p.4). And he finds out that there is a relationship between a leader and a follower and the performance of the employees/followers are dependent upon the strengthen and weakness of a relationship. if the relationship is strong then employees can work in form of teams and can perform better, in case of weak relationship the consequences can be seen later. This theory highlights the four important aspects of an effective leader (Bass & Avolio, 1993). Following are the 4 I's:

- Idealized Consideration: it is component where a leader carefully considers the needs and wants of each follower as a mentor and provide them continuous support.

- Intellectual Simulation: it is the extent to which leader take risks on his behalf and recognizes the creativity and innovation of follower.

- Inspirational Motivation: it is the extent to which leader provide a vision that helps the followers to perform the tasks extraordinarily.

- Idealized Influence: transformational leaders have high ethical standards that influence the followers to follow the steps of a leader. Hence a leader becomes role model for his followers.

The research model in this study is supported by transformational leadership theory, as leadership play an important role in the organization which influence employees, culture, environment and every aspect of particular organization. Transformational leadership help project managers to perform their organizational tasks in form of teams. Managers work with the team to identity the changes occurring and create a vision, and motivate employees to adopt a change. This continuous guidance inspires the teams to achieve the project success. Project culture is also made by the leader, depending upon his traits and capabilities. TL is inter-liked with teamwork, project culture and project success. All the items of this research model are cover in the transformational leadership theory and definition of each item reflects the contexts of the theory.

Chapter 2

Literature Review

2.1 Transformational Leadership and Project Success

Leadership plays an important role in leading people towards achievement of common goals. Transformational leadership influence people through creating vision, building morale and motivating them. It is witnessed that employee's turnover ratio can be reduced by TL style, such leader encourage employees, listens them and find solutions to their problem and in return employees satisfaction level is enhanced. TL is highly recognized and focused as compare to other style (Sahu, Pathardikar & Kumar, 2018).

TL has direct significant relationship with success of project. Leader motivate the followers which direct them towards the attainment of goals and objectives of organization and of employees themselves. If there is continuous motivation then it is chance of 90 percent project success and in case of lack of motivation the project failure is grantee (Andriani, Kesumawati & Kristiawan, 2018).

Time, cost and quality are not the only criteria for project success. Project success can be defined as if the project meets the technical performance specifications and/or mission is to be performed, and if there is a high level of satisfaction concerning the project outcome among the key people in the parent organization, key

people in the client organization, key people on the project team, key users or clientele of the project effort, the project is considered as overall success (Bakert, Murphy & Fisher, 1997: p. 903).

Project success have different dimensions, according to the researcher it has 5 dimensions which are project efficiency, organizational benefits, project impact, stakeholder satisfaction and future benefits (Khan, Turner & Maqsood, 2013).

Project success is considered different for different people, some says that when the project is completed on time, within budget, quality and performance are the measure for project success, other says that by achieving the desired goals/objectives, project is considered as successful (Lim & Mohamed, 1999). When the project is completed within time, scope and desired goals are achieved then it can be perceived as project efficiency is achieved (Serrador & Turner, 2015).

According to the study conducted by Shenhar, Dvir, Levy and Maltz (2001) there are four dimensions of project success: project efficiency, impact on the customer, direct business and organizational success, and preparing for the future. Project managers play the role of strategic managers who have the responsibility of handling all these dimensions.

Turner and Muller (2005) states that management literature suggests that effective transformational leadership style and competencies of project manager is directly related to the organizational performance. Other study finds out that project managers leadership competencies (emotional competence, emotional quotient) are directly associated with the project success.

Transformational project managers acquire competencies like communication and emotional resilience that contributes toward the success of a project. These can contribute towards the future potential benefits within a project (Muller & Turner, 2007). Another finding says that Transformational leadership has a direct positive relationship with the project success (Maqbool, Sudong, Manzoor & Rashid, 2017).

Accurate and authentic leadership style and project manager's behavior play a climacteric role towards the project success impact, and this authentic leadership can be viewed in term of transformational leadership style of project manager (Zwikael

& Unger-Aviram, 2010). Aga etal.(2016) says that transformational leadership is positively related to the project success. So, project-based organizations along with the other leadership style need to promote transformational leadership in performing task and motivating the employees. It has a significant contribution toward organization and project success.

Project management methodologies are considered to be a success factor in the project success; these PMMs are used by the project managers. Project managers use different methodologies to make the project successful in term of efficiency, effectiveness and triple constraint (Joslin & Müller, 2015). The project management literature has enhanced the understanding of researchers in term of critical success factors that influence the project success, project manager leadership style is a critical success factor that contribute towards the success and failure. But here it shows that leadership style or project manager (transformational leadership) has a positive impact on the satisfaction, efficiency and impact of project (Riaz, Tahir & Noor, 2013).

Transformational leadership style of project manager has a positive relationship with the project performance (Kissi & Tuuli, 2013). Acknowledging the different procedures involved in the transformational leadership, I explored the potential role of project success with respect to the relationship between the transformational leadership and project success in the present study.

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1: *Transformational leadership is significantly associated with project success.*

2.1.1 Transformational Leadership and Project Efficiency

Precisely efficiency is on time, within scope and budget completion of project. Project efficiency (PE) is one of the dimensions of project success, which is not limited to these constraints. PE is not the only measure of PS but it is the most important measure, without this the success can't be measured. According to

a survey conducted PE is 60 % correlated with PS when considering the time, scope and budget, whereas if only time and budget is considered than PE is 51% correlated with PS; hence, it should be considered in order to make the project successful (Serrador & Turner, 2015). Project success include number of dimensions which contributes towards the overall success of project including project efficiency, team satisfaction, impact on customer, future preparation, organization success (Serrador & Turner, 2014).

Project management is modern area in the today's world, which is responsible for handling the projects in an efficient and effective way. It provides modern tools to evaluate projects, including risk analysis, cost effective technique, effective decision making and efficiency calculators. These tools ensure that efficiency is one of the important measures of success that cannot be neglected and states that achieving maximum output through minimum input is efficiency in simple words (Kaczorowska, Słoniec & Motyka, 2016).

In developing sector, it is found that transformational leadership, project efficiency and project success are closely associated with each other. In a way that TL and PE have direct significant influence upon project success. Hence, leadership and efficiency are the two important measures in attaining the favorable success of any kind of projects (Ahmed & Abdullahi, 2016).

Transformational leader transforms the employees in a way where both employees and project manager work together to achieve the goals. But goal clarity should be there, it is the responsibility of manager or leader to clarify the goals and objectives to the employees to overcome ambiguities. When the goal is clear then employees are highly motivated towards their achievement and project success is higher in such condition (Raziq, Borini, Malik, Ahmad & Shabaz, 2018). The study showed that employees are satisfied under the TL and their work reflects efficiency. Because a manager with transformational leadership behavior motivates employees towards success through efficiency, effectiveness, satisfaction and efficacy (Naeem & Khanzada, 2017).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1a: *Transformational leadership is significantly associated with project efficiency.*

2.1.2 Transformational Leadership and Organizational Benefit

Organizational benefits (OB) are the benefits that organization gets through multiple sources like human resource, new products development, budgeting, communication and customers. Project HR helps to bring in new product development project success which is a benefit for the project-based organization. In other words, project success and human resource can be improved through the deployment of experts and well-trained staff (Yang, Chen, Wu, Huang & Cheng, 2015).

In a recent study scholar are going towards coopetition i.e. collaborating with the competitors in order to achieve the mutual OB, which is a positive initiative towards the attainment of PS. For sustainable development needs to be done on society level, in order to develop the organizations. If the society will grow, employees will be educated and ultimately organization are also led by people living in the societies. So, society and organizations are correlated with each other and in this way the project success ratio will be higher (Manzhynski & Figge, 2020).

Organization are working hard to benefit and satisfy their employees. TL also inspire and motivates the employees through targeting their persona benefits which makes them more productive towards attainment of OB. Organizational benefits and employee's benefits are linked with each other and it is the duty of leader or project manager to create a link. Due to this the turnover rate has also been reduced as the satisfaction level is higher (de la Torre-Ruiz, Vidal-Salazar & Cordon-Pozo, 2019).

Phaneuf, Boudrias, Rousseau and Brunelle (2016) states that leaders acquiring the relationship focused behavior tends to be transformational leaders, it they involve themselves in the supporting the employees and management in any organization including project-based organizations. And benefits are also considered which

leads towards project success and attainment of collective goals. Hence, TL plays an important role towards OB through different means.

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1b: *Transformational leadership is significantly associated with organizational benefits.*

2.1.3 Transformational Leadership and Project Impact

Projects are different from organization processes; projects are temporary and unique whereas process are permanent and same in nature. Leadership styles are still under consideration for proper handling of projects, but it is devised that transformational leadership lays huge impact on them employees and on projects. Project impact (PI) is considered as a challenge for TL, and it is witnessed that there is positive impact on projects and on the overall organization. Employees are highly committed towards the project which ultimately enhance the PI in a positive way (Tyssen, Wald & Spieth, 2014). Project managers acquiring TL qualities plays significant role towards project success. The study revealed that extraversion, agreeableness and openness to experience predicts PS through the TL (Hassan, Bashir & Abbas, 2017)

Berssaneti and Carvalho (2015) states that several studies have conducted that emphasis upon project management (PM) and project success. PM maturity iron triangle (time, scope and budget) is the measure of PS but only impacts upon the efficiency of project. Other constraints like top management support and dedicated, determined project managers lay significant influence upon PI, which is ultimately contributing towards success of projects operating in project-based organizations. In a critical analysis researcher explore the performance of a leader or project manager in project management in term of project results, like whether the results are positive or negative under PM.

It is witnessed that, managers should give the priority to the training in leadership skills, expertise and improvement in professional lay significant impact on the outcomes of a project. Every project is unique and of different nature must be

handled accordingly with proper leadership style and expertise helps to make the project successful. So, the outcomes generated through such constraints are mostly positive (Nixon, Harrington & Parker, 2012).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1c: *Transformational leadership is significantly associated with project impact.*

2.1.4 Transformational Leadership and Future Potential

Joslin and Muller (2015) explores the relationship between project management methodologies and project success, future potential (FP) is one of dimension of PS. The results showed that methodologies vary success up to 22.3 percent and these methods are enough to lead the higher rate of project success. It is important for the project managers to adopt the stable and required project management methodologies.

Project success is the main aim of a leader and manager, all the strategies, methodologies and leadership styles are implemented on the employees just to make the project success. PS has number of dimensions that play significant and insignificant role. According to Aga, Noorderhaven and Vallejo (2016) transformational leadership has direct significant association with project success.

TL engage employees in a way that they are continuously working on assigned tasks with full zeal and zest. The motivation level is higher and they are inspired through TL style, they work until the project is successful. There is a significant association between transformational leadership, work engagementand future potential for both genders and project success (Vincent-Hoper, Muser & Janneck, 2012).

The study examines the relationship between leadership style, team work and project success dimension future potential and found out the significant association among the them. Effective transformational leadership style enhances the performance of a project as the entire team in working under leader. And the team members ensure cohesion and cooperation (Yang, Huang & Wu, 2011).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1d: *Transformational leadership has significant association with future potential.*

2.1.5 Transformational Leadership and Stakeholder Satisfaction

Stakeholders are considered as important entities associates with project and they help to access the outcomes based upon their interests. The study found that stakeholders are specifically assess success of project as compare to failure. The criteria for assessment of project success is measure of effectiveness where as in case of failure they assess project efficiency. It is important for the project managers to know about their stakeholders and their areas of interests in order to achieve the optimal success and stakeholder satisfaction (SS) (Chipulu et al., 2019).

PS includes the most important dimension of SS along with others to achieve the organizational goals and objectives. SS is basically the satisfaction of associated expectation of stakeholders with the project, they are the one who assess and evaluate the outcomes based upon their best knowledge and interest. Their satisfactions should be the foremost priority of organization. It is examined that stakeholder satisfaction, project efficiency has direct significant association with project success (Serrador & Pinto, 2015).

Pankratz and Basten (2015) reveal that dimensions vary in different situations, there is no one size fit all dimension of PS. Dimensions are applied depending upon the conditions and situations, but they are applied based on budget, schedule, customer and team satisfaction, efficiency and benefits. Stakeholder satisfaction is also influenced by the leadership qualities of project manager. The study deposits that leadership and management help to predict the SS and that prediction is significant (Suriyankietkaew & Avery, 2014).

TL is proved to be an effective approach that enhance the performance, morale and incorporate the values with the project-based organization. Stakeholder in different industries or institutions are highly satisfied through the TL (Anderson,

2017). When the TL is absent it is heavily noticed by the employees and project manager as there is chaos and crisis in organization.

Without proper leadership style organization can't survive, this absence negatively influences SS and effectiveness. In the presence of effective TL, organization is stable employees and stakeholder are satisfied and plays active role towards project success (Strang, 2005). Hence effective and responsible leadership play an important role organizing and management of success of project and organization (Groves & LaRocca, 2011).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 1e: *Transformational leadership is significantly associated with stakeholder satisfaction.*

2.2 Role of Team Work as Mediator between Transformational Leadership and Project Success

In the literature team is defined as distinguishable set of two or more people who interact, dynamically, interdependently, and adaptively towards a common and valued goal/objective/mission, who have been assigned specific roles or functions to perform, and who have a limited lifespan of membership (Salas, Dickinson, Converse & Tannenbaum, 1992: p. 4). The traditional view of making a team is that to find a right member for the team (Bolivian & Deal, 1992).

Other definition can be that to work effectively together, team members must possess specific knowledge, skills, and attitudes (KSAs), such as the skill in monitoring each other's performance, knowledge of their own and teammate's task responsibilities, and a positive disposition toward working in a team. Such KSAs comprise teamwork (Sims, Salas, and Burke 2005).

Training given to the team helps to increase the overall performance and before assigning the task to a team it is important to look upon the teamwork skills. So, to be successful, teams has to perform team work and task work carefully (Salas

et al, 2008). In another study teams exhibit Big 5 frame work i.e. Team Leadership, Mutual performance monitoring, Backup behavior, Adaptability and Team orientation experience the success and this also help to learn and to improve the teamwork (Kay, Maisonneuve, Yacef & Reimann, 2008).

Past literature gave the evidence that teams are very important and without teams it would be difficult for the organizations to survive. However, it is essential to develop the team efficiently, then sustain them in long run, sustaining will help to overcome unusual time waste and energy wastage of the organizations and ultimately give intangible benefits (Salas, Shuffler, Thayer, Bedwell & Lazzara, 2015). For a successful team lead project manager should have both soft skills and hard skills, where soft skills include communication, teamwork and leadership. And apart from that goals/objectives should be clear, quality criteria should be told by the project manager as well (Sofany, Alwadani & Alwadani, 2014).

Hanaysha (2016) finds out that team work enhances the organizational commitment. Therefore, teamwork collaboration exercise makes an environment that facilitates knowledge and share the information where there is a need to increase job autonomy and higher job satisfaction. As a result, when an employee is satisfied with job, the levels of commitment to the organization will be increased.

Project manager leadership style helps to build an influential relationship with the team members, and the result highlights that team work is positively associated team performance (Yang, Huasng & Wu, 2011).

The study highlights the strong ties between transformational leadership and team work, the role of leadership effects the teamwork in a way that enhance organizational effectiveness and innovation. And good transformational project managers through their effective leadership incorporate communication, coordination, mutual trust, and cohesion with the team member. The result of this research shows that transformational leadership is strongly linked with the team work (Cha, Kim, Lee & Bachrach, 2015)

Transformational leadership is positively influencing teamwork. Transformational project managers motivate and encourage the team members to achieve collective goals that leads towards effective team performance (Han, Liao, Taylor & kim,

2018). It is also revealed that to study the role of transformational leadership and project manager's proactive personality make the employees to focus on their task, in short engage members in their relevant tasks. Only to those employees whose mindset is to work hard, who are motivated to achieve their goals and organizational goals and who think different from other employees (Caniëls, Semeijn & Renders, 2018).

Thamhain (2004) states in order to make the project successful, project managers have to understand all the perspectives of project management systems and organizations, perspectives involve tools and techniques, people, culture. Project success also depends upon the integrative efforts done by the teams and these teams support organizations at the sensitive relationships with the stakeholders. Xu, Zhang and Barkhi (2010) analyzed that quality teamwork positively influences the organizations infrastructure capabilities on project success, the actual and perceived efforts of these capabilities, skills are equally important for the team to achieve the project success.

The several studies highlighted that team's size also play a vital role in team work, it can affect the whole organization and its working. Very large team size can utilize more resources and can be ineffective due to the non-corporation behavior of the team member. So, for the qualitied teamwork team size should be according to the task assigned (Hashmi, Ishak & Hassan, 2018).

There is a positive relationship between the team work and team performance due to the team satisfaction and that ultimately leads to project success found by (Lindsjorn, Sjoberg, Dingsoyr, Bergersen & Dyba, 2016). Acknowledging the different procedures involved,explored the potential role of team work with respect to the relationship between the transformational leadership and project success in this study.

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2: *Team work significantly mediates the relationship between Transformational leadership and project success.*

2.2.1   Team Work Mediates Relationship between Transformational Leadership and Project Efficiency

Leadership style that promotes team work, collective goals and individual consideration significantly influence tasks cohesion. In other words, researcher predicts significant association between TL and TW. Leader behavior helps member to come under a team, collaborate with each other and work on common goals (Callow, Smith, Hardy, Arthur & Hardy, 2009).

According to the Zhang, Cao and Tjosvold (2011) reveal that TL encourage cooperation and coordination among the team members through the adoption of cooperative, competitive and effective conflict management strategies. These strategies help to consider the mutual benefits of team members, project manager and organization which resolve all the issues easily. And this results in the attainment of higher team cohesion and performance. Hence TL is significantly associated with the TW.

In every industry including project management project teams plays vital role in completion of projects. Transformational leader provides moderate and stable team conditions in which teams work effectively at their best and achieve desired task. These team conditions are significantly associated with TL qualities of project manager or top management which ultimately led towards the enhanced performance (Tabassi, Roufechaei, Bakar & Yusof, 2017).

A well trained and motivated team members improves TW and efficiency. Training and motivation help to sustain and enhance the productivity of employees, the sole reason for this training is enhanced performance towards projects. Employees working in teams together combines the capabilities and skills, hence; efficiency and effectiveness in their task completion (Tabassi, Ramil & Bakar, 2012).

Tariq (2018) examines the relationship of team work and project efficiency and states that PE is influenced by team members support in a significant way. It is the most important task of project manager to manage the team effectively and when there will be supportive relationship between team and manger then PE and collaborative TW will be ensured.

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2a: *Team work significantly mediates the relationship between Transformational leadership and project efficiency.*

2.2.2 Team Work Mediates the Relationship between Transformational Leadership and Organizational Benefit

Suwandana (2019) states that intelligent leaders through their intelligence help teams to enhance their effectiveness through transformational leadership style. These leaders understand the needs and emotions of employees and make them in accordance with the organization. This inspires the team members towards effective TW. Hence; there is positive association between TL and TW. Team creativity and innovation is very important towards effectiveness and efficiency. According to Klaic, Burtscher and Jonas (2020) team innovation, team work and positively associated with TL.

In another study the researcher analyzed the significant association between transformational leadership and team work. Hence; these two constraints possess significant impact on each other (Wiyono, 2018). Organizations tends to make employees work in form of teams, different teams are working on different projects. Each team's contribution is beneficial for the organization as the collection of successful projects influence overall organizational performance. So, TW of employees and project managers collectively contributes towards organizational benefits in form of higher quality and innovation (Fay, Shipton & Patterson, 2015).

In an important stance that when experts and trained individuals work together, then meaningful and purposeful outcomes are generated. Moreover, clear sense responsibility, clarity in tasks, accurate understanding and effective leadership help employees to achieve their task more easily. When the employees are engaged in meaningful and effective work in form of teams, they result in OB's (Steger & Dik, 2010).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2b: *Team work significantly mediates the relationship between Transformational leadership and organizational benefit.*

2.2.3 Team Work Mediates the Relationship between Transformational Leadership and Project Impact

Team consist of combination of different members acquiring various skills, capabilities, expertise, sense of humor and responsibilities. Arrangement of team member under one leader for specific goal is team composition, that has essential impact on teamwork. And this shape the ABCs of TW which are affective, behavioral and cognitive states of member of team (Bell, Brown, Colaneri & Outland, 2018).

According to the findings of Cha, Kim, Lee and Bachrach (2015) teams under the supervision of TL style are more productive and possess higher teamwork qualities and such teams experience high level of internal collaboration with each other. The constraints like communication, coordination and trust also plays important role between leadership and TW. In another study, researcher explore the significant association between TW and leadership (Chuang, Jackson & Jiang, 2016).

It is important to examine the team, as TW is critical to the organizational goals and objectives. Team work and project impact is linked with each other, the way teams collaborate and work is lay positive impact of satisfaction of employees. Employee satisfaction is important because it strengthens them to perform better and make the project successful. TW is all dependent upon the working environment and TW is mandatory step by step in achieving the desired goals. The organizations friendly and collaborative environment lay positive impact on project and employees, which makes them successful (Shujaat, Manzoor & Syed, 2014). In a recent study conducted, the researcher confirms the significant association between PI and TW while working in large teams (Murzi, Chowdhury, Karlovsek & Ruiz Ulloa, 2020).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2c: *Team work significantly mediates the relationship between Transformational leadership and project impact.*

2.2.4 Team Work Mediates the Relationship between Transformational Leadership and Future Potential

In the past literature a number of studies have been conducted in which researchers have emphasized on TL and TW. Suwandana (2019) reveals the significant association between TW and TL, where transformational leadership effectively play the role of mediator. In other study the researcher found the significant association between TW and TL, where leader encourage employees to work in form of teams through motivation and inspiration (Callow et al., 2009; klaic et al., 2020). Team composition play an important role towards effective TW, if the team is composed of well trained, skilled and expertise of employees then the team will be productive and will achieve the desired goals and objectives. If the team is composed of employees having no skills and abilities are not capable of achieving their desired tasks (Bell et al., 2018).

Zhang et al. (2011) explore that teams which are affective, competitive and with high cognition, along with effective leadership style tends work in cooperation and coordination. As the leader (TL) ensure their rights, listen to their problems, takes care of their interest and benefits. Hence TL and TW are significantly associated with each other (Tabassi et al., 2017).

Teams possess different models; every teams are different from other team. The team members share relevant knowledge that helps to enhance TW and team performance. TW nature is different depending upon the nature of task (Burtscher & Manser, 2012). Teams are the important asset of any organization; management need to sustain them for their benefits. For effectiveness TW organizations should train them with latest technologies and tools and this will help in enhancing performance and behavior of team and also provide potential in team members to work harder (MnEwan, Ruissen, Eys, Zumbo & Beauchamp, 2017). Team work is influenced by number of things but future potential also plays an important role

in fostering TW and leadership. TL and team work has significant association, they influence each other (Klaic et al., 2020).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2d: *Team work significantly mediates the relationship between transformational leadership and future potential.*

2.2.5 Team Work Mediates the Relationship between Transformational Leadership and Stakeholder Satisfaction

The findings of the study conducted by Klaic et al., (2020) states that transformational leader encourage employees to work in form of teams. The leader encourages and motivate them through it's fascinating personality, inspiration and vision by considering the needs and benefits of employees. The study analyzed the significant association between TL and TW. The teams under such leaders are more innovative and high learning capacity. In another study the researcher found direct relationship between TL and TW, leader influence each individual and teams in his surrounding and satisfaction and performance gets higher (Braun, Peus, Weisweiler & Frey, 2013). And TL also play vital role towards team effectiveness.

Stakeholders are basically any group who can be affected or affects the organization. Stakeholder satisfaction is very important as project is surrounded by number of stakeholders; each plays its own role to make it successful. One of the major reasons for failure of project is not meeting the expectations of stakeholders. This can be overcome by the participation of them at every stage and in decision making of project, its scope, budget and other constraints (Li, Ng & Skitmore, 2013). Davis (2014) states that each stakeholder (senior management, project manager, project team) perception and success is different, everyone has its measure of success or failure. It is important that all stakeholders involved in particular project should have one agreement on success, they must identify criteria for success on which each stakeholder agrees. When there is no agreement the

successful project become fail and SS is also not achieved. When a proper consensus is there the team work and SS will be ensured and project success would also be there. The study suggests that teamwork is directly related to the performance of team which is measured by the stakeholders and members of team. TW quality is rated 81 percent by the members based on performance and 61 percent is rated by the stakeholder (Weimar et al., 2017).

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 2e: *Team work significantly mediates the relationship between transformational leadership and stakeholder satisfaction.*

2.3 Role of Project Culture as Moderator between Transformational Leadership and Team Work

Culture can be defined as the values and belief systems held by a group of individuals, learned early in life, and difficult to change (Hofstede, 1997: p.4). Also Culture is the collective programming of the mind that distinguishes the members of one group or category of people from others (Hofstede, 2011: p.11). When the culture (project culture) is strong enough, whether the people leave or join the culture remains the same, it doesn't make any difference. Only the behavior is a factor that influence the culture. Organization culture do not remain stable throughout, rather culture keeps on changing according to the situation managers/ management has to take care of these changes and need to handle them appropriately (Loo, 2002). Marrewijk (2007) deposits that for every project there is a need to develop project culture, according to this study for a mega project culture was designed which constitute of innovativeness, creativeness, non-traditionalistic, and independency factor that were dominant. And further it finds out that it is important for the project managers and for the organizations operating in the projects to develop the project culture throughout the life cycle.

Culture play a significant role in the success and failure of the project (Shore, 2008). And culture is such an attribute that is a reason for the failure of many project. Hence, it is the foremost responsibility of the project manager to merge many different organizational and professional cultures and came across the project culture (Ajmal & Koskinen 2008). Project culture plays an important role toward project success through the open communication among the team. When there is open communication team can discuss the new ideas, clarify the objectives, responsibilities, can solve the complex problems easily and can create an attractive culture (Qubaisi, Elanain, Badri & Ajmal, 2015).

Transformational project managers create culture to accommodate in the organization if there is no fixed culture or sometimes, they adjust themselves in the existing culture by changing their preferences(Masood, Dani, Burns & Backhouse, 2006). Transformational leadership behave differently in different cultures sometimes autocratic or participative etc. And in between in all this culture plays a vital role, it matters not only at small level rather at huge level. It matters in how leaders are emerged, selected and deployed and also in a way that their behaviors and actions are predictable and to which organizations respond strategically (Dickson, Castano, Magomaeva & Hartog, 2012). Mittal (2015) suggested in his study that culture influence the leadership style of the project managers, they adopt leadership style according to the culture in which they operate. Transformational leadership prefer collectivism i.e. that give priority towards the collective goals and shared vision.

Project success is always considered to be an important aspect for the project management organizations, the success factor can be achieved by paying the attention towards the culture. Culture of the organization, project and also of the society. Because employees undergo through all these cultures on daily base (Ahmad, 2018). Project based organizations have now transform their structure, in which projects are temporary, unique products or services that help to develop, change and implement the techniques that transform the structure, culture and behavior. Culture play in important role in achieving the success (Gemünden, Lehner & Kock, 2018). Muller and Turner (2007) states that project success is

different for different project, every project is different in nature and have different criteria's for measuring the success. Similarly, every project acquires different project culture occupy its unique characteristics. In other findings, project culture is positively associated with the project performance, organizations should adopt the project success models to create the culture based on the shared cultural values among the organization's members (Kendra & Taplin, 2004). In a nutshell, project culture influences the team work.

Based on the above arguments, the following hypothesis is formulated:

Hypothesis 3: *Project culture moderates the relationship between transformational leadership and team work such that it strengthens the relationship.*

2.4   Research Model
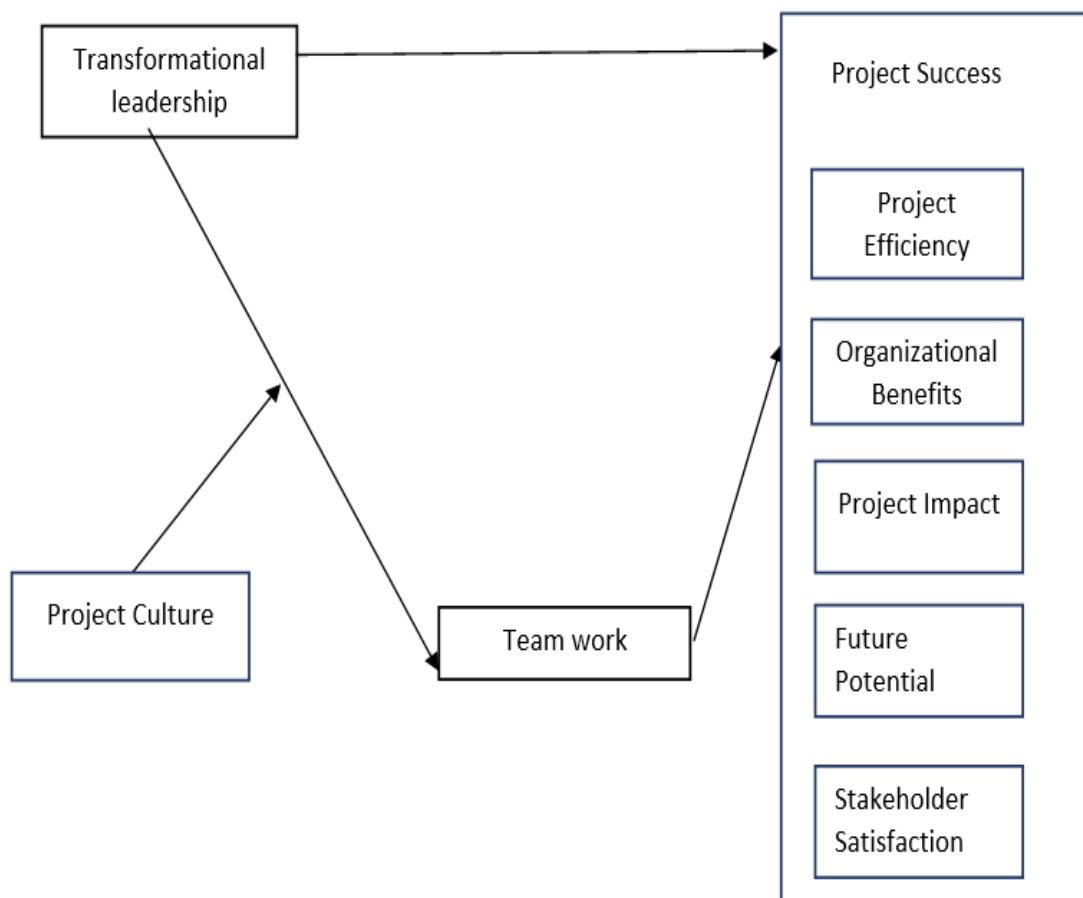
FIGURE 2.1: Research Model

2.5 Hypotheses of Study

H1: Transformational leadership is significantly associated with project success.

H1a: Transformational leadership is significantly associated with project efficiency.

H1b: Transformational leadership is significantly associated with organizational benefits.

H1c: Transformational leadership is significantly associated with project impact.

H1d: Transformational leadership is significantly associated with future potential.

H1e: Transformational leadership is significantly associated with stakeholder satisfaction.

H2: Team work significantly mediates the relationship between transformational leadership and project success.

H2a: Team work significantly mediates the relationship between transformational leadership and project efficiency.

H2b: Team work significantly mediates the relationship between transformational leadership and organizational benefits.

H2c: Team work significantly mediates the relationship between transformational leadership and project impact.

H2d: Team work significantly mediates the relationship between transformational leadership and future potential.

H2e: Team work significantly mediates the relationship between transformational leadership and stakeholder satisfaction.

H3: Project culture moderates the relationship between transformational leadership and team work such that it strengthens the relationship.

Chapter 3

Research Methodology

This chapter include the details regarding methodology and measures used to obtain valid results. This claim covers all the details regarding study form, unit of analysis, population and sampling data, measurements and their respective indexes of the reliability along with the items involved in the research being performed.

3.1 Research Design

3.1.1 Type of Study

The aim of current study is to examine the impact of TL on PS and its dimensions with the mediating role of teamwork and moderating role of project culture. To carry out the research, data is gathered from project-based organizations and project teams were targeted including project members and project managers has filled the questionnaire. The focus of study is on transformational leadership practices in Pakistan, specifically, the project-based organizations project teams working within the geographic boundaries of Pakistan were targeted in order to get the authentic results for the study. In beginning 625 questionnaires were circulated and expected to be filled by respondents, out of which 276 responses were recorded. The selective sample is considered to be the true representative of entire population project-based organization of Pakistan.

3.1.2 Research Philosophy and Quantitative Research

Research philosophy is the belief and assumption of researcher about the important aspects, strategies and designs for the study.

The present study is based upon hypothetical deductive method (HDD) which is a viewpoint of destinism, which consist of previous concept and current research that explains and support the hypothesis which will then be verified empirically for confirmation of proposed hypothesis. HDD method consist of two parts, one the hypothetical part, in which the hypothesis is advised for assessment purpose. The second part is deductive part, in which results are deduced from the hypothesis. These results are later compared with the tested data that make the judgement of pass or fail.

Quantitative research method is preferable as the population is huge and this method will help to generate the quality outcomes.

3.1.3 Unit of Analysis

The most important entity in a research is unit of analysis. It tells what is being analyzed and focused in a study, it answers the questions like who and what. It may also include in individuals, groups, organizations, cultures, etc.

To investigate the impact of transformational leadership and its effectiveness on project success, with the mediating role of teamwork and moderating role of project culture, the primary focus was on project teams working in project-based organizations of Pakistan.

As the transformational leader is based on charisma, vision, inspiration and motivation, in which employees work in form of team to ensure quality teamwork on particular projects.

The participation of every team member or project team is dependent upon the role of a leader and his expertise on specific project or in the phases of a project. The general approach was access project teams and to collect the data from every individual in a team.

3.2   Population

The population of study include team members and project managers of project teams working in the project-based organizations located in the city of Pakistan i.e. Rawalpindi.

The area of focus is Pakistan's project-based organization, through which will witness the impact of transformational leadership efficiency and effectiveness that leads to the success of project. The chosen samples are considered to be representative of PBO's of Pakistan, in which questionnaires were distributed among different project teams for analysis purpose.

Almost 625 questionnaires were circulated and 276 responses were received which is 44.16 percent. The sample size is determined though the help of (Krejice & Morgan, 1970).

Project based organizations included in this study are subsidiary of National Logistic Cell (NLC), including NLC smart solutions, National trucking and bus services (NTBS), Applied technologies institution for NLC (ATIN), NLC construction solutions and FWO (frontier works organizations) etc. The sectors/projects targeted in these project-based organizations were related to education, construction and software development.

The data gathered will be kept confidential and will use only for the education purpose. The data gathered was measured against the five-point Likert scale, where 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree. The employees which were selected were the active employees in the organizations and were experienced as well.

3.3   Sample and Sampling Technique

The sample for the current study is project teams including team members and project managers working in subsidiaries of NLC. Convenience sampling technique which is the type of non-probability sampling, is used for data collection purpose

due to the limited time and resource constraint. In this type of sampling haphazard data is collected from the available population.

It is best for this type of research conducted because the data was not collected in a sequence or in an arranged manner. This sample will depict the original scenario of entire population expressing the impact of transformational leadership on the project success in the project-based organizations with the mediating role of team work and moderating role of project culture.

3.4 Sample Characteristics

3.4.1 Gender

Gender is something that is openly told by the respondents but considered most important to maintain the equality among the males and female respondents. Table 3.1 represents the characteristics and frequency of gender in this study:

TABLE 3.1: Gender Distribution

Gender	Frequency	Percent
Male	179	64.9
Female	97	35.1
Total	276	100

Table 3.1 shows information about frequency and percentage of gender in current study sample. Table reveals that 64.9% respondents were male while 35.1% were females among total project teams.

3.4.2 Age

Age is considered as one of the most important demographics, to which respondents sometimes feel insecure to tell openly. So, for the convenience of respondent's

range of ages was used instead of the exact ages of the respondents. The age ranges are divided as 18-25, 26-33, 34-41, 42-49 and 50 and above.

TABLE 3.2: Age Distribution

Age	Frequency	Percent
18-25	79	28.6
26-33	128	46.4
34-41	39	15.5
42-49	17	6.2
50 and Above	13	3.3
Total	276	100

Table 3.2 illustrates that majority of the respondents lies between the age of 26-33, which means that 46.4% of respondents were having the age ranging from 26-33, 28.6% respondents were having the age between 18-25, 15.5% were having age ranging between 34-41, 6.2% respondents were having the age ranging from 42-49 and only 3.3% of respondents were aging above 50.

3.4.3 Qualification

Qualification, is very important to know because a qualified respondent can respond appropriately.

Table 3.3 shows information about frequency and percentage of qualifications of the respondents in current study sample. Table reveals that 34.8% respondents are from bachelors, 63.4% were from MS/MPhil and 1.8% were from PhD.

3.4.4 Experience

Experience shows the expertise and work knowledge of an individual, which leaves a permanent expression on someone. The fresh graduates and post graduates

TABLE 3.3: Qualification Distribution

Qualification	Frequency	Percent
Metric	-	-
Bachelor	96	34.8
MS/MPhil	175	63.4
PhD	5	1.8
Total	276	100

are full of energy and are capable to bring new, innovative ideas and thoughts but the experience personnel have more hands-on experience through their skills and expertise on particular task. The experience is also categorized into ranges including 5 and less, 6-13, 14-21, 22-29 and 30 and above.

TABLE 3.4: Experience Distribution

Experience	Frequency	Percent
5 and less	148	53.6
6-13	90	32.6
14-21	21	7.6
22-29	16	5.8
30 and above	1	.04
Total	276	100

Table 3.4 shows information about frequency and percentage of job experience of the respondents in current study sample. Table reveals that 53.6% respondents had work experience ranging from 5 and less years, 32.6% have 6 to 13 years of work experience, 7.6% bear experience of 14 to 21 years while 5.8 % have work

experience of 22 to 29 years, while only 0.4% have work experience of 30 and above years.

3.5 Instrumentation

3.5.1 Transformational Leadership

Transformational leadership is used as independent variable in this study. This leadership style was measured through Multi-Factor Questionnaire in which transformational leadership was having 13 items. Its scale was developed by Aga, Noorderhaven and Vallejo (2016) from the international journal of project management. it would be filled by project managers or top management working in project-based organization. This scale is adopted because it measures the construct transformational leadership from all aspects and dimensions. It involves questions relevant to the team member and their satisfaction with the leader. The items were measured on the five-point Likert-type scales ranging between strongly disagree (1) to strongly agree (5).

3.5.2 Team Work

Team work is the mediator in this study between transformational leadership and project success. It was measured by using the six-item questionnaire developed by Jalal Hanaysha (2016) from the journal of social and behavioral sciences, with the value of Cronbach's Alpha = 0.925. This scale is chosen for the measurement of construct team work because it includes the questions relevant to the team working on projects and covers the all aspect accurately. Hence this scale is suitable for this study. The constraint team work will be filled by the project managers and employees working in form of teams. The sample item is the team members in my department help each other to get the work done, The members in my team feel very close to each other. A 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5) was used to measure these items.

3.5.3 Project Culture

Project culture act as a moderator in this study. 11 items scale was used to measure the importance of project culture, developed by Hoole & Du Plessis (2002) from the journal of Frontier of project management research and application. This scale is chosen for the study because it consists of series of questions for the purpose of data collection on the construct project culture and covers the different types of projects and includes possible questions that could arise. Hence, considered accurate for the current study. The project culture will be filled by the employees and project managers working in project-based organizations. These items were measured on the Likert scale ranging between strongly disagree (1) to strongly agree (5). The items are, the degree to which relationship between team members, customers and suppliers are playing an important role in the success of project, the degree to which people participate in the management of project and work activities are organized around groups rather than individual.

3.5.4 Project Success

Dependent variable project success was measured questionnaire developed by Khan, Turner and Maqsood (2013), which specifies that project success has five dimensions. And reported good reliability 0.7.

TABLE 3.5: Instruments

No	Variable	Source	Items
1	Transformational Leadership and	Aga, Noorderhaven Vallejo (2016)	13
2	Team work	Jalal Hanaysha (2016)	6
3	Project Culture	Hoole & Du Plessis (2002)	11
4	Project Success	Khan, Turner and Maqsood (2013)	25

This adopted questionnaire is accurate for my study because it involves the details about projects impact, project efficiency, organizational benefits, project impact, future potential and stakeholder's satisfaction and it measures the overall success of a project rather than emphasizing on one aspect, this is the need of study. These items of questionnaire are measured through 5-point Likert scales ranging between strongly disagree (1) to strongly agree (5).

3.6 Statistical Tool

Firstly, the reliability and validity of questionnaire was assessed by using CFA i.e. confirmatory factor analysis, through SPSS version 21 (AMOS). Then the model fit was tested via model fit.

It involves indicators such as chi square, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Indices (CFI), Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI).

Following are the values shown in the table:

TABLE 3.6: Confirmatory Factor Analysis (CFA)

	Chi Square DF	CMIN	GFI	TLI	CFI	RMSEA
Hypothesized Model	1552.76	12.571	0.877	0.982	0.921	0.051

Table 3.6 is showing that the measurement model is good fit. The value of GFI is 0.877, values of TLI is 0.982 and CFI is 0.921 which are more than 0.92 and the value of RMSEA is 0.051 which is between 0.05 and 0.10 (ideal).

It confirms that model is fit and scale is valid.
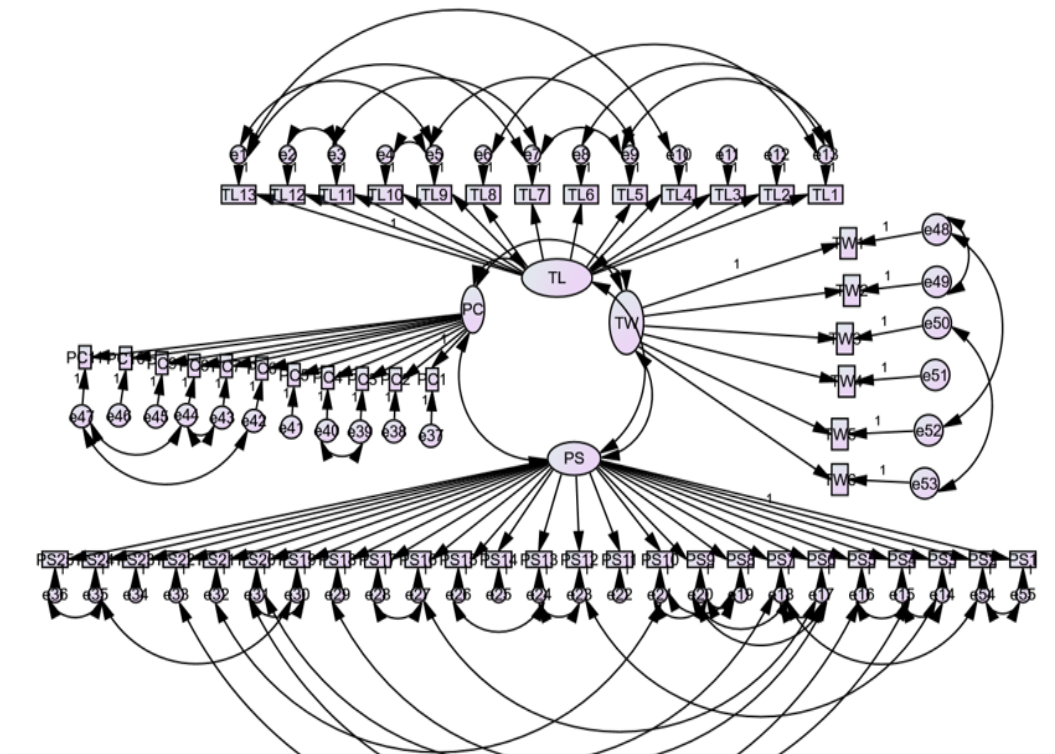
FIGURE 3.1: CFA Model

3.7 Scale Reliability

Reliability is related to accuracy; this test helps to verify the level of accuracy of data gathered. In this study the reliability is checked through Cronbach Alpha.

TABLE 3.7: Scale Reliability and Validity Analysis

Variables	Cronbach Alpha	Items
Transformational Leadership	.884	13
Team Work	.845	6
Project Culture	.880	11
Project Success	.931	25

The value of Cronbach alpha lies between 0 to 1. When the value of Cronbach's alpha is 1, then the reliability is high. In case of value higher than 0 and 1, it means that variables are highly reliable. If the values are above than 0.7 of alpha, then it is reliable but if thevalues of alpha are less than 0.7 then it less reliable.

Table 3.7 shows the reliability of each variable. Cronbach Alpha value of TL is 0.884, TW is 0.845, PC is 0.880 and PS Cronbach alpha value is 0.931. All the values are acceptable.

3.8 Data Analysis Technique

The valid data set was analyzed using IBM SPSS Statistics 21. This software is used to collect results for Reliability, descriptive frequency, correlation and liner regression. The reliability test is used to measure the consistency for the data, the correlation is used to measure the connection between variables and the analysis of liner regression is used to measure the reliance of the variables. To measure the regression analysis for mediation and moderation we used (Preacher and Hayes) method.

The collected data was examined by using IBM SPSS Statistics 21. Following are the steps that take place:

1. The questionnaires which were complete and accurate were selected.

2. For every variable of the study a code was assigned which helped in analysis of data.

3. Sample properties were illustrated by using frequency table.

4. Descriptive statistics were performed to examine the mean and standard deviation.

5. Each variable reliability was checked by using Cronbach's alpha.

6. Correlations analysis was done.

7. For analyzing the relationship between independent and dependent variable simple linear regression was performed.

8. Mediation and moderation analysis is examined through Preacher and Hayes method.

9. All the hypothesis were accepted and rejected by using Preacher and Hayes method.

Chapter 4

Results

4.1 Descriptive Statistics

It includes the information regarding mean, standard deviation (SD), minimum value and maximum value. SD is the computed value that tells about how much the data s spread from or concentrated around the mean. Mean is the average. In research point of view, the SD is calculated to know about the data, either it is near to mean or far away from mean the spread of data in this study is to examine either the responses are neutral, strongly agree or disagree. In case of low SD, the data is close to average value and in case of high SD, the data is far away from mean. Standard deviation does not tell about better or worse, acceptable or unacceptable, it is used purely as descriptive statistics describing the distribution in relation to the mean.

Descriptive analysis of all variables namely transformational leadership, team work, project culture and project success are presented in the table below:

Table 4.1 represents, minimum value is 1, maximum value is 5 and N represents the total number of responses for each variable. TL has mean 3.9964 while SD is 0.4906, mean of team work is 4.0072 and SD is 0.59743, project culture has mean of 3.9569 and SD is 0.47617 while project success has mean 3.9793 and SD is 0.42772

TABLE 4.1: Descriptive Statistics

	N	Minimum Value	Maximum Value	Mean	Standard deviation
Transformational Leadership	276	1	5	3.9964	.49061
Team Work	276	1	5	4.0072	.59743
Project Culture	276	1	5	3.9569	.47617
Project Success	276	1	5	3.9793	.42772

4.2 Correlations Analysis

Correlation analysis indicates about the strength and weakness of relationship between the two variables. Pearson correlation coefficient (r) is the test conducted for correlation purpose that highlights the relationship of a variable. It also provides the information regarding direction and magnitude of particular relationship. The value of correlation coefficient lies between +1 and -1. If value is close to 0, it means that the relationship between variables if weak. In other words when value range is 0.1 to 0.3, then its weak correlation. If value ranges between 0.3 to 0.5, its moderate correlation and when value is higher than 0.5 then its high correlation. 0 indicated no relationship between the two variables. And the plus and minus signs show the positive and negative relationship between variables.

Pearson' correlation analysis was done by using SPSS to find the association between the independent variable transformational leadership, dependent variable project success, mediating variable team work and moderator project culture. Correlation between all theoretical variables is represented in Table 4.2.

Table 4.2 shows the positive correlation between TL and PS (r = 0.281**, p < 0.01). There is also positive relationship of TL with TW (r = 0.468**, p < 0.0.1) and PC (r = .663**, p < 0.01). Positive association of PS is found with TL (r = 0.281**, p < 0.01), TW (r = 0.254**) and PC (r = 0.663**, p < 0.01). TW is positively correlated with TL (r = 0.468**, p < 0.01), PS (r = 0.254**, p < 0.01) and PC (r = 0.544**, p < 0.01). PC has positive relationship with TL (r = 0.663**, p < 0.01), PS (r = 0.620**, p < 0.01) and TW (r = 0.544**, p < 0.01).

TABLE 4.2: Correlation Analysis

Sr No.	Variables	1	2	3	4
1	**Transformational leadership**	1			
2	**Team work**	.468**	1		
3	**Project success**	.281**	.254**	1	
4	**Project culture**	.663**	.544**	.620**	1

**Correlation is significant at the 0.01 level (2-tailed) N=276, *P<0.05, **P<0.01, ***P<0.001

4.3   Regression Analysis

The correlation analysis does not provide the completed details about the variables. So, in order to further examine and investigate the relationship between transformational leadership, which is independent variable in current study and project success (dependent variable), regression analysis is performed.

Regression analysis helps to determine the relatedness of one variable to another variable. In other words, it helps to determine the dependency of one variable on the other variable. To validate the relationship between independent and dependent variable simple linear regression is carried out. For mediation and moderation multiple regression analysis is performed. In this study, a PROCESS macro by Preacher and Hayes method has been used in the case of mediation and Model is used for this purpose. And for moderation Model is used.

Hypothesis # 1

Transformational leadership is significantly associated with project success.

TABLE 4.3: Simple Regression

Predictor	Project Success		
	β	R2	Sig
TL	.594**	0.464	.000

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01; ***p<.001

Table 4.3 presents the details about TL and PS. Results of regression analysis explain that TL is positively affecting PS and there is a significant relationship between both of them. The R2 value is 0.464, Beta coefficient=0.594 and p value=0. 000.The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.464, which demonstrates that TL is bringing a positive change of 0.464 units in PS. Hence, our first hypothesis is accepted by applying linear regression

Hypothesis # 1a

Transformational leadership is significantly associated with project efficiency.

TABLE 4.4: Simple Regression

Predictor	Project Efficiency		
	β	R2	Sig
TL	.520	.270	.000

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01; ***p<.001

Table 4.4 presents the details about TL and PE. Results of regression analysis explain that TL is positively affecting PE and there is a significant relationship between both of them. The R2 value is 0.270, Beta coefficient=0.520 and p value=0. 000.The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.270, which demonstrates that TL is bringing a positive change of 0.270 units in PE. Hence, hypothesis is accepted.

Hypothesis # 1b

Transformational leadership is significantly associated with organizational benefits.

Table 4.5 presents the details about TL and OB.Results of regression analysis explain that TL is positively affecting OB and there is a significant relationship

TABLE 4.5: Simple Regression

Predictor	Organizational Benefits		
	β	R2	Sig
TL	.565	0.319	.000

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01;
***p<.001

between both of them. The R2 value is 0.319, Beta coefficient = 0.565 and p value = 0. 000.The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.565, which demonstrates that TL is bringing a positive change of 0.565 units in OB. Hence, Hypothesis is accepted.

Hypothesis # 1c

Transformational leadership is significantly associated with project impact.

TABLE 4.6: Simple Regression

Predictor	Project Impact		
	β	R2	Sig
TL	.581	0.338	.000

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01;
***p<.001

Table 4.6 presents the details about TL and PI. Results of regression analysis explain that TL is positively affecting PI and there is a significant relationship between both of them. The R2 value is 0.338, Beta coefficient = 0.581 and p value = 0. 000. The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.338, which demonstrates that TL is bringing a positive change of 0.338 units in PI. Hence,hypothesis is accepted.

Hypothesis # 1d

Transformational leadership is significantly associated with future potential.

TABLE 4.7: Simple Regression

Predictor	Future Potential		
	β	R2	Sig
TL	.662	0.438	.000

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01; ***p<.001

Table 4.7 presents the details about TL and FP. Results of regression analysis explain that TL is positively affecting FP and there is a significant relationship between both of them. The R2 value is 0.438, Beta coefficient = 0.662 and p value = 0. 000. The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.438, which demonstrates that TL is bringing a positive change of 0.438 units in FP. Hence, hypothesis is accepted.

Hypothesis # 1e

Transformational leadership is significantly associated with stakeholder satisfaction.

Un-standardized regression coefficient reported N=276, *p<.05; **p<.01; ***p<.001

Table 4.3 presents the details about TL and SS.Results of regression analysis explain that TL is positively affecting SS and there is a significant relationship between both of them. The R2 value is 0.261, Beta coefficient = 0.511 and p value = 0. 000.The p value of 0.00 shows that relationship between IV and DV is highly significant. The positive value of beta shows that it is positively effecting and there is a positive relation between IV and DV in this study. The value of R2 is 0.261, which demonstrates that TL is bringing a positive change of 0.261 units in SS. Hence,hypothesis is accepted.

4.4   Mediation Analysis

Hypothesis # 2

Team work significantly mediates the relationship between transformational leadership and project success.

To assess the effect of transformational leadership on project success with mediator team work, Hayes model 4 was used by running Hayes PROCESS macro Version 3.4 in SPSS. β coefficients of model 4 paths a, b, c and c' are as shown in figure below:

TABLE 4.8: Simple Regression

| Predictor | Stakeholder Satisfaction | | |
	β	R2	Sig
TL	.511	0.261	.000

FIGURE 4.1: Mediation Analysis with Co-efficient

TABLE 4.9: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.7996	0.3817	0.3025	0. 6077	0.2232	0.4063

Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.

Hypothesis # 2a

Team work significantly mediates the relationship between transformational leadership and project efficiency.

FIGURE 4.2: Mediation Analysis with Co-efficient

T ABLE 4.10: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.8138	0.6276	0.681	0.5789	0.3622	0.6812

Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.

Hypothesis # 2b

Team work significantly mediates the relationship between transformational leadership and organizational benefits.

F IGURE 4.3: Mediation Analysis with Co-efficient

TABLE 4.11: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.8138	0.3416	0.294	0.5703	0.1612	0.4112

Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.

Hypothesis # 2c

Teamwork significantly mediates the relationship between transformational leadership and project impact.
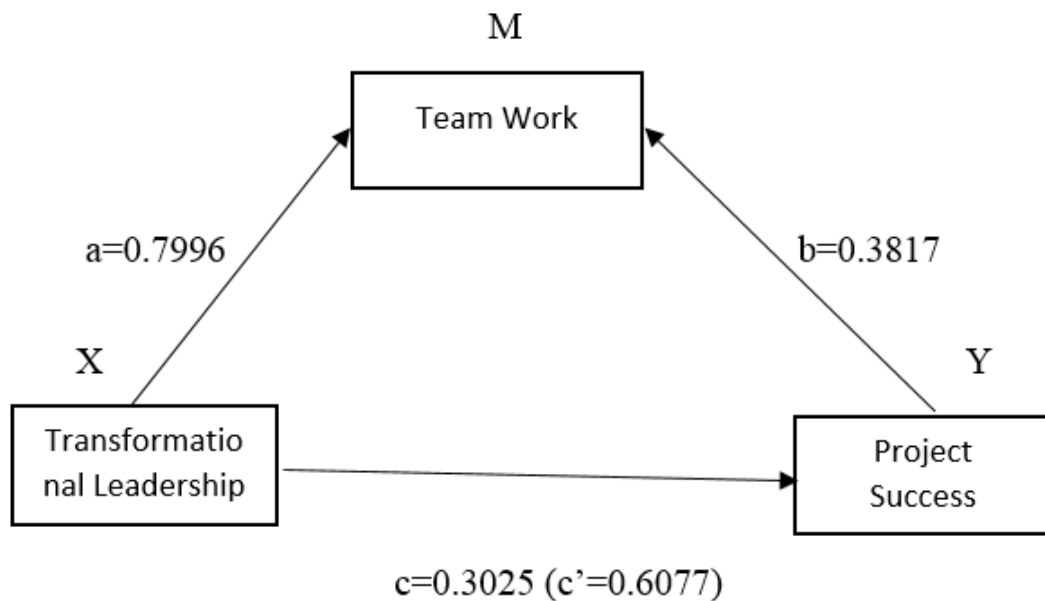

FIGURE 4.4: Mediation Analysis with Co-efficient

TABLE 4.12: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.8138	0.3416	0.2924	0.5703	0.1621	0.4211

*Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.*

Hypothesis # 2d

Team work significantly mediates the relationship between transformational leadership and future potential.
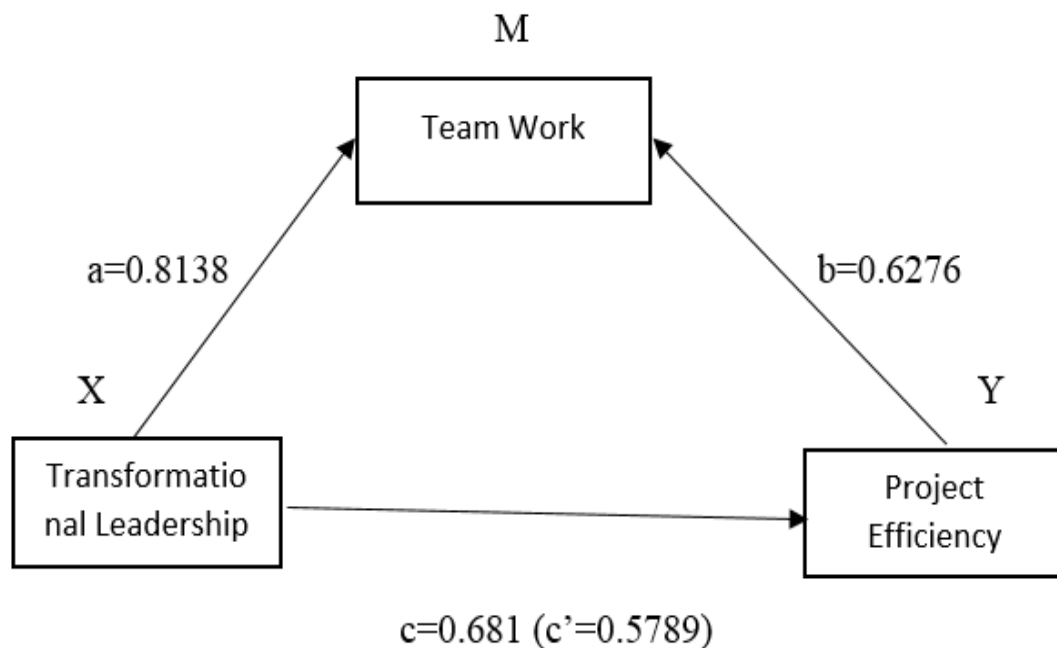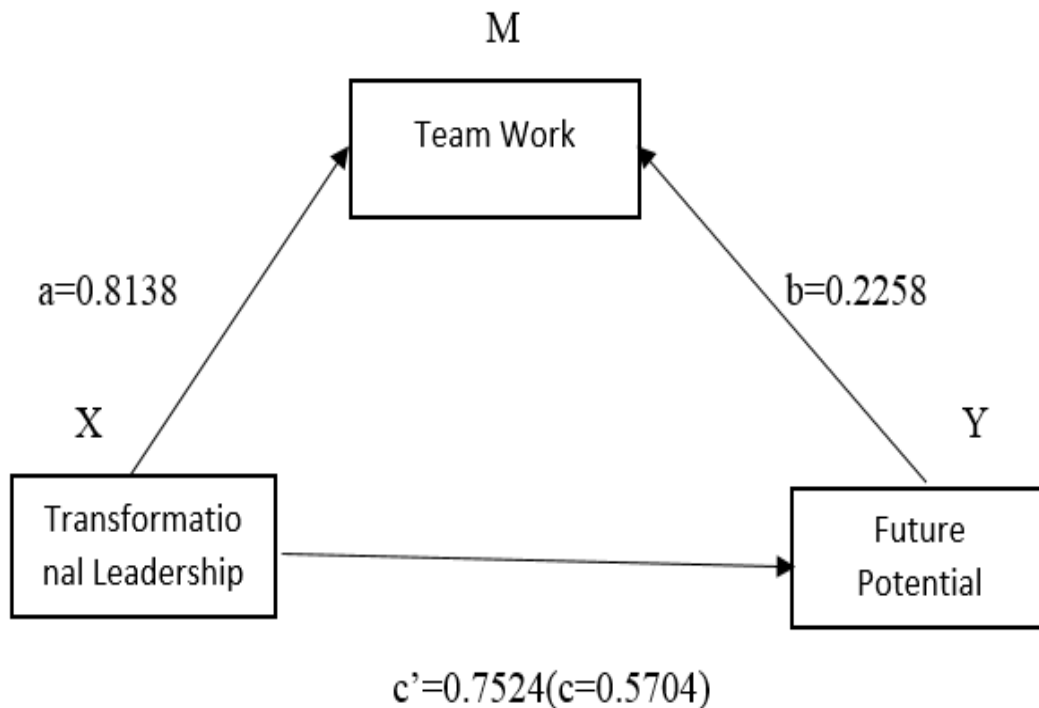

FIGURE 4.5: Mediation Analysis with Co-efficient

TABLE 4.13: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.8138	0.2258	0.5704	0. 7542	0.0617	0.3274

Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.

Hypothesis # 2e

Team work significantly mediates the relationship between transformational leadership and stakeholder satisfaction.
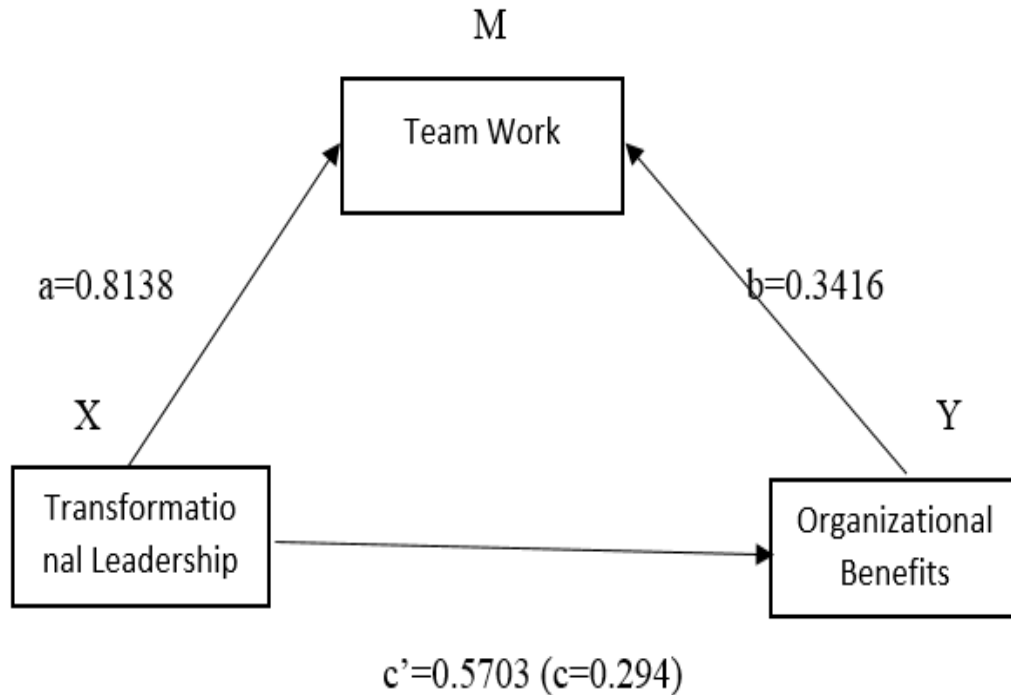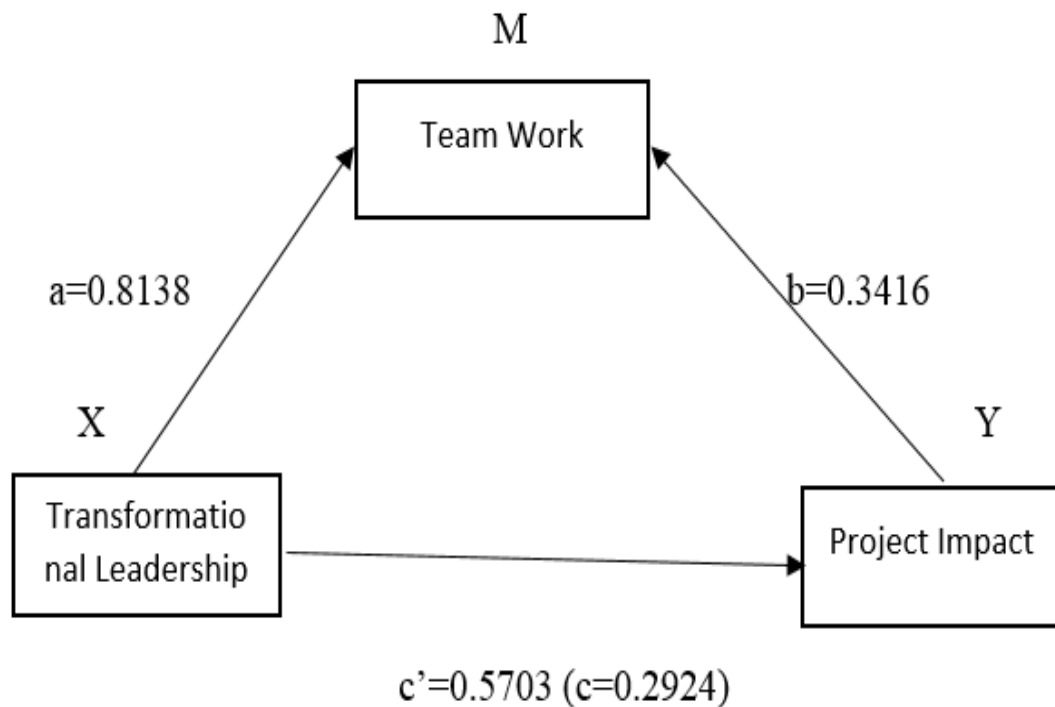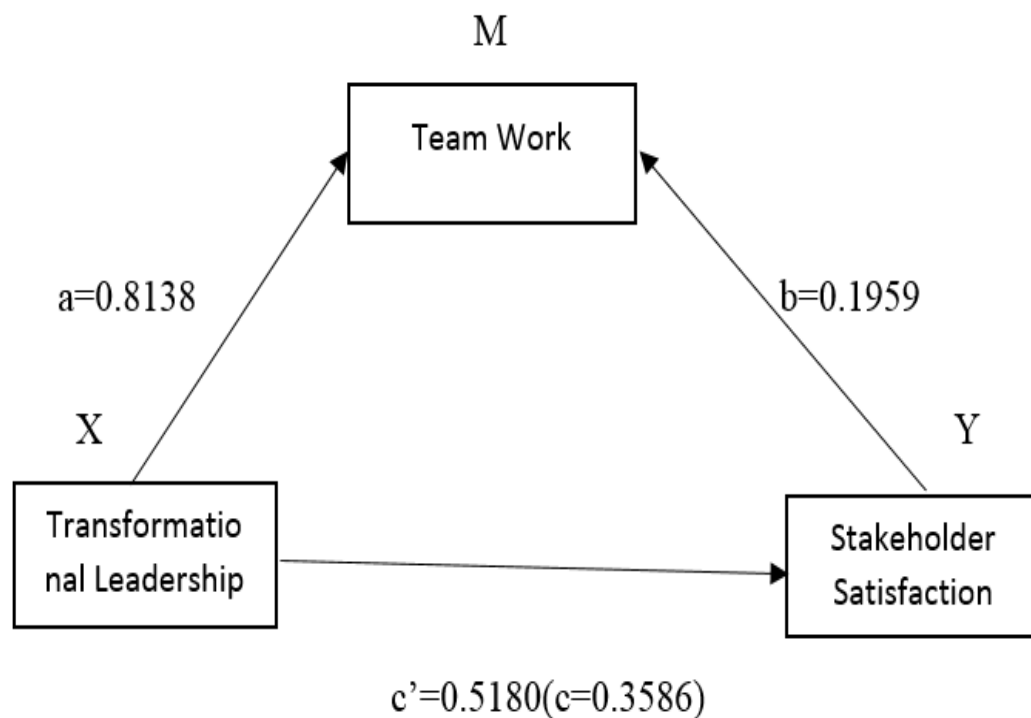

FIGURE 4.6: Mediation Analysis with Co-efficient

Table 4.14: Mediation Analysis

IV	Effect of IV on M (a path)	Effect of M on DV (b path)	Total effect of IV on DV (c path)	Direct effect of IV on DV (c' path)	Bootstrap results for indirect effects	
	β	β	β	β	LLCI	ULCI
TL	0.8138	0.1959	0.3586	0.5180	0.0520	0.2572

Un-standardized regression co-efficient reported. Bootstrap sample was 1000. Confidence Interval= 95% N=276, IV independent variable, DV dependent variable, M mediator, *p<.05; **p<.01; ***p<.001 LLCI=Lower Limit Confidence Interval, ULCI=Upper Limit Confidence Interval.

4.5 Moderation Analysis

H3: Project culture moderates the relationship between transformational leadership and team work such that it strengthens the relationship.

So, to test this relationship we have to run moderation analysis by using Process (Preacher and Hayes, 2004) and run model number 7 according to the theoretical framework.

Table 4.15: Moderation Analysis

	Co effs	SE	T	Sig	LLCI	ULCI
Project culture (MOD)	.2116	.0713	2.9666	.0033	.0712	.3521

For this hypothesis, the results show that value beta co eff is .2116 and T =2.9 both values have positive sign but according to lower limit class interval LLCI and upper limit class interval ULCI values are (.0712, .3521) according to this criterion both the values have same signs and it indicates that the hypothesis is accepted.

TABLE 4.16: Transformational Leadership * Project culture

	Co effs	SE	T	Sig	LLCI	ULCI
TL*PC (MOD)	.2103	.0894	2.3518	.0000	.0342	.3863

Table 4.16 provide results for the explanation of hypothesis 3. The interaction term of TL*PC moderates the relationship. As we can see in the above table that the lower level and upper-level confidence interval of .0342 and .3863 both have the same sign. Likewise, the interaction term stated that there is a regression coefficient. However, stated that PC as a moderator strengthen the relationship and results also interpret the same, PC strengthens the relationship between TW and TL.

Hence, we conclude that hypothesis is accepted.

4.6 Summary of Accepted and Rejected Hypothesis

TABLE 4.17: Summary about Accepted/Rejected Hypothesis

Hypothesis	Statement	Results
H1	Transformational leadership is significantly associated with project success.	**Accepted**
H1a	Transformational leadership is significantly associated with project efficiency.	**Accepted**
H1b	Transformational leadership is significantly associated with organizational benefits.	**Accepted**
H1c	Transformational leadership is significantly associated with project impact.	**Accepted**
H1d	Transformational leadership is significantly associated with future potential.	**Accepted**
H1e	Transformational leadership is significantly associated with stakeholder satisfaction.	**Accepted**
H2	Team work significantly mediates the relationship between transformational leadership and project success.	**Accepted**

Hypothesis	Statement	Results
H2a	Team work significantly mediates the relationship between transformational leadership and project efficiency.	**Accepted**
H2b	Team work significantly mediates the relationship between transformational leadership and organizational benefits.	**Accepted**
H2c	Team work significantly mediates the relationship between transformational leadership and project impact.	**Accepted**
H2d	Team work significantly mediates the relationship between transformational leadership and future potential.	**Accepted**
H2e	Team work significantly mediates the relationship between transformational leadership and stakeholder satisfaction.	**Accepted**
H3	Project culture moderates the relationship between transformational leadership and team work such that it strengthens the relationship.	**Accepted**

Chapter 5

Discussion and Conclusion

5.1 Discussion

The basic aim of current research is to analyze the impact of TL in the light of project success and its dimensions. In this study team work act as a mediator and PC acts as moderator. This research is conducted in the context of Pakistan by collecting the data from the PBOs.

5.1.1 Hypothesis # 1

Transformational leadership is significantly associated with project success. TL is significantly associated with project success. The hypothesis is accepted through analysis and in table it shows the positive value of $\beta = .594$, R2 = .464 and p = .000. The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .464-unitchange in PS.

β is having positive value in results which indicates that the TL is positively related to PS and the relationship is significant as p value is significant.

Consequently, this relationship is investigated in past literature that transformational leadership and project success is associated with each other and both influence each other (Andriani et al., 2018; Muller & Turner, 2007; Aga et al., 2016).

In this current period projects success and performance has increased a lot and at the same leadership plays an important role.

5.1.1.1 Hypothesis # 1a

Transformational leadership is significantly associated with project efficiency.

TL is significantly associated with PE. The hypothesis is accepted through analysis and in table it shows the positive value of $\beta = .520$, R2 $= .270$ and p $= .000$. The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .464-unit change in PE. β is having positive value in results which indicates that the TL is positively related to PE and the relationship is significant as p value is significant. Consequently, this relationship is investigated in past literature that PE is associated with time, scope and budget constraint of a project, hence it is an important dimension of PS. In a survey PE plays a role from 5% to 60% in making the project successful (Serrador & Turner, 2015). Raziq et al., (2018) investigated that employees are more efficient and productive when goal clarity is ensured by the top management. Literature also highlight significant relationship between TL and PE.

5.1.1.2 Hypothesis # 1b

Transformational leadership is significantly associated with organizational benefits.

TL is significantly associated with OB. The hypothesis is accepted through analysis and in table it shows the positive value of $\beta = .565$, R2 $= .319$ and p $= .000$. The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .319-unit change in OB. β is having positive value in results which indicates that the TL is positively related to OB and the relationship is significant as p value is significant. Consequently, this relationship is investigated in past literature that also highlight

the significant association of transformational leadership and organizational benefits (Yang et al., 2015; Manzhynski & Figge, 2020; de la Torre-Ruiz, Vidal-Salazar & Cordón-Pozo, 2019).

5.1.1.3   Hypothesis # 1c

Transformational leadership is significantly associated with project impact.

TL is significantly associated with PI. The hypothesis is accepted through analysis and in table it shows the positive value of β = .581, R2 = .338 and p = .000. The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .338-unit change in PI. β is having positive value in results which indicates that the TL is positively related to PI and the relationship is significant as p value is significant.

Consequently, this relationship is investigated in past literature and analyzed the significant association between both of them, effective leadership qualities lay significant impact on employees, team members and project outcomes (Tyssen et al., 2014; Berssaneti & Carvalho, 2015; Nixon et al., 2012; Manzhynski & Figge, 2020).

5.1.1.4   Hypothesis # 1d

Transformational leadership is significantly associated with future potential.

TL is significantly associated with FP. The hypothesis is accepted through analysis and in table it shows the positive value of β = .662, R2 = .438 and p = .000. The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .438-unit change in FP. β is having positive value in results which indicates that the TL is positively related to FP and the relationship is significant as p value is significant.

Consequently, this relationship is analyzed in past literature as well, Joslin and Muller (2015) investigated about future potential which is a dimension of project success and investigated that project manager with TL qualities helps to bring positive potential in employees that make them more productive.

Moreover, other researchers also witnessed the significant association between TL and FP(Vincent-Hoper, Muser & Janneck, 2012; Yang et al., 2011).

5.1.1.5 Hypothesis # 1e

Transformational leadership is significantly associated with stakeholder satisfaction.

TL is significantly associated with SS. The hypothesis is accepted through analysis and in table it shows the positive value of β = .511, R2 = .261 and p = .000.
The R2 value indicates the determination coefficient while the β value reveals the rate of change i.e. the change of 1 unit in TL brings a .261-unit change in SS. β is having positive value in results which indicates that the TL is positively related to SS and the relationship is significant as p value is significant.
Consequently, this relationship is analyzed in past literature as well, the dimension of project success i.e. stakeholder satisfaction plays an important role in successful completion and satisfaction of project by customers and stakeholders.
perceives success different so its important to consider every stakeholder (directly or indirectly) involved in project, so to avoid the backlash and chaos created in end (Pankratz & Basten, 2015; Anderson, 2017).

5.1.2 Hypothesis # 2

Team work significantly mediates the relationship between transformational leadership and project success.

For testing mediation hypothesis i.e., TW significantly mediates relationship between TL and PS, Model 4 of Process is used which was used by (Preacher and Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .2232 and .4063. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and PS.

Literature also highlight the relationship of mediator i.e. team work, teams are very important for organizations, and they help to achieve the desired goals and objectives. For this teams must be sustained (Salas et al., 2015). Project manager possess different type of skills to manage the teams through clarifying each and every aspect of project (Sofany et al., 2014). The researcher examines that TW mediates the relationship between TL and PS (Hanaysha, 2016; Cha et al., 2015; Han et al., 2018).

5.1.2.1 Hypothesis # 2a

Team work significantly mediates the relationship between transformational leadership and project efficiency.

For testing mediation hypothesis i.e., TW significantly mediates the relationship between TL and PE, Model 4 of Process is used which was used by (Preacher and Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .3622 and .6812. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and PE.

Literature also gave the evidence of significant association, project management strategies guides about the development and effective management of teams, TL provide a stable working conditions to the team members to work and this is indirectly related to project managers, which is linked with PE and PS. Efficiency ensures the effective achievement of projects and supportive leadership (Tabassi et al., 2017; Tariq, 2018).

5.1.2.2 Hypothesis # 2b

Team work significantly mediates the relationship between transformational leadership and organizational benefits.

For testing mediation hypothesis i.e., TW significantly mediates the relationship between TL and OB, Model 4 of Process is used which was used by (Preacher and

Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .1612 and .4112. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and OB.

In past literature, Suwandana (2019) states that intelligent leaders through their intelligence help teams to enhance their effectiveness through transformational leadership style. TL style understands employees in a complete way, and it ensures creativity, innovation and effectiveness in employee performance (Klaic, 2020).

Researchers gave an important stance that when experts and trained individuals work together, then meaningful and purposeful outcomes are generated. Moreover, clear sense responsibility, clarity in tasks, accurate understanding and effective leadership help employees to achieve their task more easily. When the employees are engaged in meaningful and effective work in form of teams, they result in OB's (Steger & Dik, 2010).

5.1.2.3 Hypothesis # 2c

Team work significantly mediates the relationship between transformational leadership and project impact.

For testing mediation hypothesis i.e. TW significantly mediates the relationship between TL and PI, Model 4 of Process is used which was used by (Preacher and Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .1621 and .4211. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and PI. Past literature also examined the significant association between transformational leadership and team work, and team work's association with project impact. This results in team work is significantly mediates the relationship between TL and PI (Shujaat et al., 2014; Murzi et al., 2020; Cha et al., 2015; Suwandana, 2019).

5.1.2.4 Hypothesis # 2d

Team work significantly mediates the relationship between transformational leadership and future potential.

For testing mediation hypothesis i.e., TW significantly mediates the relationship between TL and FP, Model 4 of Process is used which was used by (Preacher and Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .0502 and .2572. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and FP.

The literature highlights the relationship between transformational leadership, team work and future potential. Teams play important part in project-based organizations, for that team composition must include the relevant expertise, skill and well-trained employees, and besides this transformational leader inspire and motivate members to work together and achieve collective goals (Bell., 2018; Tabass et al., 2017). Teams need to be sustained and their benefits must be considered. Moreover, TW is influenced by number of things but future potential also plays an important role in fostering TW and leadership (Klaic et al., 2020).

5.1.2.5 Hypothesis # 2e

Team work significantly mediates the relationship between transformational leadership and stakeholder satisfaction.

For testing mediation hypothesis i.e., TW significantly mediates the relationship between TL and SS, Model 4 of Process is used which was used by (Preacher and Hayes, 2004). As per Preacher and Hayes, the direct total and indirect effects have to be independently verified when a, b, c and c' paths are tested. The lower level and ULCI upper-level confidence interval of .3622 and .6812. Both the values of ULCI and LLCI have the same positive signs and no zero is present between these two values which shows that mediation is present between TL and SS. Along with the effective role of a leader, there is one more entity that plays

vital part in success and failure of project, i.e. stakeholders. They are the one who are directly and indirectly associated with the project and with the organization. Their satisfaction matters a lot towards the project success. In order to mitigate the risk of failure SS must be taken in consideration in the entire process of project completion. As the perception of every stakeholder is different and success criteria is also different, so their involvement in the process will help to ensure the success. The study examines that TW is directly related to the performance of team which is measured by the stakeholders and members of team. TW quality is rated 81 percent by the members based on performance and 61 percent is rated by the stakeholder (Weimar et al., 2017; Li, Ng & Skitmore, 2013; Davis, 2014).

5.1.3   Hypothesis # 3

Project culture moderates the relationship between transformational leadership and team work such that it strengthens the relationship.

The lower level and upper-level confidence interval of .0324 and .3863 both have same sign. Similarly, the interaction term (TL*PC) stated that PC significantly moderates the relationship between TL and TW.

Hofstede (2011) says that culture is the collective thinking of minds that differentiate the people of groups from one another. PC is important as the culture defines the working environment, level of communication and coordination within the particular organization (PBOs), employees tends to work productive where the culture is open and friendly. Such environment helps in discussion of collective and individual issues, new ideas, goals and objectives (Qubaisi et al., 2015; Ajmal & koskinen, 2008). TL helps to develop the culture of project-based organization through their charisma, inspiration and motivation. These leaders adapt themselves according to the situation sometimes autocratic and sometimes participative, just to sustain the friendly project culture (Mittal, 2015; Dickson et al., 2012). Ahmad (2018) examine the significant association between TL and PC and TW. And finds out the project culture significantly moderates the relationship

between TW and TL (Turner, 2007; Gemunden et al., 2018; Kendra & Taplin, 2004).

5.2 Practical and Theoretical Implications

The current study shows the acceptation towards the practical and theoretical implication of transformational leadership in project-based organization. It highlights the importance of leadership (project managers) in projects, TL is more significant as it motivates and influence employees towards project success. This dissertation also added a variable of teamwork, that has fundamental importance in the literature of project management. TW plays the role of mediator between TL and PS. Teams are important for every PBO's as these teams works under a leader on different projects and helps to make it successful. The role of teams cannot be neglected. This study also includes the role of project culture as a moderator between TL and PS that significantly moderates the relationship. Culture in every organization helps to formulate the working style and is also very important. Overall, these relationships have been contributed in literature as unique research and can be analyze in future for fruitful outcomes.

While talking about the practical implications, leadership is a way of using multiple techniques for attaining the desired project goals and objectives. Current study also highlights the important role of leadership on project success. The study is equally important for the project managers, subordinates, employees and top management and also important for the project-based organizations.In Pakistan, there is need of such research that emphasize on leadership specifically on transformational leadership. So that management and employees can work on themselves to accomplish the tasks.

5.3 Limitations and Future Directions

Every study has certain limitations, as this study has. These limitations are due to limited time period and limited resource constraints. The scope of the current

study is limited; therefore, all the dimensions of transformational leadership and market dimensions to these variables cannot be explored at once. This is room of the future researcher to investigate the dimensions of TL and TW.

Secondly, the data is gathered from project teams working in project-based organization of Rawalpindi and results may vary in other type organizations. And in last but not least, the sample size is limited due to short time span and global pandemic. Moreover, this study is conducted in context of Pakistan. So, future researchers can explore these variables in context of other countries and cultures. The researcher can also add different variables along with these in domain of project management.

5.4 Conclusion

In this continuous era of changing and emerging technologies and trends, project-based organizations are highly focused in discipline of project management. It is important to find out that how teams can work efficiently and effectively on different projects and achieve the desired goals. To investigate this the current study was based upon the impact of transformational leadership on project success with mediating role of team work and moderating role of project culture. The hypothesis generated were tested in the study and all were accepted in context of Pakistan. The focus of the study was on project teams working in project-based organizations and data was gathered from there and in total 276 responses were collected. The gathered data was analyzed in SPSS and CFA was also done in AMOS. Hence, the results depict the signification association between TL and PS. TW significantly mediates the relationship between TL and PS, while PC moderates the relationship between TL and TW.

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Appendix A

CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD

Department of Management Sciences

Questionnaire

Dear Participant,

I am students of MS Project Management at Capital University of Science and Technology, Islamabad. I am conducting a research on **Impact of Transformational Leadership on Project Success: Mediating Role of Team Work and Moderating Role of Project Culture**. I would appreciate your participation and I assure you that **your responses will be held confidential** and will only be used for education purposes.

Thanks a lot for your help and support!

Sincerely,

Muhammad Attiq Ur Rehman

MS (PM) Research Student

Capital University of Science and Technology,

Islamabad

Personal Information *Please provide (✓) the following information.*

	1	2	3	4	5
Gender:	Male	Female			
Age:	18-25	26-33	34-41	42-49	50 and above
Qualification	Matric	Bachelor	MS/MPhil	PhD	
Experience	5 and less	6-13	14-21	22-29	30 and above

Section: A. Transformational Leadership Please tick the relevant choice		Strongly disagree	disagree	Neutral	Agree	Strongly Agree
1.	Team members have complete faith in me.	1	2	3	4	5
2.	I provide appealing images about the project to my team.	1	2	3	4	5
3.	I enable team members to think about old problems in new ways.	1	2	3	4	5
4.	I give personal attention to a team member who seems neglected.	1	2	3	4	5
5.	Team members are proud of being associated with me.	1	2	3	4	5
6.	I let my team know that I am confident that the project goals will be achieved.	1	2	3	4	5
7.	I provide team members with new ways of looking at puzzling things.	1	2	3	4	5
8.	I help each member of the team to develop his/her strengths.	1	2	3	4	5
9.	I make the team members feel good to be around me.	1	2	3	4	5
10.	I help team members find meaning in their work.	1	2	3	4	5
11.	I get team members to rethink ideas that they had never questioned before.	1	2	3	4	5
12.	I am attentive to the unique concerns of each team member.	1	2	3	4	5
13.	I show my team that I am optimistic about the future of the project.	1	2	3	4	5

Section: B. Team Work Please tick the relevant choice		Strongly disagree	disagree	Neutral	Agree	Strongly Agree
1.	The team members in my department help each other to get the work done	1	2	3	4	5
2.	The members in my team feel very close to each other.	1	2	3	4	5
3.	The members of my team really respect each another.	1	2	3	4	5
4.	The members of my team work well together.	1	2	3	4	5
5.	The members of my team encourage each other to succeed when performing the task.	1	2	3	4	5
6.	The members of my team work hard to get things done.	1	2	3	4	5

Section: C. Project Success Please tick the relevant choice		Strongly disagree	disagree	Neutral	Agree	Strongly Agree
1	Project efficiency	1	2	3	4	5
	Finished on time	1	2	3	4	5
	Finished within budget	1	2	3	4	5
	Minimum number of agreed scope changes	1	2	3	4	5
	Activities carried out as scheduled	1	2	3	4	5
	Met planned quality standard	1	2	3	4	5
	Complied with environmental regulations	1	2	3	4	5
	Met safety standards	1	2	3	4	5
	Cost effectiveness of work	1	2	3	4	5
2	Organizational benefits	1	2	3	4	5
	Learned from project	1	2	3	4	5
	Adhered to defined procedures	1	2	3	4	5
	End product used as planned	1	2	3	4	5
	The project satisfies the needs of users	1	2	3	4	5
	New understanding/Knowledge gained	1	2	3	4	5
3	Project impact	1	2	3	4	5
	Project' s impacts on beneficiaries are visible	1	2	3	4	5
	Project achieved its purpose	1	2	3	4	5
	End-user satisfaction	1	2	3	4	5
	Project has good reputation	1	2	3	4	5
4	Future potential	1	2	3	4	5
	Enabling of other project work in future	1	2	3	4	5
	Motivated for future projects	1	2	3	4	5
	Improvement in organizational capability	1	2	3	4	5
	Resources mobilized and used as planned	1	2	3	4	5
5	Stakeholder satisfaction	1	2	3	4	5
	Sponsor satisfaction	1	2	3	4	5
	Steering group satisfaction	1	2	3	4	5
	Met client's requirement	1	2	3	4	5
	Met organizational objectives	1	2	3	4	5

Section: D. Project culture Being a qualitative dimensions questionnaire with given characteristics of a project culture, indicated as dimensions a brief description of the meaning of each characteristic is provided for clarity		Strongly disagree	disagree	Neutral	Agree	Strongly Agree
1.	Interpersonal relationship (The degree to which relationship between team members, customers and suppliers are playing an important role in the success of project).	1	2	3	4	5
2.	Team Emphasis (The degree to which people participate in the management of project and work activities are organized around groups rather than individual).	1	2	3	4	5
3.	Management/stakeholder commitment (The degree to which each stakeholder including management commits, by means of active participation and support, to the successful completion of the project).	1	2	3	4	5
4.	Interdependence (The degree to which units within the organization or encouraged to operate in a coordinated or interdependent manner).	1	2	3	4	5
5.	Control/Discipline (The degree to which roles, polices and direct supervision are used to oversee and control employee behavior).	1	2	3	4	5
6.	Risk orientation (The degree to which the project environment encourages participants to be aggressive, innovative and risk seeking for success).	1	2	3	4	5
7.	Learning (The degree to which project are viewed as learning intervention and process of continuous improvement).	1	2	3	4	5
8.	Conflict Tolerance (The degree to which employee are encourages to air conflicts and criticism openly and deal with it responsibly).	1	2	3	4	5
9.	Results orientation (The degree to which management and team focus on achievement of results and outcomes rather on the means)	1	2	3	4	5
10.	Open system focus (The degree to which the organization and people involved monitor and respond to changes in the external environment).	1	2	3	4	5
11.	Open communication (The degree to which shareholders communicate openly and share information about the project, its problem, opportunities, successes and failures).	1	2	3	4	5