# Impact of Transformational Leadership on Project Success with Mediating Effect of Self-Efficacy and Moderated Effect of Conscientiousness

by

## Kalsoom Yasin

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*I dedicate my work to my father (Late) who had been an inspiration throughout My life.*

# CERTIFICATE OF APPROVAL

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# *Abstract*

This study focuses on the relationship between Transformational Leadership and Project Success with the mediating role of Self -Efficacy and moderating role of Conscientiousness. For the success of projects leadership played a vital role and his involvement with the workers and also the guidance of their leader. If the instructions given to the employee are ambiguous then the project could not achieved the success. In this regard the competency of the leader is vital .If the transformational leader is having the self-efficacy and conscientiousness in the personality then he could motivate and having the influence on employee , the employee is highly motivated and take the challenges with positivity and resultantly to reach the success of project. With reference to context the study is based on project organization of real estate and education sector of Pakistan's twin cities. Primary data is collected through questionnaire method and 253 respondents have given the response.

Results indicate that there were significant relationship between transformational leadership and project success, self-efficacy is also mediating and shows the significant relationship, conscientiousness also moderated the relationship and it strengthens the notion to the project success and shows the positive and significant relationship.

**Keywords: Transformational Leadership, Self-efficacy, Conscientiousness, Project Success.**

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| | |
|---|---|
| **TL** | Transformational Leadership |
| **SE** | Self-Efficacy |
| **C** | Conscientiousness |
| **PS** | Project Success |
| **SET** | Social Exchange Theory |
| **IV** | Independent Variable |
| **DV** | Dependent Variable |
| **LLCI** | Lower Level Confidence Interval |
| **ULCI** | Upper Level Confidence Interval |

# Chapter 1

# Introduction

## 1.1 Background of the Study

For the success of projects, the style of leader played a key role. The literature of Leadership is highlighting their styles and impacts on the project based organization. Among these studies it is found that Transformational Leadership is suitable at the moment (Braun, Peus, Weisweiler, & Frey, 2013).Therefore different studies show that it is the responsibility of project manager to provide the congenial environment to the team or the leadership impacts on developing the team (Müller et al., 2017). Leadership is measured as one of the critical tools for the success of project in project based organization, when the assets are limited, and the projects should be completed in certain time and achieves the targets as well. (Dwivedula, Bredillet & Muller, 2016). Then the type of leadership defines the level of success in the project (Geoghegan & Dulewicz, 2008; Muller & Turner, 2006). Turner, 2009 discussed that about 30% of the global economy is based on project activities. Project success plays a key role for the effective completion of the project. In the field of Project management, the Project success (PS) is a very critical feature; it can be measured according to the objectives like time, cost and quality. These are called the "iron triangle" (Aga, Noorderhaven & Vallejo, 2016). If we have glimpse in the history, then pyramids, Great Wall of China are the best examples of project success. Papke-Shields, Beise & Quan (2010)

concluded that 86% respondents did not plan well thus it's the growing concern of unsuccessful projects. Due to the unique aspect of projects the chances of failure are high as compared to the success. As the different studies suggest that in the success of the project depends on the style of leaders (Kendra & Taplin, 2004; Yang, Huang & Wu, 2010).As in 2006 Competence Baseline of International Project Management Association (IPMA) classifies 46 basics of capability into three groups like relative, interactive, and technical competencies. In the second edition of The Project Management Competency Development Framework issued by PMI in 2007 explains that the competency of project manager should be in knowledge, performance and the competence of a person. These comprehensive studies are benefitted for the project manager to improve an in-depth study. It would be helpful for the success of project to know the shortcomings of leader (Maqbool etal., 2017). There is the direct relationship between Transformational Leadership and Project Success recommended by different researchers (Gundersen et al., 2012, Aga et al., 2016, Yang et al., 2011). If the leader involves him in the project, then he could achieve success.

"Management actions are elastic. It would be a mistake to undertake that once recognized as having a definite style, it is impossible to vary that style for diverse statuses or situations. In fact, successful project managers have been shown to work a great deal of elasticity in their use of leadership styles." (Slevin & Pinto, 2004, p. 74).

Leadership Expert James MacGregor Burns was the first person to introduce the concept in 1978.Later in 1985 Bernard M. Bass elaborated further. MacGregor Burns stated that the leader should be persuasive .He has the capability to increase the morale of his team and he should be able to use his motivation for the progress of projects. In the projects TL has its impact on other individual .The distinctions are apparent in the followers and results shown in the form of successful projects. They boost up the morale of every team members and to motivate them for the work so that everyone must participate and got success in projects. Preceding researches show that the project success or failure is associated to the behavior of the employees, their style of completing the work, inspiration and presentation

that's why the transformational leadership is positively correlated with all these characteristics of the employees (Dumdum, et.al, 2002). Numerous researchers recommend that the creativity of the employees can be recognized successfully by the style of TL (Shin & Zhou, 2003; Jaussi & Dionne, 2003). As transformational leader creates awareness and inspires them and builds the confidence in the team member as well as in group and allow them to take initiative in the projects (Gardner & Stough, 2002). The focus of our study is to detect the success of project accomplished by TL. Transformational leaders have a clear motive like in conscientiousness the leaders are very clear about the pros and cons of the projects, that they can activate the groups. These leaders have the ability to help the followers and to experience the same passion and motivation for the fulfillment of the goals. Aga, Noorderhaven and Vallejo (2016) concluded that there exists positive relationship between TL and PS. There exist the relationship between self-efficacy and TL but is not sufficient (Gong, Huang, & Farh, 2009; Hannah et al., 2016; Kark, Shamir, & Chen, 2003; Nielsen & Munir, 2009).The reason behind this, that researchers might have the inconsistent result between self-efficacy and general self-efficacy (Nielsen & Munir, 2009). Different studies measure specific dimension of self-efficacy like creative or role self-efficacy is having the positive and significant relationship between Transformational Leadership and Self Efficacy (Hannah et al., 2016). TL is associated to the performance of the worker and if the worker is guided properly and he is motivated then he put all of his efforts to achieve the excellence and meet the targets in time and projects will achieve milestones (Boamah, Laschinger, Wong & Clarke (2018). For the conceptualization and measurements intellectuals used different dimensions, there is remarkable association between them for the transformational leadership. Aga et.al (2016) proposed the four dimensions of transformational leadership i.e. motivation of inspiration, rational motivation, idealized inspiration and individual concern. The leaders encourage their followers through motivation and inspired them by high potentials and boost their thoughts. It is helpful to understand the personality trait of conscientiousness, through the indirect knowledge, to challenge the recent condition, and answer the questions of team members calmly. It is helpful and

influenced them to handle the situation wisely, such stimulus enhanced from the reasonable inspiration implementations in the projects. Normally, leaders built the trust between the team members to allocate the task and to ample the work at right time and making the environment friendly for them so that everyone respects each other is perfect inspiration facet. Here conscientiousness played the vital role in the success of projects. Lastly, the team members and leader considered all members in the team as a person, and to spend most of time with members to guide and provide solutions as well as appreciated them for the achievements. It will motivate the team members in the project (Ng etal. 2017).

## 1.2   Gap Analysis

A research gap is defined as the topic or area which is missing or insufficient information limits the ability to reach a conclusion for the given question. As, identification of the gap is concerned in our study, it is found that the Transformational Leadership is the most discussed topic in projects based organization. Martínezb & Matutec (2018) suggested that Transformational Leadership could be examined further to improve the performance in the projects and to consider the outcome for the success of projects. Several studies suggest that transformational leadership role could be effective to empower the employees in projects (Para, Jiménez, & Martínez (2018).

The grey area in the research is the category of managerial attitude that is vital to determine the relationship among Transformational Leadership, projects and presentation (Para, Jiménez, & Martínez 2018). Mittal & Dhar (2015) recommended that to assess the importance of transformational leadership on emerging Self Efficacy. Future researchers are encouraged to work on the satisfaction of employee by improving the quality and the commitment and to reach the success of projects.

Moreover, the future researcher should take in account the mediating effect of TL on self-efficacy. It could be helpful in the projects. Self-Efficacious transformational leader could be helpful in structural conduct to grasp and mediating

relationship is supportive in the success of project. This variable could be linked in the long term(Michael, Forrest, Michelle, Andrew & William (2018).

In our discussion we are taking these aspects in our study is recommended by different research studies. Transformational Leadership and its impact in the success of projects have been studied in the sector of real estate and education. This modification endeavors to fill the gap of logical evidences to identify the mediating relationship of self-efficacy and moderating effect of conscientiousness with self-efficacy and Project Success.

## 1.3   Problem Statement

As it is stated above that the style of transformational leadership is the burning issue for the researcher now days. Too much involvement of leader plays the negative role in the projects. But in the personality of a transformational leader, it creates a charisma among workers and a positive role is observed in the projects. Every researcher studied it in context of their perspective. In the real estate sector and education sector the role of TL is studied, to monitor the mediating effect of Self-Efficacy in the Pakistani context. The project based organization of real estate and education sector with their problems are being evaluated and to perceive how the transformational leader support to rationalize the work. Transformational leadership has to be identified in the success of project. The Research scholar found that project success is positively stimulated by other factors. Such factors are known as Critical Success Factors (CSFs). If, the role of leadership behavior could improve then the project got the success. CSF includes the behavior of leader with team, the consistency of work, involvement of employee and motivation of team positively. Though, the style of leadership competence and impact of project manager on the project success is ignored in the literature. It is advised in some readings to see the influence of TL on PS. As a leader one should perform the situation accordingly. It is dire requisite to consult the styles of leadership in PS. In the writings of project management, the basic mediating relationship of self-efficacy and moderating relationship of conscientiousness of leadership on project

success is also ignored. Miscellaneous literature has been considered to increase the interest of researchers in this area. Yet, several aspects are linked to TL and mediating effect of SE is prerequisite to explore different aspects in projects.

The quality of a TL is to motivate others more than their expectations, to bind them with shared goals. TL and the personality trait of the leader could play a vibrant role in the PS. It could be helpful in future that if self-efficacy is positively used in the projects and mediating role is effective, then it progressed. Conscientiousness also moderated the relationship of project success either to enhance the project or vice versa. It is an important part of big five personality trait; it is helpful to reach the targets of the projects. If a person is conscientious in his personality then he took the responsibility of completing the project and the project should design in such a way that it could not create the problems in projects.

This reading concentrated on the role of TL in the success of project through the mediating relationship of self-efficacy and moderating relationship of conscientiousness is not being considered yet.

## 1.4 Research Questions

Based on the above stated problems, the present study stimulates the researchers to find the answers for some questions.

Summary of the questions are as follows:

**Research Question 1**

What is the relationship between Transformational Leadership & Project Success?

**Research Question 2**

Does Self-Efficacy mediate the relationship between the Transformational Leadership & Project Success?

**Research Question 3**

Does Conscientiousness moderate the relationship between Self-Efficacy & Project Success?

## 1.5 Research Objectives

The purpose of objective in the study is to develop and test the projected model and to find out the relationship between TL and project Success. Additionally, Conscientiousness is added as the possible moderator for the relationship of the variables mentioned in the research model (TL and project Success) and Self-Efficacy is mediating the variables.

The specific objectives of the study are stated below;

1. To explore the relationship between Transformational Leadership and Project Success

2. To explore the relationship between Transformational Leadership and Self Efficacy.

3. To explore the relationship between Self Efficacy and Project Success.

4. To examine the mediating relationship between Transformational Leadership and Project Success

5. To examine the moderating effect of Conscientiousness between Self-efficacy and project success.

## 1.6 Significance of the Study

The study will provide the theoretical aspect through the concrete evidences, that if a manager opts the qualities of transformational leader then the project could be succeeded. This study provides the concrete evidences in the real estate sector of Pakistan to give the importance of the qualities of a leader if he inculcates the qualities of transformational leader then the project could be completed in time and the success criteria of the projects could be boosted up.

The basic aim of leader is to train its employee in such a way that the creative abilities of the employee could be boosted, to find the creative solution of the problem

(Boerner et al., 2007). Transformational leader has a clear vision of the organization, and he has the skills to motivate and train the employees to the creative thinking among them and to encourage them to find the solution for the given problem. Transformational leadership has gained importance in practical and theoretical perspective (Schaubroeck et al., 2012). The transformational leader can activate their employees and to get the outstanding result, it could be possible if the employee is highly tempting and changing the SE for their employee (Bushra et al., 2011; Chi and Pan, 2012).

TL is succeeded in many organizations, for the success of TL there is an important factor that played a vital role that is the mediating effect of SE for PS. Due to the success of projects every one acknowledge the efforts and praise the projects and project management. This is the reason that from the last three decades, project success has become very important factor in project management (Ika, 2009). Due to this importance of PS factor management also focused in this aspect (Alderman & Ivory, 2011; Clarke, 2010; Geoghegan & Dulewicz, 2008). If in one side leadership is succeeding the projects while on the contrary if the management is poor then projects failed like Srica (2008) claimed that 80% failure in projects is due to the poor leadership. Likewise, Dey (2009) indicated that generally projects fail due to operational risk factors for instance the lack of effective project leadership skills. In existing literature on management, transformational leadership has been accepted as a dominant trait.

Similarly, if we see the mediating effect of self-efficacy then self-efficacy is enquired through four major processes: intellectual, motivational, affecting, and discriminatory. The behavior of the human is controlled by self-cognized goals. If the SE of the individual is stronger, then his goals are higher and to achieve the targets in time. His commitments are also high (Bandura, 1991). Therefore, SE is specific to a given activity domain and is most relevant in forecasting and considerate the accomplishment in that field (Bandura, 1986; Tierney & Farmer, 2002). Once a person has self-confidence then he/she can give outstanding results and it is a proof of high self-efficacy (Tiernery and Farmer, 2011).

# 1.7 Supporting Theories

Different researchers presented different theories regarding transformational leadership like transformational leadership theory, Bandura's theory of self-efficacy and Social Exchange Theory. But in this study supporting theories are Social Exchange Theory (SET) and the theory of self-efficacy. SET is applicable in majority of variables like in Transformational Leadership, Project Success and in Conscientiousness. Social Exchange theory is mostly used in social sciences domain and in our dissertation when the person exchanges the ideas it will develop the relationship and the impact of personality is vigilant. The theory of SE is applied in the variable of Self Efficacy.

## 1.7.1 Social Exchange Theory

Social Exchange Theory (SET) is frequently used in the studies of Social science. There are diverse visions of this theory, it deals with the conduct of the people and conduct differs that why it is having certain compulsion (Emerson, 1976). Within SET, these relations can be seen as dependent and dependent on the activities of another person (Blau, 1964). Blau, (1964) defines that all actions are the process of exchanges. It tells that when the people intermingle with each other the association progresses and resultantly the exchange of ideas takes place. The individual becomes social and involves himself with the other party and it develops strong feelings. Similarly, TL is also having the compelling personality and interchange the notions with the teams resultantly the success of project took place. Cropanzano and Mitchell (2005) suggest that for the two sided argument there should definite strategies for the TL to observe and to engage the employee and made the relationship with them on the basis of cost and benefit analysis.

Gouldner (1960) states that SET is having reciprocity in give-and-take as a traditional faith. In 1958 Homans came up with the concept that the shared presentation is recognized on exchange. The discussion is not associated to physical possessions but also the part of figurative values like recognition and reward of status. With reference to Conscientiousness the contribution of leader and other

individual is affected with the social behavior of the leader and the employee expects the same values from these leaders.

## 1.7.2 Bandura's Theory of Self-Efficacy

Bandura's theory of SE is a part of social cognitive theory. In this theory people are judged their efficacy in advance to perform the tasks with a meaningful domain of functioning. It is identified through the pattern, strength and the limits of self-efficacy. It influences the through the functioning. Self-efficacy effects on the person's choice of behavior, there effect on the expenditures and handling of problems according to the demand of environment (Bandura 1986).

Bandura (1977, 1997) studied positively classified SE and to agree the findings of one's abilities to form and understand the development of recognition to grasp the confident goals and he stayed to evaluate its level, approval and strength through activities and backgrounds. In SE more emphasis is given to the performance of an employee in the organization rather than the personal qualities of a person like their physical and the emotional characteristics of the person. In the organization if the person is professional and know the strength and weakness of the work could compete and made the success in projects. Self-efficacy principles are not considered as single attitude but rather are multidimensional in procedure and vary on the field of working.

Finally, self-efficacy decisions indeed state to forthcoming working and are measured before persons perform the relevant activities. Self-efficacy is "concerned not with what one has but with belief in what one can do with whatever resources one can collected" (Bandura, 2007, p. 6). As Conferring by Bandura (1986, 1997, 2007) self-efficacy is the judgment of a person's level of proficiency of accomplishing the definite mission is imminent. As it is not necessary that it should be the flawless implementation, but it is helpful to understand the individual to the self-analysis. Thus, self-efficacy had a direct relationship with TL but also having a mediating role between TL and project success.

# Chapter 2

# Literature Review

## 2.1 Transformational Leadership and Project Success

There are four dimensions of transformational leadership like individual consideration, intellectual stimulation, inspirational motivation and idealized influence. In Individual consideration leader incorporates the needs of individual and cares about the betterment, provides them mental and emotional support and guide them for the improvement of skills and aptitude. It is helpful in the projects. In the intellectual stimulation is presented when the leader challenges to the employees and make them to think and they sort that challenge by them. In the projects employees have to face the challenges in every step.

In Inspirational motivation is developed in employees when the vision of the project is inspiring for the supporters. The project member will work with full devotion. Idealized influence is developed when the leader is interested by values and the apprehension for what is best for the beginners, organization and society. The positive values when inculcated in the projects it created the friendly environment and the employee worked in the projects with full devotion. (Barling et al., 2011; Bass, 1999).

The leadership has been characterized in different styles. There are many authors who are taking in consideration the different style of leadership like laissez faire,

Transactional and transformational type of leadership. In the style of transformational leadership it develops the sense of responsibility, loyalty to the projects. Then due to the style of TL the outcomes of the given task is positive and is helpful for the project based organizations to reach the projects towards the success. (Barling 2014). When the teams are interconnected with each other than the individual get the success and also become the asset in the workplace due to the competency and his dedication towards the work. This asset will play the key roles in the projects (Gumusluoglu and Ilsev 2009).

The analysts also highlighted that if there is strong communication between members and leader clarifies all the steps to the team members and they know each and every step then they can perform vigilantly. The team members also give the positive feedback and brought the inventive ideas. The members of team's bonding are strong with their leader (Sanders and Shipton, 2012).

The basic aim of transformational leader is to inculcate the inspiration among the team members and the leader should accept the change and should be flexible if the opinion of the team member is valid and logically acceptable. It is helpful for the leader that his employee motivates and willing to take the challenge and are willing to take the responsibility. This is helpful in the projects and the members of the projects work like a team (Fischer, 2016; Waite Kinney, 2015).

The effect of TL on the achievement of project is tested empirically. There exist the mediating effect on the building of team lies between TL and PS (Aga et al., 2016). As, it is mentioned in the SET ideas are being exchanged and executed by transformational leadership style and is mediating to the success of project. In the domain of project management there exists 'triple constraint' the principles of project success are iron triangle i.e. cost, time and scope/quality. It should be managed properly (Andersen, 2014; PMI, 2016a). The transformational leader should create such an environment among the team that should be helpful and supportive in projects (Sarros et al. 2008).

Transformational leader involves the whole team and creates a positive environment. He also focuses on the building of team, there development and motivated the team members to give the extra ordinary performance (Brown and Moshavi

2005). The transformational leader implemented the work from employee through links and builds a relationship among employees (Humphrey 2002). In the projects transformational leadership plays a vital role to follow the targets of learning (González, 2018).

The quality of the transformational leader is to look in future, and always care about the success of the project through the exchange of ideas like in SET and the main focus is to solve the problem using the new strategies and should be consistent and focused (Zhang et al. 2014). If the leader monitored his/her employee properly then the motivation of the employee will be more otherwise it will be weak (Shin et al. 2017). The success of the management could be understood through the success of project. If the transformational leadership is strong then the execution of the project could be done within the budget, cost and time then such project achieves the success. (Albert et al., 2017). There exists a positive relationship between the TL and PS.

The style of leadership is very complex process and it is different in every organization as per the context of work the like it all depends on the workers, organizations and also the situations in the teams. That's why the style of leadership is taking as an important factor. The success of organization also involves the style of a leader. It ddepends that how a leader train its team members it is very much important in project based organization where the time is less and need the teamwork and understanding among the leaders and its workers. In real estate industry it also gains an importance where at a time the leader is dealing in different industries where the environment of the team is dynamic. In such case if we implement the policy of reward to the employee and give them the incentives could be helpful. It also figure out the power of TL(Campbell et al., 2016).

$H_1$: There is a positive association between Transformational Leadership and project success.

## 2.2   Transformational Leadership and Self-Efficacy

Transformational leadership played a vital role in the success of project this type of leadership is helpful in the projects because the leader promotes the collective interest of employee and it is helpful to achieve the collective goal of project (García-Morales et al., 2012). Transformational leaders are having the capability of team it is helpful for the organization. Building and to influence the team through ambition, motivation, honesty, self -confidence etc. and it is helpful for the success of projects (Calvo-Mora et al., 2014).

In 1997 self-efficacy is defined by Bandura that it is a belief of a person that he/she can perform in a situation. This concept can be used from general to specific. In the generalized form of self-efficacy signifies that a person can perform differently in variety of situations (Smith, 1989). The study of Gong et al. (2009) emphasized the mediating role of SE. It shows that TL could play an important role for the constructing of SE in employees. This research work also provides some addition in the literature of transformational leadership to create a link with SE and its effect on project success with reference to our country Pakistan's real estate project companies and also the educational projects in twin cities. Employee can easily regulate in the varying situation. If the self-efficacy increases in the employees then the performance in the projects enhances and leads to the success of project. We use Bandura Theory of self-efficacy as the supporting theory; it suggested that the employee efficiency increases due to the self-efficacy (Bandura 1977). Hence, if the employee is having high self-efficacy than he/she will perform with the maximum of his/her capacity and will take the suggestion positively for the work and this will lead the success of project.

Similarly, employees with higher self-efficacy are willing to hold a high determination in case of failures and to overcome difficulties effectively (Li et al. 2017a, b). Self-efficacy is having the positive impact in their job attitude and behavior (Saks 1994). If the individual is having the higher level of self-efficacy, then they complete their task in an organized manner and took the action in time to achieve the desired goals and leads to the success of project (Bandura 1986). Tierney and

Farmer (2002) suggested that the person with high self-efficacy have the tendency to solve the complex problem by using the information and it is helpful to complete the project in time and to achieve the desired outcome. Meanwhile, there exists high opportunity in gaining the remarkable results and higher chances of PS (Judge and Bono 2001). As TL involve himself/herself and took the practical steps and to share the creative ideas with employees and also to expect the same from them. Resultantly, the transformational leadership style encouraged the creativity and increases the SE (Dviretal., 2002; BassandAvolio, 1990).

In 1978 Bums perceived the concept of transformational leadership. He distinguished the characteristics of transformational and transactional leadership.TL motivated its employee in such a way that they agreed to work extra for longer hours and has given the fruitful results (Bass, 1985) When individual feels that his/her action will affect the outcome of the given situation then it is the self-efficacy and numerous things will occur at the moment.

Robbins and Coulter (2007) explained the transformational leaders that they can increase the interest of groups to define the goals, and requirements of task clearly. In addition, these leaders are having the appealing personality and got extraordinary results through their followers. Transformational leadership is having the capability of increasing the subordinates' motivation, morale and performance through a lot of methods such as through examples, to provide the vision and mission statement of the organization, and to challenge the subordinates' beliefs and expectations. Some scholars are having the faith that the employees' creativity can be polished by a transformational leadership style (Shin and Zhou, 2003; Jaussi and Dionne, 2003). The prime duty of a leader is to allow the employee to take initiative so that he/she worked confidently and enhance his/her creative abilities. It developed the critical thinking of the employee as well (Boerner et al., 2007). Research scholar Bass (1985) analysed that the TL is having the vision of organization and can inculcate the skills in the employees that through analytical thinking a creative solution of a problem could be devised. In the past few decades TL grew from practical and theoretical perspective as well (Schaubroeck et al., 2012).

Transformational leader is having the capability to encourage the supporters to give the effect beyond the anticipation and it is possible that the employee is tempting to the superior level of beliefs and values (Bushra et al., 2011; Chi and Pan, 2012).

Thus, it is concluded from the above discussion that Transformational leadership is having positive effect with self-efficacy.

**H$_2$:** There is a positive and significant relationship between Transformational leadership and Self-efficacy

## 2.3 Self-Efficacy and Project Success

It is shown by different researcher that self-efficacy is relating to the successful incentive characteristics (Chen et al. 2004). People with varied administrative effort may fluctuate in the method to accomplish the duty. Self-efficacy is considered as an important belief of an individual that he/she can achieve success during the assigned task and complete the task strategically and in time. Self-efficacy is related to the choice of employee (to reach the target and achieve the success of project (Fowler et al., 2018).

Self-efficacy is such an ability of a person that he/she performed action in time and whatever the situation is, tried to cope up and always positive to make the project successful. As in the theory of self-efficacy it is highlighted (Bandura, 1997). Thatswhy in majority of researches self-efficacy is being used as Bandura's (1977) theory of self-efficacy as a hypothetical viewpoint. If the person is having self-efficacy, then he/she works proactively and due to this approach, the project achieved the success. As the self-efficacious person worked sequentially and mostly monitored self-performance and examined his/her own behavior (Pajares, 2002). In Bandura's theory of self-efficacy, it is defined as that a person's belief and his/her own judgment in every aspect of life in professional as well as the social "skills to establish and implement progressions of achievement required to achieve nominated types of presentation" (Bandura, 1986, p. 391).

Regarding this aspect Bandura acknowledged two types of factors in behavior like outcome expectation relevant to the success of project and personal efficacy expectation that is concerned with the beliefs and execution of the behavior of a person in certain beliefs. It's being observed that the personal efficacy expectations are stronger than the first one. Therefore, SE is "concerned not with what one has but with belief in what one can do with whatsoever capitals one can gathered" (Bandura, 2007, p. 6). Self-efficacy is judged according to the person's performance in the projects and to see their effectiveness in the communication of other employees working in his/her group. Learning the complexity of a task during the project and conceiving the ideas as positively and to involve him in the project. To understand the requirement of the project and tried to complete the work within time and focusing on the scope of the project and to take the team along with is the real sense of self-efficacy. It is also helpful in understanding the self-appraisal to meet the demand of the projects. It is the belief of executing the certain abilities of learning the complex task and behavior.it cannot be associated the ability for executing it (Bandura, 2007).

In this case, SE is the principle strength of a person's ability to convey his/her point of view effectively and implementing of actions relating to a certain outcome.SE views are not related to the caliber of a person's ability.(Bandura,2007); it could overestimate or underestimate the ability of a person. Bandura observed that if a person's efficacy is increased slightly in the project then its influence on the projects would be positive. If the person's abilities are over estimating, then it could also be helpful in the project to boost up and to complete it with less time. It is helpful in the projects to be motivated that if any problem raised during the time the employee will tried to solve it positively and should complete it within the available resources. If the employee is underestimating then it could affect the project badly because the person's capabilities are not helpful and unable to achieve the projects goal (Bandura, 2007). Thus, there is a significant link between the SE and PS. Self-efficacy influences goal setting due to high ambition ranks, agreeing for more problematic objectives (Bandura, 1991).

Self-efficacy influences positively in the setting of goals of a project due to the

projecting level of ambition to reach the tough aims in the projects (Bandura, 1991).

**H₃:** There is a positive and significant effect of self-efficacy & project success.

## 2.4 Self-Efficacy as a Mediator in Project Success

In 1977 Bandura suggested that if the self-efficacy of the employee increases then he can easily have adopted the changes that occur in the environment (Bandura 1977). If the employee is positive with the job and feel relax in working environment, and then he can easily have completed the task. The employee felt the job satisfaction and performed his/her task more enthusiastically. Likewise, the employee with high self-efficacy has high morale and has high willpower and can deal the difficulties successfully (Li et al.2017a, b). There exists high opportunity like the performance of employee and fully satisfied with their job (Judge and Bono 2001). By combining the assumption, that in the success of project and the satisfaction of employee is mediated by the self-efficacy. The individual's ability provides the outstanding results of an organization is known as the creative SE (Tierney and Farmer, 2002). If the individual has resilient inside confidence on his strength then it is the greater level of self-efficacy and with low budget the project got success (Tierney and Farmer, 2011). To improve and attaining the skills SE is a critical variable for the projects (Bates and Khasawneh 2007; Gravill and Compeau 2008). Some scholars suggested that when an employee is involved in the work their creativity increased and is helpful in finding the solutions (Gist and Mitchell, 1992). If the employees are highly self-efficacious then they know themselves and highly evaluated and completed the assigned task successfully. They are having the confidence in their abilities (Xanthopoulou et al., 2009b). As the employees are less self-efficacious and are not confident in their abilities, they are not willing to work feasibly and create problem. Overall it is suggested that the self-efficacy of the employees could be strengthen and indirect effect of

Transformational leader helped to succeed the project in time (X.Lu etal., 2018). Liu, Liao, and Loi (2012) recommended that the employee learned to the behavior of their leader. Normally people give response to the positive outcome rather than negative (Bandura, 1977, 1986).

An undergraduate student, Choi (2004) suggested that for the success of projects TL should have the direct connection of the SE of employee and should know the professional strength. So, that the SE is mediating in the TL and it leads to the success of projects. SE autonomously linked to the number of tasks in diverse fields. But the minor amount of revisions discussed SE as a part of conceptual model, and findings were mixed. Transformational leadership mediating SE (Stajkovic et.al,2018). Sheu, Liu, and Li (2017) verified in their studies that SE is partially mediating.

The transformational leader work for future and focused on the gains and applied the innovative strategies to achieve the goals (Zhang et al. 2014). If the employee satisfied with the TL, then he/she is having high SE otherwise it will weaken the relationship (Shin et al. 2017). Leaders who endorse transformational behaviours there emphasis are on the aptitude of admirers to change and make the development of individual (Bass, 1999). Such leaders sponsor an eye-catching prophecy of the future (Judge & Piccolo, 2004) and it allows the supporters to scrutinize present difficulties, arrangements, work actions and applies after a new attitude of view (Groves & La Rocca,2011; Zhang, Tsui & Wang, 2011; Yukl, 2009).

The main focus of the study is to discover in what way and at what time transformational leader involved the workers and to see the devised strategies that how its effect trickles down to the rest of employees. Relying on the part of Social Cognitive Theory the theory of SE, we proposed that Transformational Leader mediating the relationship between the work commitment of leader and self-efficacy that support the outcome of project success. From the research work it is found that SE is positively related to the TL and PS. It is having the indirect effect on PS (X. Lu et al., 2018).

Hence, Transformational Leadership and Project Success is mediating the self-efficacy

**H$_4$:** There is a mediating effect of self-efficacy in Transformational Leadership & Project Success.

## 2.5 The Moderated Effect of Conscientiousness on Project Success

Conscientiousness is defined as the ability of an individual to be effective, careful and to perform the things in a consistent manner. Conscientiousness states to the individual leaning to be effective, vigilant, and methodical. (Hastings & O'Neill, 2009; Saucier, 1994). The social exchange theory stated those actions that are dependent, and rewards are benefitted to the beneficiaries (Blau, 1964).

Conscientiousness enables the involvement of task and effort, nurturing the beliefs of higher self-efficacy (Brown, Lent, Telander, & Tramayne, 2011; Chen, Casper, & Cortina, 2001). Conscientiousness linked strongly with SE (Deci & Ryan, 2000). The person is conscientious is more successful and confident (Barrick & Mount, 1991). Conscientiousness is mostly used variable and it is connected to the theory of exchange and is moderated and project achieved the success. Weirdly, in the research it is discussed rarely on the impact of contentiousness on other personalities that how successful are they in the workplace. It is also the need to investigate that how it played the vital role in the success of project. Like TL when interact with the person who is conscientious in behavior and is also having the high self-efficacy can give the outstanding results (Judge etal., 2001).

Caniel et.al, (2018) is having a positive personality and it is related to the success of project. According to the Social Exchange Theory it is stated that it is engaged the employee and created the positive impact. This study exhibits that this proportional is moderated between the TL, conscientiousness and PS. When the conscientiousness is moderated with transformational leadership it contributed in such a way that the employee engaged himself/herself in the work and then it leads to the success of project. The moderating effect of personality trait like conscientiousness and the mediating effect of self-efficacy are having the connection

between transformational leadership and project success. Although, it is very rare in reality but sometimes personality trait strengthen the effect of the success of project (Aydogmus et.al, 2017).

Conscientiousness comprises of taking responsibility, organized, faithful, watchful and meticulous. A lot of researches prove that from Big-Five personality traits conscientiousness is the only trait that is helpful to improve the employee work habits and could played a vital role to reach the success (Winkelmann & Winkelmann, 2008; Furnham, Eracleous, & Chamorro-Premuzic, 2009).

Ehrhart and Klein (2001) findings in the study that the person having conscientiousness in the personality sets high targets in mind and also have the high self-esteem ,it is positively related to the transformational leadership (Hetland, Sandal, & Johnsen, 2008).

**H$_5$:** There is moderating effect of conscientiousness on the relationship of Self efficacy & Project Success such that it strengthen the relationship.

## 2.6 Research Model



FIGURE 2.1: Research Model of Impact of Transformational Leadership on Project Success with Mediating Effect of Self-Efficacy and Moderated Effect of Conscientiousness

## 2.7 Research Hypotheses

**H$_1$:** There is a positive association between Transformational Leadership and project success

**H$_2$:** There is a positive and significant relationship between Transformational Leadership and Self-efficacy

**H$_3$:** There exists a positive and significant effect of Self-efficacy & Project Success

**H$_4$:** There is mediating effect of Self Efficacy in between the Transformational Leadership and Project Success

**H$_5$:** There is moderating effect of conscientiousness on the relationship of Self efficacy & Project Success such that it strengthen the relationship.

# Chapter 3

# Research Methodology

## 3.1 Introduction

We will talk over in this chapter regarding the methods that are being used to find relationship on the impact of Transformational leadership on project success with mediating effect of self-efficacy and moderating effect of conscientiousness and there results. This chapter included the details of method that has used to nd the results of our research to check the hypothesis either accepted or rejected. In this chapter to check our hypothesis we analyze through research design, population, unit of analysis, sample size, characteristics of sample, techniques of research and the use of reliability parameters and instrumentation. The result is being interpreted according to the analyzing.

## 3.2 Research Design

In the design of research it is represented the general method to the different working of the study is being chosen. It is verified in a clear and logical way, we will professionally discuss the study problem; it creates the draft for the gathering, measurement, and analysis of data. In brief it is the outline of research plan of action. Polit et al (2001:167) define a research design as "the researcher's overall for answering the research question or testing the research hypothesis".

The research design comprises of time horizon, types of setting and unit of analysis i.e. discussed below:

### 3.2.1 Type of Study

The emphasis of the study is to perceive the impact of transformational leadership style and its effects seen on the projects in Pakistan, the sample of the study is the employee of project sector and their employees as well. This is a basic study whe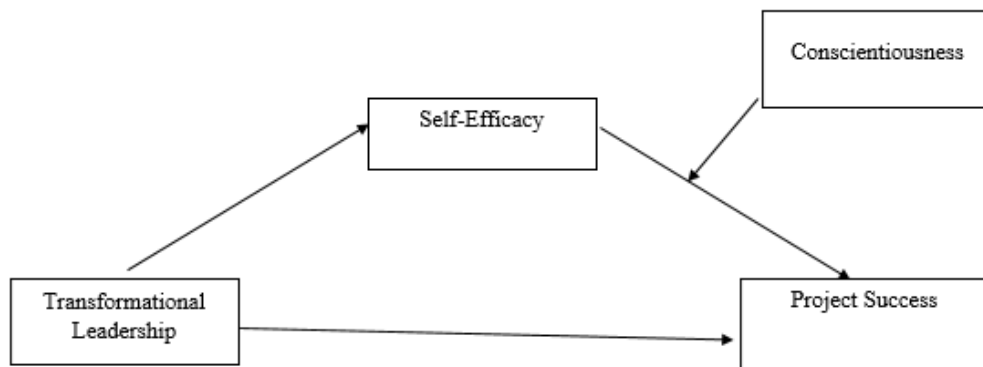re the impact of transformational leadership on project success with the mediating effect of self-efficacy and moderated effect of conscientiousness was measured based on self- reported perception.

## 3.3 Research Philosophy and Quantitative Research

In this research Hypothetic-deductive method has been followed. In the literature the grey area was the mediating role of self-efficacy need to be discussed. On this basis we form a model and develop the hypothesis accordingly. We inculcate the existing theories from past literature and to investigate that either it accepts or negate the theories in our study.

In order to test the data empirically we adopt the quantitative method rather than qualitative due to the limitation of time.

## 3.4 Unit of Analysis

Unit of analysis is an important feature of any study. In the present dissertation unit is being analyzed by individual. We are analyzing the quality of a transformational leader in this study, therefore the targeted population that is being analyzed is employees of different sectors i.e. Education, Real Estate etc. In this study, we used to collect data from employees. For this study unit of analysis was

the individual of private project based organization's employees from Twin cities Rawalpindi and Islamabad.

### 3.4.1 Time Horizon

The data was collected from different multinational project based organizations. As the time was limited so we collected the data in three weeks, as its nature is cross sectional. It is collected from different individuals or groups at a single point in time.

### 3.4.2 Data Collection

When, we are conducting the quantitative research. It is very important to determine the sample size of the study. Our sample needs to represent the population like in our study the population is of real estate and education sector. As it is impossible to collect the data of all the population of these sectors so we decided our target population as the real estate and education's sectors sample of private project based organization.

To prove the proposed model as well as the testing of hypothesis. The collection of data in the limited time is very difficult process so for this purpose the optimum sample size is being decided and to collect the data of 400 employees from the twin cities like Rawalpindi and Islamabad. The data is collected from the single time period. We are investigating the impact of transformational leadership on project success. Our survey was developed for employees in which employees were required to rate their transformational leaders, self-efficacy and conscientiousness, and the project success.

For the collection of data, we visited different real estate organization and educational institutions as well. We took the permission from the PM after confirming the purpose of our study. For this purpose, they took the surety that their data will be kept as confidential and could be used only for the educational purpose. Then the questionnaire is filled in the organization by the employee of taking their

interview after giving them the full information. The questionnaire was attached with the cover letter. We gather data of transformational leader (IV) and conscientiousness(Mod) both were employee rated, whereas we asked respondents about their Self-efficacy (Med) that was employee rated and project success (DV) that was also rated by the employee. In the beginning 400 questionnaires were distributed among employees, but we received 290 responses. After the scrutinizing the invalid responses only 253 valid responses were used for analysis. The response rate was 56%.

## 3.5 Population and Sample

### 3.5.1 Population

Due to the limited time and limited resources it is impossible to collect the data of entire population. As in our case the population of the study was the entire real estate sector and all the educational projects in twin cities. As real estate sector played a vital role and it is gaining the importance due to the interest of the people from the last few decades. As the real estate sector market is cheaper than internationally that's why it is having the vast influence. Therefore we selected the real estate population in our dissertation. Education played an important role for the economic growth of the country. But it is also helpful for the improvement of the income. Education is the pre requisite. Innovative educational projects would be helpful to improve the education sector. That's why we selected the education sector in the study. It was impossible to cater the population of entire education sector and real estate sector in twin cities Rawalpindi Islamabad. We have taken the sample of these two sectors of limited institution.

To solve this problem the quantitative research of the sample is being used. For this purpose, the convenient sampling technique is being used i.e. the form of non-probability sampling. Such sample size is being collected to represent the characteristics of the full population. In conveniently sampling technique we collect

the data randomly. That's why we select the random respondent that could be accessed conveniently.

To achieve the objective of the study as mentioned above, we have to check the impact of transformational leader on employees, that's why the sample is distributed to the employees and got the permission to their mangers of the projects to evaluate them.

The data is collected through the questionnaire that is being distributed in the organizations in hard copies and is attached with the cover letter and the brief description of the topic is mentioned. We choose those employees who played the active role in project industry therefore that could be the representation of all population.

We distributed 400 questionnaires. We contacted to the multiple organizations few companies denied but few helped us to gather the data from employees.

### 3.5.2  Sample and Sampling Technique

The data collection from the entire population is impossible due to the limited time and scarce resources. Convenient sampling technique is used, 56% valid responses are considered. In Pakistan the real estate industries and education sector played a vital role in projectized industries.

## 3.6  Sample Characteristics

To know the characteristic of the sample we use the multiple demographic to ask from respondents. The demographic characteristics are different according to the nature of study. Commonly used demographics are age, gender, qualification and experience.

Following are the details of demographics:

### 3.6.1  Age

According to the Merriam Webster dictionary age is defined as the development of an individual to measure in terms of years.

Age played a vital role in the project based organization and it is helpful to know the maturity of a person and it determines the self-efficacy of a person that as much as the employees know about themselves, the organization will progress more.

He/she will accept the challenges positively and to follow the leader in the positive way.

TABLE 3.1: Frequency by Age

| Age | Frequency | Percent |
|---|---|---|
| 20-25 | 83 | 32.8 |
| 26-33 | 94 | 37.2 |
| 34-41 | 57 | 22.5 |
| 42-49 | 12 | 4.7 |
| 50 and Above | 7 | 2.8 |
| **Total** | **253** | **100** |

Table 3.1 shows that majority of the respondents are lying between the age of 26—33. 37.2% of the respondents from 253. The respondents having the age between 20—25 were extending to 32.8 %. The respondent from age 34-41 is comprises of 22.5%.4.7% respondents were of 42-49 and only 2.8% respondents were 50 and above.

## 3.6.2 Working Tenure in the Organization

The second demographic for the study is the working tenure in the organization. As our study is relevant to the Impact of transformational leadership and their behavior according to the self-efficacy, it is having the vital importance to see the theoretical effect and for this purpose working tenure in the organization played an important role. While distributing the questionnaire we also ask the working experience of the employee in that specific project based organization to check the importance of projects as well. It is helpful to know the stability of the leadership as well. It is also an indirect measurement to see the impact of leaders.

The following table explains the working tenure of the employee in project based organization. It accounted the time spent by an employee in an organization also

TABLE 3.2: Frequency by Working Tenure

| Experience | Frequency | Percentage |
|---|---|---|
| 0–5 | 55 | 21.7 |
| 6–10 | 58 | 22.9 |
| 11–15 | 76 | 30 |
| 16–20 | 50 | 19.8 |
| 21–25 | 12 | 4.7 |
| 26–30 | 2 | 0.8 |
| **Total** | **253** | **100** |

Table 3.2 explains the frequency and percentage base of an employees working tenure. It shows that 30 % of the employees are working 11—15 years more than years of the total sample. 22.9 % respondents were having the experience of 11–15. While 19.8% respondents are having the experience of more than 16—20 years. 4.7% respondents are having the experience of 21–25 years. The mere .8% respondents were having the experience of 26–30 years.

### 3.6.3   Gender

To minimize the effect of the gender discrimination we tried to collect the data of both genders. As our study is focusing on the real estate and education sector. To see the impact of both, gender the underneath table explains the detail of this study.

TABLE 3.3: Frequency by Gender

| Gender | Frequency | Percent |
|---|---|---|
| Male | 121 | 47.8 |
| Female | 132 | 52.2 |
| **Total** | **253** | **100** |

Table 3.3 explains that the proportion of female is more as the data is collected from the education sector and real estate as well to show that in these sectors female contributed 52.2% while the contribution of male is 47.8%.

### 3.6.4 Qualification

The study chose the real estate and education sector for the collection of data. These industries have the mix of qualification. But the industries require more competent knowledge of the field that comes after experience than the qualification. Qualification also played an important role in the jobs.

The following table depicts the real picture.

TABLE 3.4: Frequency by Qualification

| Qualification | Frequency | Percent |
|---|---|---|
| Bachelor | 86 | 34 |
| Master | 136 | 53.8 |
| MS/M.Phil. | 27 | 10.7 |
| PHD | 4 | 1.6 |
| **Total** | **253** | **100** |

Table 3.4 shows that 53.8% respondents were having the qualification of master's degree.34% respondents are having bachelor's degree. 10.7% were having the MS degree and 1.6 % were having PHD of the entire sample.

## 3.7 Instrumentation

### 3.7.1 Measures

The collection of data is the most difficult part in the empirical studies. In this research we collected the data through the adopted questionnaires that is being created in the prior studies created by the prominent scholars. The data was collected through structured questionnaire. . We used Purposive sampling to the real estate and education sector. The item's nature was mixed it was filled by the employees as well as the leaders. The questionnaires were responded through the 5-points Likert scale where 1 was considered as strongly disagree to 5 is considered as strongly agree. It also consists of four demographic characteristics that is being discussed above.

### 3.7.2 Transformational Leadership

Transformational leadership style was measured through Multi-Factor Questionnaire in which transformational leadership was having 13 items. Its scale was developed by Hinkin and Schriesheim in 2008. The five-point Likert-type scales were attached on the extremes of 1 (not at all) to 5 (frequently, if not always).

### 3.7.3 Self-Efficacy

Self-Efficacy was measured using 8 items questionnaire developed by Chen and Gully (1997). A 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5).

### 3.7.4 Project Success

Direct measurement of Project success the standard tools are not available in publishing literature, and one tool which consists of previous research (Suprapto, Bakker & Mooi 2015; Mir & Pinnington, 2014; Khang & Moe, 2008). Recently used by Aga and Vallejo (2016) and reported good reliability .930. The sample item is 'The project was completed on time'. This project success measure consists of 14 items. These are measured through 5-point Likert scales ranging between 1'strongly disagree' and 5 'strongly agree'.

### 3.7.5 Conscientiousness

Conscientiousness was measured using 6 items it was developed from FFPI by Hendriks Hendriks, A. A. J., Hofstee, W. K. B., & De Raad, B. (1999). A 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5).

## 3.8 Control Variables

The basic purpose of one-way ANOVA is to test that either two or more differ from each other significantly in one or more characteristics.

TABLE 3.5: Instrumentation

| Variables | Sources | Items |
|---|---|---|
| Transformational Leadership (IV) | **Hinkin & Schriesheim in 2008.** | 13 |
| Self-Efficacy (Med) | **Chen & Gully (1997).** | 8 |
| Project Success (DV) | **Suprapto, Bakker & Mooi 2015** | 14 |
| Conscientiousness (Mod) | **A. A. J., Hofstee, W. K. B., & De Raad, B. (1999).** | 6 |

To identify the control variables, we conduct one-way ANOVA. We identify all the demographic variables like gender, age, qualification one by one with dependent variable. All the variables are significant in our case represented that for the success of transformational leadership demographic variables play the vital role. The data is normally distributed.

TABLE 3.6: One-Way ANOVA (Control Variables)

| Variable | F | Significance |
|---|---|---|
| Gender | 3.282 | .000 |
| Age | 4.256 | .000 |
| Qualification | 3.485 | .000 |
| Experience | 2.321 | .001 |

## 3.9 Reliability Analysis of Scale Used

In current study we use the Cronbach Alphas and all the scales were reliable. Higher the value of Cronbach alpha higher would be the reliability. The scale ranges from 0 to 1, the values of the alpha were higher than 0.7 to show that the data is reliable. The reliability is reported in the table given below:

Table 3.7, lists the Cronbach alpha of all the scales that were used in the study. All the values of Cronbach alpha for the items used under the study are above 0.7 that confirms the internal consistency of the items.

TABLE 3.7: Scale reliabilities

| Variables | Cronbach Alpha | Items |
|---|---|---|
| Transformational Leadership | 0.895 | 13 |
| Self-Efficacy | 0.826 | 8 |
| Project Success | 0.899 | 14 |
| Conscientiousness | 0.77 | 6 |

# 3.10 Statistical Tool and Data Analysis Technique

The data was collected from 253 employees and different test were performed to analyze the data. The data was checked for model fitness, reliability, regression and the correlation of the variables in the study. To check the impact of one variable over the other we run the regression analysis. We use SPSS21 version was used.

Following is the procedure of the sequence of the test to the collected data.

1. In the first step, the focus was to sort out the completely filled questionnaire.

2. The next step was the calculation of frequency table to check the missing values and incorrect entries. The demographics of the variables are also done in tabular form for the clear understanding of the impacts of variables

3. In third step, was to be done to check the reliability analysis of the various scale that were used in the study.

4. The next step was the calculation of hypothesized model. These were reported in tabular form

5. The composite variables of model were calculated

6. The study through one-way ANOVA test done to check the impact of one variable over the other variable

7. The correlation analysis was done to check the relationship of variable in the model

8. Then Andrew F. Hayes model 14 test is to run to check the mediation and moderation among the variables

9. In the final step the model is analyzed through values

# Chapter 4

# Results

## 4.1 Data Analysis

## 4.2 Descriptive Statistics

In descriptive statistics we extract the information about the data. In descriptive statistics comprise of number of respondents, minimum, maximum value. It also shows the means and standard deviation of every variable. In the mean values we explain the average of the variables while in standard deviation it states that how much data is deviated towards the mean. We use 5-point Likert scale in all variables. It signifies the significant level of variables

In order words descriptive statistics explain the summary of whole data because it shows the significant level of the statistics points.

Following is the table represents the level of significance of whole data.

TABLE 4.1: Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Project Success | 253 | 1 | 4 | 4 | 0.59 |
| Transformational Leadership | 253 | 2 | 5 | 4 | 0.56 |
| Self-Efficacy | 253 | 2 | 5 | 4 | 0.51 |
| Conscientiousness | 253 | 1 | 5 | 4 | 0.75 |

The table 4.1 interprets that there are 253 numbers of respondents in total. The table shows the minimum and maximum value of each variable. The minimum value of Project Success is 1.40 and maximum is 4.80. The minimum value of Transformational Leadership is 2.25 and maximum value is 5. The minimum value of Self Efficacy is 2.22 and maximum value is 4.89. The minimum value of Conscientiousness is 1 while its maximum value is 5.

The means and standard deviation of the variables are: The mean of Project Success is 3.81 while the standard deviation is 0.599. The mean of Transformational Leadership is 3.77 and standard deviation is 0. 569.The mean of Self Efficacy is 3.955 while the standard deviation is 0.515. The mean of Conscientiousness is 3.66 whereas the standard deviation is 0.750 respectively.

## 4.3 Correlation Analysis

The purpose of Pearson correlation is to calculate the linkage of overall variables and to check the relationship between the variables. The range of correlation is between -1 to 1. The level of association is shown in the magnitude of values. The positive and negative sign of the predictor shows the direct and inverse relation between the predictor. The positive sign indicates that if one variable increases then other will also increase. When the negative sign appears, it means that there is inverse relationship between variables means that if one increases other will de crease or vice versa.

As the value is near to 1 it shows the strong direct relationship if the value is near to -1 the relationship is inverse or indirect relationship. Though, it shows that the relationship exists between the predictors.

Accordingly, the acceptance and rejection of hypothesis could not be interpreted on the basis of correlation analysis. Though regression analysis is done for hypothesis testing.

TABLE 4.2: Correlations

| Variables | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| Transformational Leadership | 1 | | | |
| Self-Efficacy | .539** | 1 | | |
| Conscientiousness | .267** | .251** | 1 | |
| Project Success | .497** | .559** | .545** | 1 |

**. Correlation is significant at the 0.01 level (2-tailed).

Generally, in demographic we ignore the correlation. Table 4.2 shows the results of correlation analysis and moderated relationship exists between the variables. There exists a positive significant correlation between transformational leadership (dependent variable) and self-efficacy (mediator) where r = 0.539 and p < 0.01. Moreover, there exists a positive significant correlation between transformational leadership (dependent variable) and conscientiousness (moderator) i.e. r = 0.267 and p < 0.01. There exists a positive significant correlation between transformational leadership and project success is r = .497 and p < 0.01

Between self-efficacy and conscientiousness there is positive significant correlation where r = 0.251 and p < 0.01, whereas positive significant relationship exists among conscientiousness and project success where r = 0.545 and p < 0.01. Self-efficacy is positively correlated with project success where r = .559 and p < 0.01.

## 4.4 Regression Analysis

In correlation the relationship between the variables are shown but it does not explain the cause and effect relationship that how a variable shows its impact on the change in variable. It not only explains the predictor and dependent variable. In regression analysis we check the cause and effect relationship of IV and DV.

TABLE 4.3: Regression Analysis

| Project Success | | | | | |
|---|---|---|---|---|---|
| Predictor | B | R2 | R2 | F | Sig. |
| Model | | | | | |
| Transformational Leadership | 0.523 | 0.247 | 0.24 | 82.2 | .000 |

As Table 4.3 shows that the overall model is statistically significant. The proportion of variation in the project success can be explained by the transformational leadership and shows 0.24 variations. As the value is between 0 to 1 so it's better. The p values show that the model is significant. The F value shows that the model as a whole is significant i.e. 82.229. The association between transformational leadership and project success is statistically significant this indicates that there exists direct relationship between Transformational Leadership and Project Success .So, it accepted the hypothesis of positive and significant relationship between Transformational Leadership & Project Success.

$H_1$ : There is a positive association between Transformational Leadership and project success

## Transformational Leadership and Self-efficacy

TABLE 4.4: Regression Analysis

| Self- Efficacy | | | | | |
|---|---|---|---|---|---|
| **Predictor** | **B** | **R2** | **$\Delta$R2** | **F** | **Sig.** |
| Model Transformational Leadership | 0.48 | 0.29 | 0.28 | 102.5 | .000 |

As Table 4.4 shows that the overall model is statistically significant. As Results have shown that there is a positive and signicant relationship exists between Transformational Leadership and Self-efficacy. The R2 = 0.290 and $beta$ = 0.487 with the signicant p < 0.001, R2 shows the coecient of determination and explains the model is statistically significant while the value of $beta$ shows the rate of change determines that1 unit change in transformational leadership leads to 0.487 change in self-efficacy. As the value lies between 0 to 1 so it's better. The p value shows that the model is significant. The F value shows that the model as a whole is significant i.e. 102.582. The association between transformational leadership and self-efficacy is statistically significant this indicates that there exists direct relationship between Transformational Leadership and Self-Efficacy .So; the hypothesis of positive and significant relationship between Transformational Leadership & self-efficacy is being accepted.

$H_2$ :There is a positive association between Transformational Leadership and self-efficacy.

**Self-efficacy and Project Success**

TABLE 4.5: Regression Analysis

| Project Success | | | | | |
|---|---|---|---|---|---|
| **Predictor** | **B** | **R2** | **ΔR2** | **F** | **Sig.** |
| Model | | | | | |
| Self-Efficacy | 0.65 | 0.31 | 0.30 | 114.04 | .000 |

Table 4.5reveals that the results are meeting threshold values ($beta = 0.65$, p<0.001, R2 = 0.31)

It determines that if there is one unit change in self-efficacy then it leads to approximately 31% change in project success. It shows the significance and the values are statistically significant. It shows the positive relationship between self-efficacy and project success that if there is increase in self-efficacy then the success of project is evident. Hence, H3 is also accepted.

$H_3$ : There is positive relationship between self-efficacy and project success.

## 4.5   Mediation

For this purpose, we use through the process of Andrew F. Hayes through the model 14. This model is used to show the mediated moderation. The mediator is such kind of variable that explains how or why an independent variable is related to a dependent variable. Mediation can be explained through the question of "how did it work?'. Its focus is to consider the mechanism, causal chain of events, or the underlying process. So, mediation is whether the predictor to outcome relationship operates by a third variable like predictor is TL outcome is PS and third variable is SE. so we see that either the TL has an effect on PS because it impacts some other variables or through some other variable. The partial mediation is mostly observed than full mediation. In other words, it is less likely a mediator will explain

all of the variation between transformational leadership and project success. This suggests there is a dire need to discover the additional mediators in future studies, that the other mediators are also important for the success of project not evident in our study. When there is mediation then the relationship between the predictor and other outcome becomes "0" and this is called the case of full mediation. In the mediation there is a direct and indirect effect, in case of mediator there is the indirect effect of predictor and outcome and in our case, it is the relationship between TL and PS. Then the next thing is to understand that there is direct and indirect effect, we have the significant relationship in the direct and indirect effect of mediation. The output of mediation has obtained through process by Andrew F. Hayes model number 14 we have boot strap at 5000. While doing this mediation analysis we opted OLS/ML confidence and compared the direct as well as indirect effect.

### Outcome: Self-Efficacy

TABLE 4.6: Model Summary

| R | R-sq | MSE | F | df1 | df2 | P |
|------|------|------|--------|-----|-----|------|
| 0.53 | 0.29 | 0.18 | 102.58 | 1 | 251 | .000 |

### Model

|          | coeff | Se   | T     | p    | LLCI | ULCI |
|----------|-------|------|-------|------|------|------|
| Constant | 2.11  | 0.18 | 11.51 | .000 | 1.75 | 2.47 |
| TL       | 0.48  | 0.04 | 10.12 | .000 | 0.39 | 0.58 |

Table 4.6 in model summary first we see the section with outcome self-efficacy. Then we see the predictor and mediator relationship here. We see the P value suggested that SE is having significant relation with PS and TL. Where p = .0000 at $p < 0.05$ the beta coefficient does not carry the value of "0" as our LLCI (Lower Level Confidence Interval) and the ULCI (Upper Level Confidence Interval) does not include and show the positive relationship. It shows that mediation exists. Similarly, in the next section of table the outcome SE to include the TL. TL are

statistically significant with the coefficient value 0.4872 where p < 0. 05 also the beta value with LLCI and ULCI does not include the value of 0 thatswhy we can say it is statistically significant and it is evident that mediation exist between the variables.

## 4.6   Direct, indirect and total effect

The second name of mediation is also an indirect effect of X(TL) on Y(PS) through M(SE). The confidence interval in the table gives the reasonable range of values for the estimates. If the 95% confidence interval does not have zero at the selected level, then it is statistically significant at p < 0.05. If indirect effect is significant then it also supports mediation.

Values for quantitative moderators are the mean and plus/minus one SD from mean.

Values for dichotomous moderators are the two values of the moderator.

TABLE 4.7: Direct Effect of Transformational Leadership on Project Success

| Effect | SE | t | p | LLCI | ULCI |
|--------|------|------|------|------|------|
| 0.24 | 0.05 | 4.44 | .000 | 0.13 | 0.35 |

Table 4.8 depicts that there is positive and significant relationship exist between SE an PS as the p value is .000 and p < .05 its LLCI is .1360 and ULCI is .3520 that is more than zero and shows the positive and direct effect between the predictor and mediating PS.

Logically, the questions of how are naturally using the process of mediation analysis (e.g., Baron & Kenny, 1986; Judd & Kenny, 1981; MacKinnon, Fairchild, & Fritz, 2007a), This is the total indirect effect of Transformational leadership on project

TABLE 4.8: Total Indirect Effect

| | Index | SE(Boot) | BootLLCI | BootULCI |
|--------|-------|----------|----------|----------|
| **SE** | -0.12 | 0.04 | -0.22 | -0.04 |

success, through self-efficacy. This is equal to the last coefficient from above subtracted from the first coefficient above. This gives the significance; so again, we can say that the indirect effect is significant. As the LLCI is -.2214 and ULCI is -.0424 and is more than 0 and show the positive relationship. It proves that there is mediating effect of SE in TL & PS.

$H_4$ : There is a mediating effect of self-efficacy in Transformational Leadership & Project Success

## 4.7 Moderated Analysis

The moderator relationship displays that when or under what conditions an independent variable is related to a dependent variable. The question of when is mostly answered through the analysis of moderation (e.g., Aiken & West, 1991; Jaccard & Turrisi, 2003). **Product terms key:** int_1 SE X CON

TABLE 4.9: Moderation Analysis

|           | coeff | Se   | T     | p     | LLCI  | ULCI  |
|-----------|-------|------|-------|-------|-------|-------|
| Constant  | -3.37 | 0.92 | -3.65 | .0003 | -5.18 | -1.55 |
| SE        | 1.28  | 0.22 | 5.68  | .000  | 0.83  | 1.72  |
| TL        | 0.24  | 0.05 | 4.44  | .000  | 0.13  | 0.35  |
| CON       | 1.35  | 0.25 | 5.22  | .000  | 0.84  | 1.86  |
| Int_1     | -0.25 | 0.06 | -4.02 | .000  | -0.38 | -0.13 |

Table 4.10 demonstrate that there is significant moderated relationship exist as it is visible in interaction term the p value is .0001 where p <0.05 and LLCI is -.3846 and -.1317 should not include zero in our case. It shows the positive significant relationship and validated the moderated mediation.

$H_5$ : There is moderating effect of conscientiousness on the relationship of TL & PS

## 4.8 Summary of accepted and rejected hypotheses

Following is the table to represent the summary of acceptance and rejection of hypothesis to show that all the hypotheses are accepted

TABLE 4.10: Summary of Accepted and Rejected Hypotheses

| Hypotheses | Statements | Results |
|---|---|---|
| **H1** | There is a positive and significant relationship between TL and PS | **Accepted** |
| **H2** | There exist a positive and significant effect of TL & SE | **Accepted** |
| **H3** | There is a mediating effect of self-efficacy in SE & PS | **Accepted** |
| **H4** | There is a mediating role of SE in between the TL and PS | **Accepted** |
| **H5** | There is moderating effect of conscientiousness on the relationship of TL & PS | **Accepted** |

# Chapter 5

# Discussion and Conclusion

## 5.1  Discussion

The purpose of this study is to explore the impact of transformational leader to see the involvement of leader in the project success. Its aim is to see the qualities of leadership's effect in the success of projects. To address the unanswered question is the specific objective of this research to find the impact of transformational leadership and the success of project with reference to our beloved country Pakistan. By the help of different variables, we create the link between transformational leadership and project success. Moreover, this research investigates the moderated role of conscientiousness on the relationship between TL and PS. The data for these understudied proposed hypotheses is collected from the education and real estate sector of Pakistan.

Following are the conclusions of the study:

The first hypothesis suggests that there is a positive and significant relationship between TL and SE and got accepted. In other words, TL leads to SE that is supported by the literature (Fowler et al., 2018) is proven in the context of Pakistan. Furthermore, when the TL perceive the quality of employee he/she enhance the SE and it leads to the success of project. Therefore, the second hypothesis is accepted too, which proves that SE is positively associated with the success of projects. Similarly, H3 also proved the result that there is mediated effect of

self-efficacy in TL and PS and it is accepted and is authorized in literature as well (X.Lu etal., 2018).There are different studies that prove the relationship between these variables. Although very few studies are available but to show the indirect relationship, so in our study we address in this part. Hence, SE mediates the relationship among the transformational leadership and project success. According to H4, if there is a positive association between Transformational Leadership and project success it is accepted. Lastly, there is moderating effect of conscientiousness on the relationship of TL & PS is H5 that is accepted. It is proved through the analysis of data and concluded that TL is moderating conscientiousness through PS. The in-depth discussion is given below:

### 5.1.1 H$_1$:There is a positive association between Transformational Leadership and Project Success

One of the major critical success factors is leadership style in project management literature (Aga, Noorderhaven, & Vallejo, 2016). And transformational leadership is influential leadership style which always leads to project success (Yang et al., 2010). A transformational leader inspires the followers to generate positive work behavior (Avolio et al., 2004). Although, extensive literature on transformational leadership has been concise by the researchers and attributes of transformational leaders has been converted into four broad dimensions (Aga, Noorderhaven, & Vallejo, 2016).

Hence, by internalizing the leaders attributes and inspiration of that leader foster the employees to develop innovative and creative work style which resultantly leads to whole project success. The Project Management Institute (PMI) defines" project success as balancing the competing demands for project quality, scope, time, and cost, as well as meeting the varying concerns and expectations of the project stakeholders" (PMI, 2008, p. 9). So, we identify that transformational leaders meet the expectations of employees who are the core stakeholder for a project and raise their self-efficacy, also motivate them that resultantly leads the project towards success. Explanatory value of Social exchange theory has been

felt in the area of leadership (Liden, Sparrowe, & Wayne, 1997). SET portrays that for employee workplace is a platform of developing interpersonal connections. The development of interpersonal relationship is also known as social exchange of relationship (Cropanzano, Byrne, Bobocel, & Rupp, 2001).

For example transformational leadership whenever inspires his followers by its unique attributes, resultantly employees feel strong belief on their leader which engender beneficiary consequences in form of project success. According to Cropanzano and Mitchell (2005) individual reciprocate the benefits or behaviors they receive in exchange process. Hence, we express through current dissertation that employees are likely to offset the attributes of transformational leadership ehich they internalize in form of the project success (Malatesta & Byrne, 1997; Masterson, Lewis, Goldman, & Taylor, 2000).

## 5.1.2 H$_2$:There is a positive and significant relationship between Transformational Leadership and Self-Efficacy

Transformational leadership is having the relationship with self-efficacy got accepted because it showed the significant relation.

We see the P value suggested that SE is having significant relation with PS and TL. It shows the strong relationship and is supporting by literature. It is also proved with reference to our country Pakistan.

Self-efficacy theory stated that if the person is confident and have the belief in him/her can achieve the success. The positive behavior of the leader is helpful and if its self-efficacy is strong then he can do a lot of things. The Bandura theory of Self-Efficacy is suggested that SE is mediating the relationship and is proven in the results as well. Employees are motivated and to perform the work with enthusiasm.

The self-efficacious leader is having the proactive personality. Employees are highly motivated and perform the task due to his positive attitude the.

### 5.1.3 H₃: here exists a positive and significant effect of Self-Efficacy & Project Success

Employees with high self-efficacy are more self-believers that they can change situation even of failure project (Bandura, 1997). Furthermore, the higher self-efficacy in employee raise their belief on themselves which help the employees to cope with uncertain and aversive situations (Whyte, Saks, Hook, 1997).So, on the basis of literature we claim that project comprises self-efficacious team members with one agenda can make it more successful. Bandura (1997) also defines that the literature is replete with successes of employees who have high self-efficacy.

Self-efficacy theory illustrate that efficacy leads to positive work outcomes (Bandura, 1997). Also, given behavior leads to certain behavioral outcomes, so, the employee who has self-belief, clear goals and perceiving motivation from their leader as well as co-workers will leads to achievement of project success. Moreover, if we are raising high self-efficacy in employee, it will help to achieve the project success in minimum time. It is because the employee has the self-belief that they will successfully accomplish the project which helps them to turn around the failure of project (Bandura, 1977).

Social exchange theory also elucidated that whenever individual get positive encouragement from the environment, resultantly, he tried his best to put back the better outcomes as compare to perceive in order to exchange process. With compliance of Social exchange theory, we recognized that employee who perceives high self-efficacy in certain environment will be more motivated to show fruitful results which will maximize the chances of project success. Therefore, belief of one on his leader and on himself delivers him the extra skills and energy which leads the project towards success.

### 5.1.4 H$_4$:There is a mediating effect of self-efficacy in Transformational Leadership & Project Success

The results demonstrated significant relationship of SE as mediator among TL and PS. Bandura (1982, p. 122) has characterize the self-efficacy "how well one can execute courses of action required to deal with prospective situation". By exploration of definition, we found that one person who is highly self-efficacious can leads to successful outcomes or results such as project success. Past literature describes that transformational leaders are more self-efficacious and they seek to meet the primary and foremost higher-order needs (self-esteem and self-actualization) of employees (Banks, McCauley, Gardner, & Guler, 2016). As the prime key of a transformational leadership is that he motivates the employees and followers by increasing their self-efficacy (House and Shamir, 1993).

Transformational leaders follows the strategies of strong visioning, setting high performance expectations and goals for employees which attracts and internalize by the followers to become self-efficacious (Yukl, 1998, Pillai, Williams, 2004). And thus the higher self-efficacy of employees leads to project success. Literature explored that employee who found complexity and ambiguity in tasks, with the higher self-efficacy instead of being panic he will view the task with positive eye (Stajkovic, Alexander, Fred Luthans, 1998) and such belief of one on him leads the project towards success. Therefore, we can prove through literature that self-efficacy mediates the relationship between TL and PS.

We also recognized that transformational leaders increase self-efficacy in employee as he inspires enough to the followers by using novel approaches such as decision making process, find out solutions of problems with more optimistic way, motivating followers intrinsically, recognizing and appreciating each follower to develop his or her personal potential resultantly raise self-efficacy in his team members. According to the self-efficacy theory of Bandura (1973, 1977), perceived self-efficacy influences the employee in functioning such as in his cognition as a belief on his leader, motivates him for self-determining and tackling obstacles with ease, in his emotions as feeling himself emotionally competent and taking decisions. Thus,

they belief on themselves (Avolio, 1999; Bass & Avolio, 1994) to handle and tackle the aversive problems of project and thus whole project will be successful.

So, with the compliance of self-efficacy theory and past literature we demonstrated that SE mediates between the relationship of transformational leadership and project success (Avolio, Zhu, Koh, & Bhatia, 2004). Project success is also not only affiliated with planning and implementation of project but there is a lot of factors which are needed to understand (Serrador, & Pinto, 2015). As the previous study defines project success "on time completion and within budget", but now the measurement of project success is a broad area (Thomas, Jacques, Adams, Kihneman-Woote, 2008). We measured in our dissertation the project success with the leadership. How much the leadership will be influential and transformational the project will be more successful.

## 5.1.5 H5: There is moderating effect of conscientiousness on the relationship of Transformational Leadership & Project Success

Conscientiousness personality trait moderates the relationship between self-efficacy and project success; such that if Conscientiousness is high the relationship between self-efficacy and project success would be strengthen.

According to the results, this hypothesis has accepted and it also has been supported by the previous studies. Results indicated signicant values that are according to the standards. Conscientiousness is demonstrating the relationship is highly signicant. Conscientiousness brings the noticeable change by strengthening the relationship between self-efficacy and project success. Hence, the results are meeting the standards criteria and statistically this relationship is signicant and approved.

Hypothesis of the dissertation that there is moderating effect of conscientiousness on the relationship of self-efficacy and project success has also been supported by the literature. Conscientiousness personality trait is the most important personality trait because it predicts the different kinds of project outcomes and job

performance (e.g., Barrick & Mount, 1991; Barrick, Mount, & Judge, 2001; Dudley, Orvis, Lebiecki, & Cortina, 2006; Roberts, Chernyshenko, Stark, & Goldberg, 2005). Conscientiousness is a personality type of employee who is more dutiful, disciplined and responsible. Roberts (2009) has defined that employee who are with conscientiousness personality trait are goal directed and planful as well as follow the rules and regulations of team and project. Therefore, in the project success conscientiousness personality trait plays a vital role. We accumulated that due to high employees' self-efficacy project would be successful and if the most of employees of that project have the personality trait conscientiousness the relationship of self-efficacy to project success will be strengthen. As the conscientiousness personality has the motivation of achievements as well as they are hard work and perseverance in accomplishing the task (Barrick and Mount, 1991).

Consequently, we concluded that if high efficacious team or project has more employees with personality trait of conscientiousness, the project will be more successful. Self-efficacy theory also explains that people show behavioral outcome as they are being treated in that environment. Bandhura (1977) exemplifies that personality is a major factor which prevent to demonstrate outcomes (i.e behavior and job performance) according to being treated. The personality trait is a hindrance to show behavior because it is internal locus of control of an employee. Not only external environment but internally the employee personality trait can foster him to show behavior accordingly. So, with compliance of self-efficacy theory, we determined that Conscientiousness is a personality trait which helps to achieve project success or strengthen the relationship of self-efficacy to project success. The employee are dutiful and responsible with Conscientiousness personality trait, therefore, the personality as internal and transformational leadership as externally fosters employee to be self-efficacious. Consequently, employee will exert it's all skills and abilities on job which further leads project towards success. With compliance of self-efficacy theory, we identified that if there are more people in one project team has the personality trait Conscientiousness; they can make their project more successful.

## 5.2    Implications

### 5.2.1    Theoretical Implications

Under the study we tried to elucidate the importance of leadership in projects. As the project managers most of the time practices different leadership style at one time to manage and gain project success (Prabhakar, 2005). But our finding says that transformational leadership style is more much authenticated because the influence of leadership on followers is a great lead of project success. This dissertation also added an instrumental variable of self-efficacy which was fundamental aspect to explore in project management literature. We have used self-efficacy as mediation between transformational leadership to project success. Literature is replete with importance of transformational leadership which encourage self-efficacy. But under this dissertation we enlighten the importance of self-efficacy in project management which is self-belief of employee and project manager raise the self-efficacy in employee adapting transformational leadership style. So, how the self-efficacy leads to project success is the agenda of understudy thesis. We also explored that personality factor such as conscientiousness trait is an absolute contextual variable which should be study on the relationship of self-efficacy and project success. Personality factor is always has been study as an integral part of project management literature because it sometimes maximize the chances of project failure and most of the time as project success. So, we reveal through this study that conscientiousness personality strengthen the relationship of self-efficacy and project success. Overall, these relationships has been contributed in literature as unique research and can be analyze in future for fruitful outcomes.

### 5.2.2    Practical Implications

Leadership is an approach that how to use different strategies and techniques to achieve project goals. Current results are too important in the importance of leadership on project success. This study is also equally important for managers,

subordinates, supervisors and employees. In Pakistan, it is need of hour for such kind of research to diminish the impact of transformational Leadership.

Moreover, these discoveries also more important in the project based organizations where project manager switch their styles to accomplish the project. But in current dissertation we proved through empirical study that only transformational leadership can leads the project towards success by raising self-efficacy in employee. Transformational leadership is very important because it is the influential leadership style.

## 5.3 Direction for Future Recommendations and Limitations

Every research indeed has some shortcomings or impediments; this investigation also has a few reservations. It is due to the restricted assets and time limitations. The scope of the given study is limited therefore; all dimensions to culture and market requirements cannot be explored at once. There is a room for upcoming researchers to examine the dimensions of different culture.

On second, data has been gathered from Project based organizations of Pakistan, results may be varying in some other culture or in different spaces of organizations in Pakistan.

Thirdly, we used small sample size due to shortage of time and used convenient sampling technique which may threatens the generalizability of results.

Finally, the study was conducted only in Pakistan that may raise the question of cultural influence. So, future researchers can also investigate these relationships in other cultures or countries.

As the hypotheses were accepted but there is still a lot of room for further research with other variables and domain of project management.

Transformational leadership is influential leadership style which can further study to explore more positive outcomes in project based organization. Transformational

leadership also empowers and motivate the employee how these attributes could help in project based organization can be analyze in future. Moreover direct and indirect effect of transformational leadership on project turnover can be study in project management literature.

## 5.4 Conclusion

In Pakistan, project management has not covered yet a wide area in literature and still it is less used in practice with perspective of leadership style. But with the passage of time project management has proved its level of importance and growing its roots in Pakistan as huge amount of projects are observed in the past decade. This study focused on the project management companies working in twin cities and has tried to find empirical evidence for the relationship of transformational leadership style on project success. The transformational leader raises self-efficacy in employee which ultimately leads the project towards success. Leadership style has been count for the fruitful outcome in current dissertation. This evidence will helpful in project based organization as the leader must be influential enough to grab the attention of employees as well he should motivate employee to face the hurdles and aversive condition with clear goal path which will helpful in achieving goals of project resultantly in achieving project success. The study also concludes that culture and values play an important role in such relationship which must be taken in consideration by transformational leaders.

# Bibliography

Aga, D. A., Noorderhaven, N., & Vallejo, B. (2016). Transformational leadership and project success: The mediating role of team-building. International Journal of Project Management, 34(5), 806-818.

Albert Bandura Stanford University, 1977 self-efficacy: Toward a Unifying Theory of Behavioral Change, 810–850.

Albert, M., Balve, P., & Spang, K. (2017). Evaluation of project success: a structured literature review. International Journal of Managing Projects in Business, 10(4), 796-821.

Andersen, E.S. (2014), "Value creation using the mission breakdown structure", International Journal of Project Management, Vol. 32 No. 5, pp. 885-892

Aydogmus, C., Camgoz, S. M., Ergeneli, A., & Ekmekci, O. T. (2018). Perceptions of transformational leadership and job satisfaction: The roles of personality traits and psychological empowerment §. Journal of Management & Organization, 24(1), 81-107.

Avolio, B. J., Zhu, W., Koh, W., & Bhatia, P. (2004). Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance. Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(8), 951-968.

Avolio, B. J. (1999). Full leadership development: Building the vital forces in organizations. Sage, 100–115.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. Psychological Review, 84(2), 191-215.

Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. Journal of social and clinical psychology, 4(3), 359-373.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs: Prentice-Hall.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. Educational Psychologist, 28(2), 117-148.

Bandura, A. (1997). Self-efficacy: The exercise of control. New York, NY: Freemann

Bandura, A. (2007). Much ado over a faulty conception of perceived self-efficacy grounded in faulty experimentation. Journal of Social and Clinical Psychology, 26(6), 641-658

Bandura, A. (1982). Self-efficacy mechanism in human agency. American psychologist, 37(2), 122-147

Banks, G. C., McCauley, K. D., Gardner, W. L., & Guler, C. E. (2016). A meta-analytic review of authentic and transformational leadership: A test for redundancy. The Leadership Quarterly, 27(4), 634-652.

Barrick, M. R., Mount, M. K., & Judge, T. A. (2001)." Personality and performance at the beginning of the new millennium: What do we know and where do we go next?" International Journal of Selection and Assessment, 9, 9-30

Barrick, M. R., & Mount, M. K. (1991). "The Big Five personality dimensions and job performance: A meta-analysis". Personnel Psychology, 44, 1-26

Bass, B.M. (1985), Leadership and Performance Beyond Expectation, Free Press, New York, NY.

Bass, B. M. & Riggio, R. E. Transformational Leadership. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc; 2008

Bates, R., and S. Khasawneh. 2007. "Self-efficacy and College Students' Perceptions and Use of Online Learning Systems." Computers in Human Behavior 23 (1): 175-191.

Blau, P. M. (1964). Exchange and power in social life. New York, NY: Wiley

Boamah, S. A., Laschinger, H. K. S., Wong, C., & Clarke, S. (2018). Effect of transformational leadership on job satisfaction and patient safety outcomes. Nursing outlook, 66(2), 180-189.

Boerner, S., Eisenbeiss, S.A. and Griesser, D. (2007), "Follower behavior and organisational performance: the impact of transformational leaders", Journal of Leadership and Organisational Studies, Vol. 13 No. 3, pp. 15-26.

Brown, F.W. and Moshavi, D. (2005), "Transformational leadership and emotional intelligence: A potential pathway for an increased understanding of interpersonal influence", Journal of Organizational Behavior, Vol. 26, No. 7, pp. 867-87

Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013), "Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust." The Leadership Quarterly, 24, 270-283. https://doi.org/10.1016/j.leaqua.2012.11.006.

Bryde, D. (2008). Perceptions of the impact of project sponsorship practices on project success. International Journal of Project Management, 26(8), 800-809.

Bushra, F., Usman, A. and Naveed, A. (2011), "Effect of transformational leadership on employees' job satisfaction and organisational commitment in banking sector of Lahore (Pakistan)", International Journal of Business and Social Science, Vol. 2 No. 18, pp. 261-267.

Caniëls, M. C., Semeijn, J. H., & Renders, I. H. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. Career Development International, 23(1), 48-66.

Calvo-Mora, A., Ruiz-Moreno, C., Picón-Berjoyo, A. and Cauzo-Bottala, L. (2014), "Mediation effect of TQM technical factors in excellence management systems", Journal of Business Research, Vol. 67 No. 5, pp. 769-774

Chen, G., Gully, S. M., & Eden, D. (2004). General self-efficacy and self-esteem: Toward theoretical and empirical distinction between correlated self-evaluations.

Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 25(3), 375-395.

Chi,N.W.andPan,S.Y.(2012), "A multi-level investigation of missing links between transformational leadership and task performance: the mediating roles of perceived person - job fit and person - organisation fit", Journal of Business and Psychology, Vol. 27 No. 1, pp. 43-56.

Choi,J.N.(2004), "Individual and contextual factors of creative performance :the mediating role of psychological processes", Creativity Research Journal, Vol. 16 Nos 2-3, pp. 187-199.

Cooke-Davies T. The "real" success factors on projects. International Journal of Project Management 2002;20(3):185-90.

Daniel RD. Management information crisis. Harv Business Rev 1961;39(5):111-21

Deci, E. L., & Ryan, R. M. (2000). "The" what" and" why" of goal pursuits: Human needs and the self-determination of behavior." Psychological Inquiry, 11, 227-268.

Diallo, A., & Thuillier, D. (2004). "The success dimensions of international development projects: the perceptions of African project coordinators." International journal of project management, 22(1), 19-31.

Dóci, E., & Hofmans, J. (2015). "Task complexity and transformational leadership: The mediating role of leaders' state core self-evaluations." The Leadership Quarterly, 26(3), 436-447.

Doeleman, H. J., ten Have, S., & Ahaus, K. (2012). "The moderating role of leadership in the relationship between management control and business excellence." Total Quality Management & Business Excellence, 23(5-6), 591-611.

Dudley, N. M., Orvis, K. A., Lebiecki, J. E., & Cortina, J. M. (2006). "A meta-analytic investigation of Conscientiousness in the prediction of job performance: Examining the inter correlations and the incremental validity of narrow traits". Journal of Applied Psychology, 91, 40-57

Dumdum, U.R., Lowe,K.B., & Avolio, B. (2002)." A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: an update and extension."

Dvir, D., Raz, T., & Shenhar, A. J. (2003). "An empirical analysis of the relationship between project planning and project success." International journal of project management, 21(2), 89-95.

Dvir, T., Eden, D., Avolio, B.J. and Shamir, B. (2002), "Impact of transformational leadership on follower development and performance: a field experiment", Academy of Management Journal, Vol. 45 No. 4, pp. 735-744.

Dwivedula, R. Bredillet, C.N., & Muller, R. (2016). "Personality and work motivation as determinants of project success: the mediating role of organizational and professional commitment." Int. J. Management Development, Vol. 1(3), 229-245.

Ehrhart, M. G., & Klein, K. J. (2001). "Predicting followers' preferences for charismatic leadership: The influence of follower values and personality." The Leadership Quarterly, 12, 153-179

Fowler, R. R., & Su, M. P. (2018). "Gendered Risks of Team-Based Learning: A Model of Inequitable Task Allocation in Project-Based Learning." IEEE Transactions on Education, 99, 1-7.

Furnham, A., Eracleous, A., & Chamorro-Premuzic, T. (2009). "Personality, motivation and job satisfaction: Hertzberg meets the big five." Journal of Managerial Psychology, 24(8), 765-779.

García-Morales, V.J., Jiménez-Barrionuevo, M.M. and Gutiérrez-Gutiérrez, L. (2012), "Transformational leadership influence on organizational performance through organizational learning and innovation", Journal of Business Research, Vol. 65 No. 7, pp. 1040-1050.

Gardner, L., & Stough, C. (2002). "Examining the relationship between leadership and emotional intelligence in senior level managers." Leadership & organization development journal, 23(2), 68-78.

Geoghegan, L. & Dulewicz, V. (2008). "Do Project Managers' Leadership Competencies Contribute to Project Success?" Project Management Journal, Vol. 39(4), 58-67.

Gist, M.E. and Mitchell, T.R. (1992), "Self-efficacy: a theoretical-analysis of its determinant and malleability", Academy of Management Review, Vol. 17 No. 2, pp. 183-211.

Gong, Y., Huang, J.C. and Farh, J.L. (2009), "Employee learning orientation, transformational leadership, and employee creativity: the mediating role of employee creative self-efficacy", Academy of Management Journal, Vol. 52 No. 4, pp. 765-778.

Gravill, J., and D. Compeau. 2008. "Self-regulated Learning Strategies and Software Training." Information & Management 45: 288-296.

Gundersen, G., Hellesøy, B. T. & Raeder, S. 2012. "Leading international project teams the effectiveness of transformational leadership in dynamic work environments." Journal of Leadership & Organizational Studies, 19, 46-57.

Hassan, M. M., Bashir, S., & Abbas, S. M. (2017). "The Impact of Project Managers' Personality on Project Success in NGOs: The Mediating Role of Transformational Leadership." Project Management Journal, 48(2), 74-87.

Hannah, S. T., Schaubroeck, J. M., & Peng, A. C. (2016). "Transforming followers' value internalization and role self-efficacy: Dual processes promoting performance and peer norm-enforcement." Journal of Applied Psychology, 101, 252-266. https://doi.org/10. 1037/apl0000038.

Hastings, S. E., & O'Neill, T. A. (2009). "Predicting workplace deviance using broad versus narrow personality variables." Personality and Individual Differences, 47(4), 289-293

Hendriks, A. A. J. ,Hofstee ,W . K . B . , & De Raad, B . (1999a) .The Five Factor Personality Inventory (FFPI). Personality and Individual Differences,27, 307-326.

Hendriks,A.A.J.,Hofstee,W.K.B.,& De Raad,B.(1999b).The Five Factor Personality Inventory: (FFPI). Personality & individual differences, 27(2), 307-325.

Hinkin, T. R., & Schriesheim, C. A. (2008). "A theoretical and empirical examination of the transactional and non-leadership dimensions of the Multifactor Leadership Questionnaire (MLQ)." The Leadership Quarterly, 19(5), 501-513.

House, R. J., & Shamir, B. (1993). Toward the integration of transformational, charismatic, and visionary theories.

Humphrey, R.H. (2002), "The many faces of emotional leadership", The Leadership Quarterly, Vol. 13, No. 5, pp. 493-504

Ika, L. A. (2009). "Project success as a topic in project management journals." Project Management Journal, 40(4), 6-19.

Iyer KC, Jha KN. "Factors aecting cost performance: evidence from Indian construction projects." International Journal of Project Management 2005;23(4): 283-95.

Jaussi, K. S., & Dionne, S. D. (2003). "Leading for creativity: The role of unconventional leader behavior." The Leadership Quarterly, 14(4-5), 475-498.

Judge, T. A., & Bono, J. E. (2001). "Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis". Journal of Applied Psychology, 86(1), 80-92.

Joslin, R., & Müller, R. (2015). "Relationships between a project management methodology and project success in different project governance contexts." International Journal of Project Management, 33(6), 1377-1392.

Kark, R., Shamir, B., & Chen, G. (2003). "The two faces of transformational leadership: Empowerment and dependency." Journal of Applied Psychology, 88, 246-255. https:// doi.org/10.1037/0021-9010.88.2.246.

Kendra, K., & Taplin, L. J. (2004). "Project success: A cultural framework." Project management journal, 35(1), 30-45.

Khang, D. B., & Moe, T. L. (2008). "Success criteria and factors for international development projects: A life-cycle-based framework." Project Management Journal, 39(1), 72-84.

Kissi, J., Dainty, A., & Tuuli, M. (2013). "Examining the role of transformational leadership of portfolio managers in project performance." International Journal of Project Management, 31(4), 485-497.

Li, A. N., Liao, H., Tangirala, S., & Firth, B. M. (2017a). "The content of the message matters: The differential effects of promotive and prohibitive team voice on team productivity and safety performance gains". Journal of Applied Psychology, 102(8), 1259-1270.

Li, M., Wang, Z., Gao, J., & You, X. (2017b). "Proactive personality and job satisfaction: The mediating effects of self-efficacy and work engagement in teachers". Current Psychology, 36(1), 48-55

Liden, R. C., Sparrowe, R. T., & Wayne, S. J. 1997. "Leader-member exchange theory: The past and potential for the future. In G. R. Ferris (Ed.)" Research in personnel and human resources management, Vol. 15: 47-119: Greenwich, CT: JAI

Liu, D., Liao, H., & Loi, R. (2012). "The dark side of leadership: A three-level investigation of the cascading eect of abusive supervision on employee creativity." Academy of Management Journal, 55(5), 1187-1212.

Maqbool, R., Sudong, Y., Manzoor, N., & Rashid, Y. (2017). "The Impact of Emotional Intelligence, Project Managers' Competencies, and Transformational Leadership on Project Success: An Empirical Perspective." Project Management Journal, 48(3), 58-75.

Lu, X., Xie, B., & Guo, Y. (2018). "The trickle-down of work engagement from leader to follower: The roles of optimism and self-efficacy". Journal of Business Research, 84, 186-195.

Malatesta, R. M. (1997). Understanding the dynamics of organizational and supervisory commitment using a social exchange framework.

Malatesta, R. M. 1995. Understanding the dynamics of organizational and supervisory commitment using a social

exchange framework. Unpublished doctoral dissertation, Wayne State University, Michigan

Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. Academy of Management journal, 43(4), 738-748.

Mehmood, Z. U. I., & Arif, M. I. (2011). "Leadership and HRM: Evaluating new leadership styles for effective human resource management." International Journal of Business and social science, 2(15).

Michael A. LaRocca, Forrest R. Scogin, Michelle M. Hilgeman, Andrew J. Smith & William F. Chaplin (2018). "The impact of posttraumatic growth, transformational leadership, and self-efficacy on PTSD and depression symptom severity among combat Veterans, Military Psychology"

Mir, F. A., & Pinnington, A. H. (2014). "Exploring the value of project management: linking project management performance and project success." International journal of project management, 32(2), 202-217.

Muller, R., & Turner, J.R (2006). "Matching the project managers' leadership style to project type. Int. J. Project Management, Vol. 25, 21-32.

Ng, T. W. (2017). "Transformational leadership and performance outcomes: Analyses of multiple mediation pathways." The Leadership Quarterly, 28(3), 385-417.

Ngacho, C., & Das, D. (2014). "A performance evaluation framework of development projects: An empirical study of Constituency Development Fund (CDF) construction projects in Kenya." International Journal of Project Management, 32(3), 492-507.

Niessen, C., Mäder, I., Stride, C., & Jimmieson, N. L. (2017). "Thriving when exhausted: The role of perceived transformational leadership." Journal of Vocational Behavior, 103, 41-51. https://doi.org/10.1016/j.jvb.2017.07.012.

Nubuor, S. A., Hongyi, X., & Frimpong, S. K. (2014). "The Impact of Transformational Leadership Style on Project Success: An Empirical Study of Banking Projects in Ghana." International Journal of ICT and Management, 2, 85-95.

Pajares, F. (2002). Overview of social cognitive theory and of self-efficacy. Retrieved from (20.12.2016)

Papke-Shields, K. E., Beise, C., & Quan, J. (2010). "Do project managers practice what they preach, and does it matter to project success?" International journal of project management, 28(7), 650-662.

Para-González, L., Jiménez-Jiménez, D., & Martínez-Lorente, A. R. (2018). "Exploring the mediating effects between transformational leadership and organizational performance." Employee Relations, 40(2), 412-432.

Pillai, R., & Williams, E. A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment, and performance. Journal of organizational change management, 17(2), 144-159.

Pinto, M. B., & Pinto, J. K. (1990). "Project team communication and cross-functional cooperation in new program development." Journal of product innovation management, 7(3), 200-212.

Prabhakar, G. P. (2005). Switch leadership in projects an empirical study reflecting the importance of transformational leadership on project success across twenty-eight nations. Project Management Journal, 36(4), 53-60.

Robbins, S.P., Coulter, M. (2007). Principles of Management (Vol. 9). New York: Prentice Hall.

Saks, A. M. (1994). "Moderating effects of self-efficacy for the relationship between training method and anxiety and stress reactions of newcomers." Journal of Organizational Behavior, 15(7), 639-654.

Roberts, B. W., Chernyshenko, O. S., Stark, S., & Goldberg, L. R. (2005). The structure of Conscientiousness: An empirical investigation based on seven major personality questionnaires. Personnel Psychology, 58, 103-139.

Roberts BW, Jackson JJ, Fayard JV, Edmonds G. Conscientiousness. In: Leary M, Hoyle R, editors. Handbook of individual differences in social behavior. Guilford; New York, NY: 2009. pp. 369-381

Saucier, G. (1994). "Mini-Markers: A brief version of Goldberg's unipolar Big-Five markers." Journal of Personality Assessment, 63(3), 506-516

Schaubroeck, J., Hannah, S., Avolio, B., Kozlowski, S., Lord, R., Trevino, L. and Peng, A. (2012), "Embedding ethical leadership within and across organisation levels", Academy of Management Journal, Vol. 55 No. 5, pp. 1053-1078.

Serrador, P., & Pinto, J. K. (2015). Does Agile work?—A quantitative analysis of agile project success. International Journal of Project Management, 33(5), 1040-1051.

Sheu, H., Liu, Y., & Li, Y. (2017). "Well-being of college students in China: Testing a modified social cognitive model". Journal of Career Assessment, 27, 144-158.

Shin, S. J., & Zhou, J. (2003). "Transformational leadership, conservation, and creativity: Evidence from Korea." Academy of Management Journal, 46(6), 703-714.

Shin, Y., Kim, M. S., Choi, J. N., Kim, M., & Oh, W. K. (2017). "Does leader-follower regulatory fit matter? The role of regulatory fit in followers' organizational citizenship behavior." Journal of Management, 43(4), 1211-1233.

Slevin, D. P., Cleland, D. I., & Pinto, J. K. (2004). "Innovations: Project management research 2004." Project Management Institute.

Smith, R. E. (1989). "Effects of coping skills training on generalized self-efficacy and locus of control." Journal of personality and social psychology, 56(2), 228.

Stajkovic, Alexander D., and Fred Luthans. "Self-efficacy and work-related performance: A meta-analysis." Psychological bulletin 124.2 (1998): 240.

Stajkovic, A. D., Bandura, A., Locke, E. A., Lee, D., & Sergent, K. (2018). "Test of three conceptual models of influence of the big five personality traits and self-efficacy on academic performance: A meta-analytic path-analysis." Personality and Individual Differences, 120, 238-245.

Suprapto, M., Bakker, H. L., & Mooi, H. G. (2015). " Relational factors in owner-contractor collaboration: The mediating role of teamworking." International journal of project management, 33(6), 1347-1363.

Tejeda, M. J., Scandura, T. A., & Pillai, R. (2001). "The MLQ revisited: Psychometric properties and recommendations." The Leadership Quarterly, 12(1), 31-52.

Thomas, M., Jacques, P.H., Adams, J.R., Kihneman-Woote, J., 2008. "Developing an effective project: planning and team building combined". Proj. Manag. J. 39 (4), 105-113.

Tierney, P., & Farmer, S. M. (2002). "Creative self-efficacy: Its potential antecedents and relationship to creative performance." Academy of Management journal, 45(6), 1137-1148.

Tierney, P., & Farmer, S. M. (2011). "Creative self-efficacy development and creative performance overtime".Journal of Applied Psychology, 96(2), 277-293.

Tyssen, A. K., Wald, A., & Spieth, P. (2014). "The challenge of transactional and transformational leadership in projects." International Journal of Project Management, 32(3), 365-375.

Todorović, M. L., Petrović, D. Č., Mihić, M. M., Obradović, V. L., & Bushuyev, S. D. (2015). "Project success analysis framework: A knowledge-based approach in project management." International Journal of Project Management, 33(4), 772-783.

Vinger, G., & Cilliers, F. (2006). "Effective transformational leadership behaviours for managing change." SA Journal of Human Resource Management, 4(2), 1-9.

Winkelmann, L., & Winkelmann, R. (2008). "Personality, work, and satisfaction: Evidence from the German socio-economic panel." The Journal of Positive Psychology, 3(4), 266-275.

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). "Work engagement and financial returns: A diary study on the role of job and personal resources." Journal of Occupational and Organizational Psychology, 82(1), 183-200.

Xanthopoulou, D., Bakker, A. B., & Ilies, R. (2012). "Every day working life: Explaining within-person fluctuations in employee well-being". Human Relations, 65(9), 1051-1069.

Yang, L. R., Huang, C. F., & Wu, K. S. (2011). "The association among project manager's leadership style, teamwork and project success." International journal of project management, 29(3), 258-267.

Yukl, G. (1998), Leadership in Organizations, 4th ed., Prentice-Hall, Englewood Cliffs, NJ

Zhang,Y.,LePine,J.A.,Buckman,B.R.,&Wei,F.(2014). "It's not fair... or is it? The role of justice and leadership in explaining work stressor-job performance relationships." Academy of Management Journal, 57(3), 675-697.

# Appendix-A

CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
ISLAMABAD

Department of Management Sciences

**Dear respondent,**

I am a student of MS Project Management Capital University of Sciences & Technology, Islamabad. I am conducting a research on the topic: "Impact of Transformational leadership on project success with mediating effect of inspired motivation and moderated effect of conscientiousness". You can help me by completing the attached questionnaire. I appreciate your participation in my study and I assure that your responses will be held confidential and will only be used for education purposes.

**Regards**

**Kalsoom Yasin**

| | 1 | 2 |
|---|---|---|
| **Gender** | Male | Female |

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| **Qualification** | Metric | Inter | Bachelor | Master | MS/M.Phil | PhD |

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| **Age** | 18- 25 | 26–33 | 34-41 | 42-49 | 50 and above |

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| **Experience** | $5-10$ | $11-16$ | $17-22$ | $23-28$ | $29-35$ | 36 and above |

| **Transformational Leadership** | | | | | | |
|---|---|---|---|---|---|---|
| 1 | I have complete faith in my leader. | 1 | 2 | 3 | 4 | 5 |
| 2 | My leader provides appealing images about the project to the team. | 1 | 2 | 3 | 4 | 5 |
| 3 | My leader enables team members to think about old problems in new ways | 1 | 2 | 3 | 4 | 5 |
| 4 | My leader give personal attention to a team member who seems neglected | 1 | 2 | 3 | 4 | 5 |
| 5 | My leader is proud of being associated with team. | 1 | 2 | 3 | 4 | 5 |
| 6 | My leader let my team know that I am confident that the project goals will be achieved. | 1 | 2 | 3 | 4 | 5 |
| 7 | My leader provides team members with new ways of looking at puzzling things | 1 | 2 | 3 | 4 | 5 |
| 8 | My leader helps each member of the team to develop his/her strengths. | 1 | 2 | 3 | 4 | 5 |

| 9 | My leader makes the team members feel good to be around him/her. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 10 | My leader helps team members to find meaning in their work. | 1 | 2 | 3 | 4 | 5 |
| 11 | My leader get team members to rethink ideas that they had never questioned before | 1 | 2 | 3 | 4 | 5 |
| 12 | My leader is attentive to the unique concerns of each team member | 1 | 2 | 3 | 4 | 5 |
| 13 | My leader shows that my team is optimistic about the future of the project. | 1 | 2 | 3 | 4 | 5 |
| **Project Success** | | | | | | |
| 1 | The project was completed on time | 1 | 2 | 3 | 4 | 5 |
| 2 | The project was completed according to the budget allocated | 1 | 2 | 3 | 4 | 5 |
| 3 | The outcome of the projects is used by intended users | 1 | 2 | 3 | 4 | 5 |
| 4 | The outcome of the projects is likely to be sustained | 1 | 2 | 3 | 4 | 5 |
| 5 | The outcomes of the project have directly benefited the intended end users, either through increasing efficiency or effectiveness | 1 | 2 | 3 | 4 | 5 |
| 6 | Given the problem for which it was developed, the project seems to do the best job of solving that problem | 1 | 2 | 3 | 4 | 5 |
| 7 | I was satisfied with the process by which the project was implemented | 1 | 2 | 3 | 4 | 5 |
| 8 | Project team members were satisfied with the process by which the project was implemented. | 1 | 2 | 3 | 4 | 5 |
| 9 | The project had no or minimal start-up problems because it was readily accepted by its end users. | 1 | 2 | 3 | 4 | 5 |
| 10 | The project has directly led to improved performance for the end users/target beneficiaries. | 1 | 2 | 3 | 4 | 5 |

| 11 | The project has made a visible positive impact on the target beneficiaries. | 1 | 2 | 3 | 4 | 5 |
|----|------------------------------------------------------------------------------|---|---|---|---|---|
| 12 | Project specifications were met by the time of handover to the target beneficiaries. | 1 | 2 | 3 | 4 | 5 |
| 13 | The target beneficiaries were satisfied with the outcomes of the project. | 1 | 2 | 3 | 4 | 5 |
| 14 | Our principal donors were satisfied with the outcomes of the project implementation. | | | | | |

**Conscientiousness**

| 1 | Competence | 1 | 2 | 3 | 4 | 5 |
|---|------------|---|---|---|---|---|
| 2 | Order | 1 | 2 | 3 | 4 | 5 |
| 3 | Dutifulness | 1 | 2 | 3 | 4 | 5 |
| 4 | Achievement Striving | 1 | 2 | 3 | 4 | 5 |
| 5 | Self-discipline | 1 | 2 | 3 | 4 | 5 |
| 6 | Deliberation | 1 | 2 | 3 | 4 | 5 |

**Self-Efficacy**

| 1 | I will be able to achieve most of the goals that I have set for myself. | 1 | 2 | 3 | 4 | 5 |
|---|-------------------------------------------------------------------------|---|---|---|---|---|
| 2 | When facing difficult tasks, I am certain that I will accomplish them. | 1 | 2 | 3 | 4 | 5 |
| 3 | In general, I think that I can obtain outcomes that are important to me | 1 | 2 | 3 | 4 | 5 |
| 4 | I believe I can succeed at most any endeavor to which I set my mind | 1 | 2 | 3 | 4 | 5 |
| 5 | I will be able to successfully overcome many challenges. | 1 | 2 | 3 | 4 | 5 |
| 6 | I am confident that I can perform effectively on many different tasks | 1 | 2 | 3 | 4 | 5 |

| 7 | Compared to other people, I can do most tasks very well. | 1 | 2 | 3 | 4 | 5 |
| 8 | Even when things are tough, I can perform quite well. | 1 | 2 | 3 | 4 | 5 |