

CAPITAL UNIVERSITY OF SCIENCE AND  
TECHNOLOGY, ISLAMABAD



**Impact of Emotional Intelligence  
on Project Success with  
Mediation of Team Cohesion and  
Moderation of Self-Efficacy**

by

**Ahmad Noor Ud Din**

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

in the

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*This work is dedicated to my parents and my teachers.*



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ISLAMABAD

**CERTIFICATE OF APPROVAL**

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Self-Efficacy**

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## *Abstract*

This study focuses on the relationship between emotional intelligence and project success with the mediating role of team cohesion and moderating role of self-efficacy. The specific context of the study is the project based organization in Pakistan. Data were collected using questionnaire from 215 employees working on various construction projects in Rawalpindi, Mianwali and Islamabad. Results indicate that emotional intelligence is positively associated with project success. Moreover mediating role of team cohesion is also established. In addition, results also confirm the moderating role of self-efficacy is discussed.

**Key words: Emotional Intelligence, Team Cohesion, Self-Efficacy, Project Success.**



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# Chapter 1

## Introduction

### 1.1 Background of the Study

The globalization and growing industry has increased the number of projects in different areas including construction, information technology, security and social sector (Yatim, Bredillet & Ruiz, 2009). Global economic statistics show a major and rising practice of project based management system in the world. Organizations that use project management practices need to be more skilled to respond risk or chances. Worldwide the investing budget on projects has largely increased which is now in billions (Anantatmula, 2008). These figures of spending on projects continue to rise each year (Reich & Wee, 2006). These increasing figures show the increasing demand of superior, rapid and more cost-effective projects and with this increasing demand it is becoming difficult for project managers to manage the projects (Anantatmula, 2008). This increasing usage of project based management system practices increases role of project managers. Researchers have widely discussed the project managers skills and capabilities needed to successfully complete the project, Different authors have discussed the worth and usage of emotional intelligence (EI) in projects to successfully complete the projects (Gehring, 2007).

Organizations and scholars recognized the significance of project management in the early 1900s. The application and use of project management in different types

of projects has now become very high round the world. Turner, Ledwith and Kelly (2009) say that round about 30% of international economy is project based which is rapidly increasing. But interesting and the thing to concern is that the failure rate in projects is more than the success. This increasing rate of failure in projects convinces the management to think seriously about it and the role of project managers in this situation (Zwikael & Smyrk, 2015). As we know that projects are unique in their nature, this characteristic increases the chances of failure of a project. Despite these high rates of failure still organizations are investing in new projects and this rate is increasing year to year (Zwikael & Smyrk, 2015). The reason behind is this that organizations are considering projects to be more performing and contributing to national economy than functional organizations. Another reason for increasing investment is that projects are considered to be major part in innovation and change of process management (Damanpour, 2010). The challenges related with projects are considerable. But, the reason is that every project looks “first of its kind” (Sausser, Reilly & Shenhar, 2009). Generally the projects are known by their large budgets and uncertainty. Moreover, projects usually attract high public and political interest which ultimately affect the results of projects. The reason of this attraction is that these projects generally relate the social, infrastructure, environmental, national and international concerns (Whitty & Maylor, 2009). But the results of these types of mega projects are usually unsatisfactory due to their complexities. These complexities are many types i.e. the delay in completion, cost over-run and fails to deliver the goals (Williams & Samset, 2010). There are many examples of cost over run in mega projects i.e. the cost of Sochi Olympics was expected to be within \$12 billion to \$50 billion but actual cost increased more than 300%, likewise the cost of London Olympics increased 101% (Orttung & Zhemukhov, 2014). Sausser, Reilly and Shenhar (2009) have deeply seen the complexity and the challenges associated with projects and found that the complexities and challenges associated with projects are basically managerial, rather than technical. In this respect to determine the project success, the project managers should possess both project management and leadership skills that are critical. In building our main point of view, we notice that the part

of emotion has been emerged currently as being an essential aspect in how effective managers accomplish their daily activities (Jordan & Lindebaum, 2015). Emotions are unique type of influential practice and move to short-lived, deep emotions which may be connected to particular actions (Elfenbein, 2007), like irritation and happiness. Such type of emotional feelings may affect the different types of project procedures and practices which ultimately affect the outcome and final results of projects, and so group's assistance from endorsing and identifying a variety of emotions. Salovey and Mayer (1990) describe emotional intelligence like a "capability to observe one's and others' moods and emotions, to differentiate between them and to use this information to direct one's thoughts and activities". Similarly in the literature of human behavior, interactions in the setting of project management says that then emotional intelligence (EI) is the capability to define how individuals work in collective environment and converse with other people (Druskat & Druskat, 2012). Rezayian and Keshthgar (2008) define the emotional intelligence such as a type of collective intelligence, which represent the skill and capability to properly manage the emotions of own and others and to manage the dissimilarities through applicable actions. Research says that Emotional intelligence enhance the social relations through connecting emotions. Therefore, emotional intelligence is important to increase work place manners and performance. Emotionally intelligent managers are more expected to express and use their emotions positively to attain the required outcome to complete the project successfully. Emotional intelligence is used to enhance the interest of leaders which enables them to talk positively with group associates and to provide inspiration to talking the complexities in responsibilities (Peslak, 2005).

Hughes (2005) says that people who have high degree of emotional intelligence possess the ability to handle the complexities and conflicts between them and team members and have more good and positive views about their personal and professional lives. On the bases of these things it is considered that emotional intelligence has significant impact on different human factors, i.e. team member's satisfaction, job performance and project success.

The popularity of the emotional intelligence (EI) concept gets equal coverage from

the scholars and followers, which are directing them to the publication both in qualitative and quantitative nature (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). Not only emotional intelligence gets attraction from researchers towards publication but it is also a key indicator of important consequences i.e. physical and mental consequences. Similarly, the emotional intelligence is also a key predictor of manager's effectiveness (Siegling, Nielsen, & Petrides, 2014). Siegling, Sfeir and Smyth (2014) suggested that emotional intelligence directs to leadership prospective. They say that leaders are more emotionally intelligent than team members and these emotionally intelligent leaders get the place of emotionally intelligent manager to create a positive communication both for the benefit of their team members and to create good working environment to achieve the desired project results.

Emotionally intelligent leaders who express their emotions may practice emotional impurity to express moods of pleasure and happiness to increase team members' constructive conditions and pleasure (Ilies, Cuseu, Dimotakis, & Spitzmuller, 2013). They also say that project managers' emotional intelligence is important to avoid the risk of project team members, i.e. team members selection, job involvement and job satisfaction. Emotionally intelligent project leader wants to make a managerial environment which gives importance to emotional intelligence and attract and keep emotionally intelligent team members. Similarly, the emotionally intelligent managers enhance their group member's confidence and group identity which is important to create team emotional intelligence (Druskat & Wolff, 2001). To achieve the project success, the team members play a significant role so, managers must encourage physical activity and developing prospects which increase the emotional intelligence and abilities of their team members. Emotionally intelligent executives are capable to construct team social uniqueness between their team members and support and move them towards emotional situations that increase their determination and work fulfillment (Ashkanasy & Humphrey, 2011).

Literature has presented that EI has a remarkable effect on job efficiency. Goleman



(1995) says that emotional intelligence has large impact not only on job performance but also on personal life and says that 80% of human's life success depends on emotional intelligence. If managers possess high emotional intelligence, ultimately their employees performance will be good and they will do well (Wong & Law, 2002) because emotionally intelligent manager's will create positive work environment in which the employees will perform better which will ultimately lead to project success. Emotional intelligence creates positive working conditions due to good attitude of project managers with team members. Similarly, Sy, Tram and O'Hara (2006) found in their research that manager's emotional intelligence has a great effect on performance and work fulfillment. They also found emotional intelligence like a social skill and considered that it has high impact on public management work; they also seen that high emotional intelligence provides better skills for flexibility, communication and understanding.

Many research studies have recognized leadership as an intrinsically emotional process. Connecting with employees on high level of emotions, it is necessary to build relations on confidence and commitment (Madera & Smith, 2009). Leban and Zulauf (2004) say that emotional intelligence is important for project managers to understand the moods and emotions of employees toward work and to help them to make good choice about how policies should be presented. Leadership practices that raise positive and optimistic affectivity have also been seen to be allied with improved team and organizational performance (Ozcelik, Langton & Aldrich, 2008). Such types of findings have directed claim that emotional intelligence shows a unique set of competencies which gives us better leadership outcome (Ashkanasy & Ashton-James, 2005). Most of the earlier research observing emotional intelligence and project leadership has focused on how emotional intelligence contributes to leadership and team cohesion. But less work has been seen on the part of emotional intelligence and the connection between emotional leaders and team members (Clarke, 2010). Notwithstanding, many authors suggest that both managers and team members should be emotional intelligent in achieving their desired outcome. Literature has presented that to build a positive relationship and to achieve the desired work outcomes i.e. team performance, job

commitment, job satisfaction and organizational identity there should be good positive association which is achieved through emotional intelligence (Dulebohn, Bommer, Liden, Brouer & Ferris, 2012).

First time the name of “emotional intelligence” was familiarized by Salovey and Mayer in 1990, which was derived from social intelligence. Mayer, Salovey and Caruso (2004) considered emotional intelligence (EI) as a mix of two parts; “emotions” and “intelligence”. The first component “emotions” refers to effect, mood and spirits and on the other hand “intelligence” refers to mental, logical thinking and logical thinking. Thus, Emotional intelligence has been seen as the way the feelings and emotions of a person’s reaction to a situation. Doctor John Mayer and Doctor Peter Salovey were the first those who introduce the idea of EI in 1990 (Mayer & Salovey, 1990). In 1997, they reviewed their concept of emotional intelligence (EI) by describing it as “the capability to reason almost emotions, and of emotions to improve concepts. This contains the capabilities to correctly identify emotions, to contact and create emotions so as to support thought, to recognize emotions and emotional information, and to thoughtfully adjust emotions so as to encourage emotional and logical development”.

The significance of EI associated to individuals in many areas has turned more attentive from last ten to fifteen years (Adeyemo, 2008). Research says that individuals who possess high level of emotional intelligence might have a strong capacity to handle with complexities and conflicts among them and other team members and might be a further constructive vision over individual and professional life. Weiss and Cropanzano (1996) say that moods at workplace are affected by involvement of emotions and moods like arrogance, keenness, irritation, embarrassment, blame, horror, obstruction, and jealousy. These types of emotions and feelings appear from conditions that produce emotional responses in the job location. Literature has presented that personnel not only team members but also project top management also experience emotions in work places (Mignonac & Herrbach, 2004). Ashkanasy and Ashton-James (2005) claimed that there is a number of relationship among administrative decision-making practices and the emotions that project administrators practice in reaction to job situations.

Projects are more likely to practice and to share their feelings and emotions confidently. These positive emotions and feelings turn the interest of project managers that enable them to converse positively and efficiently with group fellows and to provide inspiration to deal with complexities and challenges associated with work. Therefore, the project managers with high level of emotional intelligence are more inspired which have a constructive effect on team members and to give them explanations about project related new problems and complexities (Mount, 2006). We have constructed the idea of our research based on some literature gaps in relation among EI and project success like Xiang, Yang and Zhang (2016) say that they have focused only two item (awareness of others emotions and management of others emotions) of EI out of four components (awareness of own emotions, management of own emotions, awareness of others emotions and management of others emotions) in their research. They suggest that in future research all four component of EI should be taken and they say that their focus was only on team performance despite of project success.

Zaccaro, Rittman and Marks (2002) proposed an idea of team leadership and recommended that mediating instruments by which leadership capabilities to upgrade team inspirational procedures, likewise team cohesion, which is the degree to which work team members fixed together and join to accomplish group objectives.

## 1.2 Problem Statement

Projects are basically done to achieve the desired outcome within limited time and budget. Each project needs two types of resource to successfully complete the project; one is human and other is technical. However, technical resources also rely on humans. So, humans are most important resource to complete a project successfully. As we know humans have emotions and their emotions affect team work that ultimately affects the success of project. So, emotions are one of the important factors that ultimately affect the project success. As we know CPEC is started in Pakistan, so people from diverse cultures, areas, backgrounds and religions of Pakistan and China are working together to complete the different

projects. So, it is very difficult for project managers to manage their feelings and emotions properly. On the other hand literature has also ignored the impact of emotional intelligence on project success. Some of the studies have taken emotional intelligence in their research work but main problem in the literature of project management is that underlying mediating and moderating mechanism through which emotional intelligence affect the project success in largely ignored.

### 1.3 Research Questions

On the basis of the stated problems, the present study is indented to find answers for some questions, brief summary of the questions are as follows:

**Question 1:** Does EI positively related to project success?

**Question 2:** Does any positive relationship exists between emotional intelligence and team cohesion?

**Question 3:** Does team cohesion have any positive relationship with project success?

**Question 4:** Does team cohesion plays a role of mediator between emotional intelligence and project success?

**Question 5:** Does self-efficacy plays a role of moderator between emotional intelligence and project success?

### 1.4 Research Objectives

The goal of the research is to develop and test anticipated model to find out the connection among emotional intelligence, team cohesion and project success. Additionally the self-efficacy is added the possible moderator for the relationship of the mentioned variables in the research model (emotional intelligence, team cohesion and project success). The specific objectives of the study are stated below:

1. To explore the positive relation among emotional intelligence and project success.
2. To see the mediating effect of team cohesion between emotional intelligence and project success.
3. To examine the moderating effect of self-efficacy between emotional intelligence and project success.
4. To test empirically and establish the proposed relationships in the construction projects of Pakistan.

## 1.5 Significance of the Study

Barczak, Lassk and Mulki (2010) have permanently said that emotional intelligence significantly impact on team member's performance and job satisfaction. A justification for this could be seen that managers with high emotional intelligence perform better in managing the emotional variations of employees at work than managers with lower emotional intelligence and emotionally intelligent managers use the positive emotions to create good working environment. And Positive emotions have always been related to increase group and managerial relations and building trust relationship with other people (Barczak et al., 2010).

Emotionally intelligent project leaders are mostly practice and to discuss their feelings and emotions clearly (Peslak, 2005). These positive emotions and feeling turn the motivation of project leaders spirit that enable them to converse positively and efficiently with group members and to provide inspiration to deal with complexities and challenges associated with work. Therefore, the project managers with high level of emotional intelligence are highly inspired which have a progressive effect on team members and to give them answers about project related new problems and complexities (Mount, 2006).

Researchers recommend that persons are more expected to be courteous and reliable in their emotional sharing if they understand that other people will deal

such feelings in valuable way. Sharing of emotions by any group person may effect and be recursively implemented by the responses of other group fellows, building up “emotion cycles” (Hareli & Rafaeli, 2008). But we recognize that as positive and negative emotions meet, “emotional tugs-of-war” may result which disturb the team (Liu & Maitlis, 2014). If people know that their team members use their emotional expressions like legitimate, it help them to feel closer and more well-informed around one another. Concentrating on the matter of what is being transferring can support team members to reach the psychological hurdles in information discussion and combination (Kennedy-Moore & Watson, 2001).

Quick and Nelson (2009) say that high team cohesion will have good impression on project team’s performance, work fulfillment and expansion. High cohesive employees likewise have a tendency to have more constant in work to achieve the objectives.

## **1.6 Supportive Theory**

### **1.6.1 Social Cognitive Theory**

Social cognitive theory (Bandura, 1999) is very important theory to know the emotional and social procedures included in social inspiration, self-efficacy and performance. A number of researches have been conducted involving social cognitive variables, particularly self- efficacy, to several sides of informative and professional manners (Lent, Brown, & Hackett, 2002). The emphasis of research has been on the relative of social cognitive variables to consequences attained and employees as individuals. Such an emphasis is reasonable given that emotionally intelligent leaders have usually been related with maximizing the growth and decreasing the difficulties of persons, and that predominant incentive instruments in job setting (e.g., ranks, wages) seems to be related to the value of persons’ performance and success. Although team procedures have been gathering, growing care between informative and administrative researchers in current centuries, reflecting the rising

admiration of team methods in education and operational fields (Stajkovic & Lee, 2001).

Though research on social cognitive theory has highlighted personal-level approaches (e.g., self-efficacy) and results, the theory is also related how individuals work with each other in groups and more social components. For example, mutual efficacy, the complement to self-efficacy, is a main social cognitive component which can support to clarify in what way team works with each other. Bandura (1997) defined mutual efficacy as a “group’s common views in its conjoint competencies to form and implement the ways of action needed to deliver certain stages of achievements”. In disparity to self-efficacy, that includes an individual’s views almost his or her capability to do certain activities independently, collective efficacy discusses to team member’s collective views like a team. Research on collective efficacy has come more slowly as compared to self-efficacy, but its study base has extended significantly in current decades and it has verified as a much flexible team-level descriptive concept, finding request to groups of different scope, job and managerial setting (Zaccaro, Blair, Peterson, & Zazanis, 1995).

## **1.7 Emotional Intelligence in Construction Projects**

The idea of emotional intelligence quickly attained consideration of researchers in the area of managerial psychology and performance (Bennett, 2009). The emotional intelligence concentration is based on various bases; even most of them appear especially relevant to organizations. For example, humans are not only intellectual capital but likewise social and emotional in nature, and even several researchers claim that the functions of an organization is mostly depend upon individuals emotional intelligence skills and capabilities to handle the complex situations. The literature emphasis upon how leaders can practice the emotions to influence the employee’s performance that influence the project success (Gabriel & Griffiths, 2002).

Contradictions lead to fuel scientific analysis; some conflict establishes them in the area of construction project administration, an area that has practiced substantial progress in current years. In this area, the worth of personal relations has been of important to researchers (Ofori, 2008). On one perspective, it is kept up that construction organizations are currently looking for persons with excellent administration and leadership abilities to increase personal relations and abilities, the excellence of which has been linked with the success of the projects. The features of person's cooperation are flooded with emotional substance and inability to recognize him frequently involves negative results for organizations. Numerous reviewers claim that there is a requirement to develop operating personal relations in construction, however several struggles to this result are troubled by specific manliness generalizations (and their comparing behaviors) pervading the business (Loosemore & Galea, 2008).

At this stage, specified these two contrary aspects in the research, the idea of emotional intelligence achieve significance. Emotional intelligence (EI) has been well-defined, as 'capabilities relating to the acknowledgment and guideline of emotion in the personal and others' (Spector, 2005) and a rising number of research proposes that it is significant for working personal relations. One research recommends that emotional intelligence is a necessary element for project accomplishment (Lopes, Salovey, Cote, Beers & Petty, 2005). Similarly, a sequence of parts in the structure research achieves consideration to the assumed significance of emotional intelligence (EI) in construction business. One important concept regarding emotional intelligence is that positive teamwork needs real collaboration between project manager and team member's and, while the value of that collaboration is measured; it converts clear that emotional responsiveness and emotional regulation are significant aspects (Songer, Walker & Beliveau, 2004). But the part of background and in what way it disturbs the authority of emotional intelligence is an important cause which presently increases importance in the organization research.

Usually, most of the emotional intelligence research is based inside a positive structure, while the objective is to build consistent actions of emotional intelligence and



to calculate and check a person's extent of emotional intelligence and narrate those parts of administrative achievement. But, in our study, we follow a diverse method to empirically observe an under-explored track of research. Specially, in looking for to recognize that in what way project managers (PMs) create logic of emotional intelligence and the part of it in their exertion (Blickle, Momm, Kramer, Mierke, Liu & Ferris, 2009). So, our attention does not concern either emotional intelligence is an effective concept or either it is just other organization trend. While in taking an interpretive place, we are interested to achieve entrance to and recognize how project managers understand and create logic of emotional intelligence and the part of emotion in their daily functioning lives in the environment of the construction projects.

Qualitative study has been considered as an appreciated instrument for producing circumstantial differences in managing literature. In looking to achieve entrance to those clarifications, we build upon Weick's (1995) idea of making as a method of discovering how these types of clarifications are reached. Thus, we study the descriptions that project managers build upon to create logic of emotional intelligence and claim hypothetically that emotional intelligence is understood as a phenomenon which possibly threatens the individuality of project managers. Consequently, the precise involvement of the study sketched at this point is to give a different type of qualitative facts to allow an analysis of the possible presentation of emotional intelligence in an individual circumstantial situation leading to a theorization of the issues which limit possible claim. Different authors in creating contribution (Cicmil, Williams, Thomas & Hodgson, 2006) for study to improve understand emotions and relations in the environment of project management and provide to the increasing research in this area by emphasizing the details why it is tough for the idea of emotional intelligence to achieve a position in this industry.

This analysis is unsettled as researchers and administration advisors similar to highlight that emotional intelligence may be 'trained', that explains into greater performance (Lindebaum & Jordan, 2014). Researchers in the context of construction have moved their attention to emotional intelligence as sound. Basically this is a broader acknowledgment that thinking upon project or managerial desires at

the cost of social desires is probable to have an expected outcome, like member disappointment, decreased promise and improved team member's turnover (Butler & Chinowsky, 2006). Researchers in construction have proposed that, remaining to the difficult and forceful type of relations in construction, worthy relations between project team members are critical to the project success. Therefore emotional intelligence is considered to be a critical capability to this end (Mo, Dainty & Price, 2006).

# Chapter 2

## Literature Review

### 2.1 Emotional Intelligence

Salovey and Mayer (1990) describe emotional intelligence as “A capability to observe one’s and other’s moods and emotions, to differentiate between them and to practice this type of information to guide one’s thinking and activities”. Although it was major put forward, emotional intelligence has been constantly recognized like a key management skills, which has a major impact on how leaders contact with others. This is particularly the situation in the highly complex project’s environment (Joseph & Newman, 2010). On the bases of collecting related evidence that emotional intelligence is linked to managerial efficiency it looks rational to determine that project management is not basically determined by technical methods or skills but also based on abilities and skills that related to emotions (Fisher, 2011). Muller and Turner (2007) have established a relation among emotional intelligence like an individual attribute of project managers and project management efficiency in the complex projects. Specially, his research work tell us that the abilities of a project manager’s to recognize and to control emotion of self and others to produces better quality results and to build effective relations with both stakeholders (internal & external).

Xiang et al., (2016) in their study have broken down the emotional intelligence in four components. First component of emotional intelligence is awareness of

own emotions. Awareness of own emotions is the skill of individuals to know own feelings like pleasure, grief, irritation, and so on. If the group fellows might aware their emotions exactly and well-timed, then they can take the suitable actions to free themselves from the effect of bad emotions. This type of awareness in the workplace, especially in the extreme conditions like prerequisite analysis with the customers, might support the team members reply to their emotions', change their outlooks to friends and customers well-timed, and then manage with their tasks further efficiently, that are helpful to form the constancy on the team participants facts and work features of the job.

Second component of emotional intelligence is the management of own emotions (MWE). Management of own emotions (MWE) means how persons can control the feelings and emotions they are aware, particularly the negative emotions and moods. If the individuals who possess the capability to manage their own feelings and emotions, that type of peoples do not show sudden emotions but hold emotions to understand the decisions and then show them in a proper way. There is a word-painting describing about this ability, "provide you ten seconds, and then describe your state of mind". Absence of management on own emotions will direct to down intelligent working. In the requirement analysis, conflicts and complexities with other peoples will come consistently in the project team effort, because of diverse views and unknown project targets. Similarly, if the project team members cannot stop the instant responses and show the direct actions about their emotions, it will be harmful to create a good and friendly working environment between team members which will ultimately influence the team performance and project success.

Third component of emotional intelligence is the Awareness of other's emotions (ATE) and ATE means identifying other people's emotions and mediating this type of the emotions is important to create the effective relation with other team members. This type of responsiveness is built on not only the direct conversation between respondents but also recognizing other's feelings and emotions by face or body language (Jordan & Lawrence, 2009). Working project team is like a social network, which has a magical influence to increase the amount of persons' abilities. This type of magnification is attained by team member's connections

and arguments. If one individual could be aware of team member's feelings and emotions effectively, he/she will show the proper and accurate responses to achieve the effectiveness properly, that are beneficial to achieve cohesiveness in teams and attainments on group job (Elfenbein, Beaupre, Lévesque & Hess, 2007).

Fourth and last component of emotional intelligence is the management of other's emotions (MTE) and demonstrates that the people could have the ability to impact other team member's feelings and emotions. The functioning environment of project team members is difficult to the team efficiency, particularly in the tough working environment. If team members meet certain problems whereas there is no appropriate involvement, the passive approach, even the irritation of only one team participants, would disturb all the team members, which is damaging to the regular job. But, if there is a team member who could inspire the depressed employee and calm the angry member, the project team could have strength and inspiration to overcome the problems (Christie, Jordan, Troth & Lawrence, 2007). So, it is essential for the entire project team participants having the capabilities to support the teams in the positive and responsive manners, which are also useful for discovering the actual project's prerequisite.

In the project working environment, we often face team members of different types of emotions i.e. positive and negative. Generally the positive emotions are recognized to have a positive impact that facilitates the team members to do job effectively and efficiently (Lindebaum & Jordan, 2014). On the other hand, Gilnow, Shapiro and Brett, (2004) say that negative emotions like frustration, annoyance and impatience can reduce interest that leads to a decline in performance.

Project managers with high emotional intelligence are more motivated and have a more positive affect on their team members and job performance that leads to project success. They provide better solutions to solve the upcoming problems and complexities that ultimately affect the project success (Mount, 2006). Muller and Turner, (2007) have permanently considered that emotional intelligence is an important prerequisite for project success. They recognized that highly emotionally intelligent project managers have the capability to overcome the negative emotions and conditions. With these outcomes, Thomas and Mengel (2008) concluded that

absence of emotional intelligence results in annoyance, depression and pressure in complex project environments. Generally, these researchers give evidence for important role of emotional intelligence provides in deciding project success aspects.

Weiss and Cropanzano (1996) say that emotions and behaviors at work are affected by the understanding of emotions and moods like pride, enthusiasm, annoyance, embarrassment, fault, anxiety, defeat, and jealousy. This type of feelings appears from actions and events that generate emotional responses in the project work setting. Research has presented that team members even project top management, practice emotions at work (Ashkanasy & Ashton-James, 2005). They also claimed that there is a solid connection among strategic decision-making procedures and the feelings and emotions that project managers practice in reaction to workplace actions.

Naseer, Chishti, Rahman and Jumani (2011) claim that emotional intelligence is important for better project performance and they emphasize that an individual who recognizes how to remain inspired in pressure, inspire others, control difficult personal relations, own and others and create good working environment to achieve better outcomes. Naseer et al., (2011) determined in a current research that high emotionally intelligent project managers and team members better than lower emotionally intelligent team members. So, that's why managers who give more importance to emotions develop a highly emotionally intelligent team that increases their enthusiasm toward work performance and project success. Moore and Mamiseishvili (2012) in their research to check the relation among emotional intelligence and job performance, originated that one team member with a lower emotional intelligence can disturb the whole project team. This is the intention that project managers should give on more stress on emotional intelligence while picking project team members.

Stubb, Koman and Wolff (2008) show that current study highlights that emotionally intelligent managers and team members perform job more efficiently independently and as team participants. Similarly active project teams need more than just practical abilities, they want emotional intelligence also. Managers who

are more emotionally intelligent are more likely to express and share their positive emotions with their team members (Peslak, 2005). As a result, emotional intelligence increases the interest of project managers, allowing them to connect efficiently to their team members and to enable creativeness. Highly emotionally intelligent project managers should be more enthused to have a good impact on their team members and give them suitable solutions to solve new challenges and complexities that critical projects brings (Mount, 2006).

Barczaket al., (2010) have constantly stated that emotional intelligence considerably disturbs project team member's job satisfaction and confidence. A clarification for this could be established in the sign that project managers with greater emotional intelligence are better than their low emotional intelligence complements at handling the emotional variations team members experience at work and to provide positive emotions. Positive feelings and emotions have been connected to rising better social relations and creating belief with others. Barczak et al., (2010) say that feelings and emotions have an important impact on how project team participants connect, express and perform work with each other. They emphasize that the capability to achieve emotions and feelings, particularly through clash, stress and tension enables and encourages positive and active functioning relations with new project team members. Kunnanatt (2008) recommend that team members with high emotional intelligence are capable to support beside disturbing feelings and emotions that increased the capability to realize and handle emotions they own. Kunnanatt (2008) discusses that high emotional intelligence gives better results either at separate and group level. In a research on the impact of team emotional intelligence on group efficiency, Aslan, Ozata and Mete (2008) established that team emotional intelligence has a good impact on team efficiency. In this respect, they concluded that positive emotional intelligence increase confidence in team members; while negative emotions (like anger) reduce confidence. While discussing negative emotions, Boden and Berenbaum (2007) resulted that low level of emotional intelligence is linked with greater levels of doubt and frustration. Meanwhile we consider emotional awareness is a part of emotional intelligence. Emotional intelligence should also be linked to project

employee's perceptions of confidence in other employees. In conclusion, we also note that Sy et al., (2006) who studied the effect of emotional intelligence on work attitudes and results also found that perceptions of job satisfaction and confidence are directly related to emotional abilities.

**H1:** There is a positive association between emotional intelligence and project success.

## 2.2 Team Cohesion

Cook, Cheshire, Rice and Nakagawa., (2013) defined team cohesion as “a project manager’s opinion on the degree of attraction of a team to its members and the familiarity of the personal bonds among team members”. If a team is more cohesive, the more effective project team members will perform. To achieve the team member’s requirements, they can get more conformity from each team member. Team cohesion can provide the positive team results that include awareness of difficulties, better creativity, increase enthusiasm, increase motivation and preference of change. From research, different process aspects may impact team cohesion as team structure and contribution (Quick & Nelson, 2013). From individual prospective, team cohesion is generally described as positive emotions and feelings toward project team members or using of similar feelings between team members, giving importance to public enclosure and internalization linked with normative mechanism. In this way, team cohesion gives importance an affective element in group practices. Cohesion is usually seen as an effect of expected understanding between team participants and relates positively with member’s activities in small groups and team practice and results for team participants (Hoegl, Ernst & Proserpio, 2007).

Team cohesion can differ based on team size and progress. In this way, teams need to be more cohesive and get better steps in its group improvement. Constant with time-based arrangements connected to logical alteration in group improvement, team cohesion changes across different phases of interaction, especially in team



group and social networks, demonstrating high cohesion in later phases (Woerkom & Sanders, 2010).

JCA Global (2013) states their work on teams, that effective team are developed by building emotional intelligence in team members. This research gives the idea of team emotional intelligence. JCA Global (2013) describes team emotional intelligence as “the shared behaviors, actions and moods that make the circumstances for teams to improve co-operate, coordinate and communicate well”. Barczak et al., (2010) say that team emotional intelligence is attained by creating a set of norms that achieve emotional procedures in the team. These standards enable teamwork, cohesiveness and norms that are important for team success. Highly emotionally intelligent teams competently accomplish and acquires the most from the individuals among the team, gives care to both job and emotion and competently achieves emotion in the team (JCA Global, 2013).

Seal, Bailey and Troth (2009) recommends that the most ideal approach to see a team’s emotional intelligence level is see the employee’s personal emotional capabilities. Since leaders attain their belongings through others, we observe the indirect ways through which managerial emotional intelligence can affect target performance. First approach through which intelligent leaders may affect their team members and improve performance is by making a cohesive environment inside the team. Cohesion between team members is characterized as a good intra-group spirits solidarity, agreement and pride in completing in gathering’s assignment (Beal, Cohen, Burke, & McLendon, 2003). Notwithstanding sharing a promise to the team work, team members of a cohesive team also share a common preferring toward each other.

Team Cohesion influences workers conduct. Emotionally intelligent leaders incite team cohesion by: (1) empowering positive sentiments of gathering character; (2) setting bunch standards and (3) urging colleagues to participate in emotional communication. Kotzé and Venter, (2011) say that emotional intelligence is critical in light of the fact that it predicts higher team performance.

Emotionally intelligent managers may influence work-unit cohesiveness by creating group standards or norms. These standards manage the social propensities,

occasions, execution objectives, and clashes, between others, in a team. Representative consistence with the group standards that are initiated by an emotionally intelligent leader makes collaboration (Tran & Hertel, 2011). Emotionally intelligent leaders can set working environment standards that are acknowledged by the team members since they team members. In pressures and complexities emerging within teams, emotionally intelligent members may have the capability to perceive and eliminate the negative emotions environment, while employees with less emotional intelligence may either be unaware of what's contributing the antagonism or be incompetent in changing it (Taggar & Ellis, 2007).

Emotional intelligence likewise has progressively turned into a concentration of research at the group level, where it is conceptualized and measured as accumulated emotional intelligence of the colleague. At the point when a group comprises of numerous intelligent employees, then complex conditions do not affect the team (i.e., team cohesion) (Jordan & Troth, 2004). Team cohesion is a felt attraction toward colleagues that makes a relational bond among them. Through this holding, colleagues are persuaded to perform well. A few recent psychology studies say that the more prominent the team cohesion, the higher the team execution is (Mathieu, Kukenberger, Innocenzo & Reilly, 2015).

**H2:** There is a positive relation between emotional intelligence and team cohesion.

Cohesive connections among team members have been essential for good performance and this performance leads to project success. Researcher's characteristics team cohesion lopsided consequences for performance to its multi-dimensionality. Surveys show two particular measurements of teams attachment, including social (i.e., the way that colleagues are pulled in to the group by a constructive social connection among its individuals) and undertaking (i.e., the way that colleagues are pulled in to the group by assignment responsibility) cohesion (Castano, Watts & Tekleab, 2013). One might say, task cohesion speaks to the degree to which individuals are attracted to a group because of the attraction of tasks and their common promise to the assignment, and this sort of cohesion will probably improve group performance. Taking after the surviving reviews which view task cohesion as a result and recommend that this cohesion can apply critical impact on team

performance (Bahli & Buyukkurt, 2005), we suggest that undertaking attachment intervenes the connection between group social components and ideation results (i.e., item thought freshness and convenience to clients and handiness to firms).

Cohesion is “usually seen by managers as a necessary standard for team creation” and “some Level of cohesion is important for the group to work adequately”. Managers within the organization have the possibly cohesion through making team with different arrangements of aptitudes and urging these groups to embrace different perspectives (Salas et al., 2014).

Team cohesion is how much colleagues’ cooperate to seek after aggregate objectives. It is characterized as a dynamic procedure that is reflected in the propensity of a gathering to meet up and stay joined in the quest for its instrumental goals as well as for the fulfillment of part’s emotional needs (Mach & Baruch, 2015).

It is normal that high team cohesion will assume a huge part in project success. Team cohesion, which is viewed as a key variable for group participation, its connection with firm performance has been broadly talked about (Salas et al., 2014). Slater and Sewell (1994), for instance, inferred that cohesiveness and achievement are commonly dependent and that the cohesion progress relations ought to be inspected by methods for a round model in which the two factors are associated. However, team cohesion influence firms performance through different elements, which gives another point of view to us to investigate the connection between team cohesion and improvement. Researcher’s characteristic cohesion attachments differed consequences for execution to its multi-dimensionality. Analysis of the research shows two different measurements of team member’s cohesion, with social (i.e., the way that colleagues are pulled into the group by a positive social connection between its individuals) and duty (i.e., the way that colleagues are pulled in to the group by assignment duty) cohesion (Carless & De Paola, 2000). While, task cohesion shows the level in which individuals attracted by tasks and in which they show common interest and dedication towards the tasks and this kind of cohesion increases team performance (Bahli & Buyukkurt, 2005).

Taking the reviews which see task cohesion as a result and recommend that this cohesion can apply crucial impact on team performance (Man & Lam, 2003), we

suggest that task cohesion intervenes the connection between team social components and ideation results (i.e., product idea newness and usefulness to customers and usefulness to firms). Specially, we consider the accompanying criteria while distinguishing the past to task cohesion. First, the antecedents should improve the significance of and responsibility to group task. Second, without these predecessors, task cohesion is probably not going to happen among the colleagues. For example, the group may experience issues creating assignment based attachment if its individuals have lacking social and relational capability. At last, task cohesion is context-specific and precursors and past should show these contextual shades. An ideation group ordinarily comprises of people cooperating to finish an allotted errand while working under the firm direction. At the end of day, the antecedents should further speak to the key variables at firm, team and personal levels. With that in mind, we incorporate colleague's organizational responsibility, social cohesion, and social competency as the precursors to task cohesion. Individuals prefer to work with similar others. This "inspiration to create and keep social relations inside the gathering" is alluded to as social cohesion (Carless & De Paola, 2000). Good relations and attachment can encourage colleague's incorporation. New researches have noticed that good relations can improve team member performance (Sivasubramaniam, Liebowitz & Lackman, 2012).

**H3:** There is a positive association between team cohesion and project success.

## 2.3 Project Success

Countless researches have demonstrated that emotional intelligence tremendously affects project success. Goleman (1995) speculated that emotional intelligence decides 80% of a man's life success. If project managers have good emotional intelligence, their team member's performance likewise has a tendency to be superior (Wong & Law, 2002). Sy et al., (2006) found that manager's emotional intelligence had a more positive effect at work fulfillment of representatives. Berman and West (2008) took emotional intelligence as a social capability and concentrated the impact in administration; they found that extraordinary emotional intelligence might

add to further created abilities in flexibility, correspondence, and comprehension. Emotional intelligence is likewise regularly observed as a very necessary characteristic for work in particular positions. Dong, Shao, Yuan and Huang, (2014) discovered high state of team member's emotional intelligence level might lower the impact of disagreeable emotions to the turnover aim, which was helpful to project success. Wong and Law (2002) found the important connection among emotional intelligence and job fulfillment and work performance (success). Patra (2004) says that emotional intelligence can make a lovely working environment and impact team members work satisfaction and effective administration and organizational expansion. Sy et al., (2006) analyzed the connections among worker's emotional intelligence, their leader's emotional intelligence, team member's job satisfaction and work performance (success). The analysts found that the team member's emotional intelligence was directly connected with work satisfaction and success.

From researcher, team cohesion affects project success and team efficiency in a non-project environment. Quick and Nelson (2009) says that high team cohesion will have good impression on project team's performance, work fulfillment and expansion. High cohesive employees likewise have a tendency to have more constant or regular yield between its colleagues as they hold closely to the generation standards. In addition, information sharing manner mediates the connection among team cohesion and personal performance. Notwithstanding, it is uncertain whether team cohesion additionally anticipate project performance, team efficiency and job satisfaction in a project environment whereby project supply and time are the limitations (Woerkom & Sanders, 2009).

Without the sufficient particular abilities and skill team members won't have the capability to adequately execute the predefined systems, which will inversely affect the project success. In spite of the fact that outcome control stresses the importance of accomplishing project objectives, the unpracticed and insufficiently prepared employees are not liable to understand these objectives without the direction of individuals who know about the improvement (Wallace, Keil & Rei, 2004). In cohesive teams, individuals are persuaded to work hard. Team cohesion

is directly identified with performance and maintenance (Beal, Cohen, Burke, & McLendon, 2003).

Loughead, Colman and Carron (2001) used team cohesion as a mediator between emotional intelligence and project performance (success). In their study, they say that team cohesion positively mediates between emotional intelligence and project performance (success). Similarly, Mach, Dolan and Tzafrir (2010) in their study used team cohesion as a mediator among employee's attitude and project success in which they found that more a team cohesive more positive results comes. They also discussed that employee's attitude (emotions) effect team performance which ultimately affects project success. So, more a team is cohesive the more positive attitude we expect from employees which leads to project success.

**H4:** Team cohesion plays a mediating role between emotional intelligence and project success.

## 2.4 Self-Efficacy

Self-efficacy is characterized as "faith in one's abilities to prepare the inspiration, cognitive assets, and expected strategies required to meet given situational demands" (Wood & Bandura, 1989). Self-efficacy is an individual's judgment about how well one can perform in a specific assignment situation. Moreover, self-efficacy is thought to decide conduct by impacting the exercises people attempt, the resources they use in the exertion and to what extent they hold on notwithstanding impediments or challenges (Bandura, 1999). Self-efficacy is considered to play a key part in inspiration (decision, exertion, and persistence), learning, self-control and accomplishment (Schunk & Di Benedetto, 2016). A solid feeling of self-efficacy drives people to set higher objectives and have firmer responsibility toward accomplishing them. Locke (2009) declares that human conduct is fundamentally roused and controlled through self-influence. The more certainty an individual has in their capacity to play out a specific job, the more probable that individual is to take part in the activity, set higher objectives than typical, endure through challenges and eventually be fruitful (Miles & Maurer, 2012).

Self-efficacy has been appeared to enhance and impact together inspiration and task performance. Research studies have inspected the connection among authority self-efficacy and manager's inspiration for modification. Leadership self-efficacy was observed to be identified with direction setting and to achieving employee's commitment (Paglis & Green, 2002). In light of the difficulties related with setting and resolving career objectives, it appears to be likely that the connection between responsibility to career objectives and weakening of effective activities will be moderated through self-efficacy. Self-efficacy can communicate with job promise to influence job achievement on the ground that as representatives turn out to be more dedicated to their career objectives, they will probably build up an arrangement for performance fulfillment in their job try, and to strengthen certainty in their capabilities to obtain individual abilities, for example, aptitudes and skills. Brown, Jones, and Leigh (2005) concluded that both self-efficacy and objectives are factors of effective activities.

Perceiving that team member's recognitions can vary from individual observations about work qualities, Strubler and York (2007) built up a "Team Characteristics Model". In analyzing this model for actual organizational groups, Strubler and York originated that team members revealed fundamentally higher amounts of serious psychological conditions in experienced seriousness and experienced contribution than non-team members both previously, then after the fact functioning as a team. The possibility that team member's self-efficacy recognitions can impact their performance is a focal topic in Staples and Webster's (2007) collaboration show in view of social cognitive theory. Their theory recommends that different outer practices impact teamwork, self-efficacy views and relate decidedly to saw viability. Steady with this model, colleague's self-efficacy recognitions related positively to saw efficiency for personal and group performance, with stronger relations among self-efficacy for teamwork and saw team performance in aggressive competing teams (Edmonds, Tenenbaum, Kamata, & Johnson, 2009).

Mulki, Lask, and Jaramillo (2008) demonstrated that individuals who are high in self-efficacy have confidence in their capacity to deal with their function admirably and will probably become effective in their career. Self-efficacy upgrades

team member's willingness to contribute extra effort and play an important part in enhancing work viability, work satisfaction and profitability. At last, more than 30 years of research declares that expanding individual's convictions in their abilities (self-efficacy) "encourages effective self-regulation and expanding individual's inspiration, persistence with challenges, and performance accomplishments" (Bandura, 2012).

Luszczynska, Chwarzer, Lippke and Mazurkiewicz (2011) utilized self-efficacy as moderator in which they say that self-efficacy is direct behavior connection because individuals believing that self-doubts fail to follow up on their arrangements. Thus, emotional intelligence influence behaviors that relies on upon the individual's level of self-efficacy (moderator). Grau, Salanova and Peiro (2000) likewise give significant information about the moderating part of self-efficacy between stressors and expert burnout. In which they examined the impacts of stress on emotional tiredness. Comes about demonstrate that self-efficacy moderates the relations among stress and its impacts in connection to burnout. Accordingly, team members with low level of self-efficacy feel more "burnt out". Along these lines, the moderation of self-efficacy relies both on its level of emotional intelligence and on the measurements of burn out.

**H5:** Self-efficacy moderates the relation among emotional intelligence and project success; if self-efficacy is high, the association among emotional intelligence and project success would be stronger.



## 2.5 Research Model

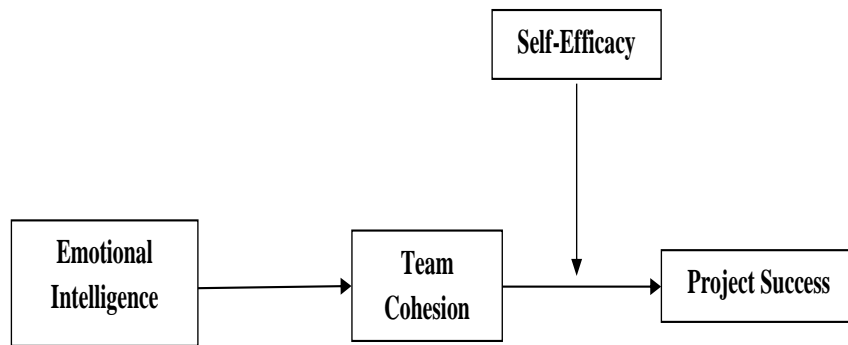


FIGURE 2.1: Research Model of The impact of Emotional Intelligence on Project Success: Mediating role of self-efficacy & Moderating role of team cohesion.

## 2.6 Research Hypotheses

**H1:** There is a positive association between emotional intelligence and project success.

**H2:** There is a positive association between emotional intelligence and team cohesion.

**H3:** There is a positive association between team cohesion and project success.

**H4:** Team cohesion plays a mediating role between emotional intelligence and project success.

**H5:** Self-efficacy moderates the relationship between emotional intelligence and project success; if self-efficacy is high than the relationship between emotional intelligence and project success would be stronger.

# Chapter 3

## Methodology

### 3.1 Introduction

This chapter discusses the methodology which is used to find out the relationship of emotional intelligence and project success, with mediating role of team cohesion and moderating role of self-efficacy. This chapter deals with research design and strategy that cover all data collection methods (population & sample) along with the measurement and instrumentation.

### 3.2 Research Design

Research design is a structure of research plan of action. Zikmund (2003) characterizes research design is the plan of the researcher that determines the methodology and strategy for collecting and analyzing necessary information. Research design includes time horizon, types of setting and unit of analysis which are discussed below.

#### 3.2.1 Study Setting

The participants for this study belong to the field of construction projects (public & private). Questionnaires were filled by project professionals (project managers,

project coordinators, project consultant and project team members) of construction industry.

### **3.2.2 Time Horizon**

The data is collected in one and half month for this study, the data in nature is cross sectional and collected at one time.

### **3.2.3 Unit of Analysis**

Unit of analysis can be individual, group, industry, organization, country or cultured from which the data is collected. For this study, unit of analysis was individual of different projects (public & private) from Islamabad, Rawalpindi and Mianwali.

## **3.3 Population and Sample**

The present study seeks to focus on the construction projects (public & private) in Pakistan; the population of the study is the project professionals (project managers, project coordinators, project consultants and project team members) of this sector. Population is a set of peoples, events, things connected with interest that the researcher wants to examine (Cavana, Delahaye & Sekaran, 2001). The current research study population is employees of the project base organizations.

Sample is composition of the population represents the whole population. Data is collected through survey based questionnaires; 400 questionnaires were distributed using through convenience sampling technique.

## **3.4 Instrumentation**

The data was collected through adopted questionnaires from different sources. The nature of the items included in the questionnaire is such that all of them, i.e.

Emotional Intelligence, Team Cohesion, Self Efficacy and Project Success have to be filled by the project professionals (managers, project coordinators, project consultants and project team members). The items of the questionnaires were responded by using 7-points Likert-scale. Questionnaires also consist of four demographic variables which include information regarding the respondent gender, age, qualification and experience.

### 3.4.1 Emotional Intelligence

The 16 items scale established by Jordan and Lawrence (2009) is used to check the effect of emotional intelligence on project success. The data was collected through survey based questionnaires to response the industry conditions of construction projects in Pakistan. The responses are obtained through 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). In questionnaire the emotional intelligence is divided into four components i.e. Awareness of own emotions (AWE), Management of own emotions (MWE), Awareness of other emotions (ATE) and Management of others emotions (MTE). Specific components of EI: (1) awareness of own emotions (sample item: "I can explain the emotions I feel to team members"); (2) awareness of others' emotions (sample item: "I can read my fellow team members' true feelings, even if they try to hide them"); (3) management of own emotions (sample item: "When I am frustrated with fellow team members, I can overcome my frustration") and (4) management of others' emotions (sample item: "I can get my fellow team members to share my keenness for a project"). (Alpha value  $\geq 70$ )

### 3.4.2 Team Cohesion

To measure the team cohesion we adopted the scale of (Kaufmann & Wagner, 2016). The responses were obtained through 7- point Likert scale ranging from 1 (strongly disagree) to 7 (Strongly Agree). The sample items of the scale are: "The team members got along well with each other, the team members had a strong feeling of fellowship/camaraderie among each other". (Alpha value  $\geq 89$ )

### 3.4.3 Self-Efficacy

To measure the self-efficacy we adopted the scale of (Chen, Gully & Eden, 2001). The responses were obtained through 7-point Likert scale ranging from 1 (Strongly Disagree) to 7 (Strongly Agree). The sample items of the scale are: “I will be able to achieve most of the goals that I have set for myself; even when things are tough, I can perform quite well”. (Alpha value  $\geq 70$ )

### 3.4.4 Project Success

To measure the project success, we adopted the scale of (Aga, Noorderhaven & Vallejo, 2016). The rating scale ranged from 1 (Strongly disagree) to 7 (Strongly Agree). The sample items of the scale are: “The project was completed on time; the outcomes of the project are used by its intended end users”. (Alpha value  $\geq 70$ )

## 3.5 Data Collection Procedure

In order to get important data, a proper method of data collection was selected to achieve the appropriate information. Questionnaire surveys are recently the most frequently used of collecting data for research (Barling., 2014). Data collected from several project based organization and the list of some projects is given below:

1. Construction of Multistory Buildings (Residential Apartments for Army Officers) DHA phase 2, Islamabad.
2. World Trade Center (WTC) by M/S AL-GHURAIR GIGA Construction Co. at DHA Phase 2, Islamabad.
3. Construction of Multistory Buildings Askari-14 (Sector B, C, D), Rawalpindi.
4. Ghakhar Plaza at Sadar Rawalpindi by M/S Ihsa Construction Co.
5. Construction of Bridges on CPEC by M/S Gammon Pakistan at Turab, Mianwali.

400 questionnaires were distributed out of which 224 were received and response rate was 56%. Out of 224, 215 questionnaires were workable.

### 3.6 Data Analysis Tools

Different statistical tests were performed like Descriptive statistics, reliability, Confirmatory factor analysis (CFA), correlation analysis and regression analysis were carried out through two different software SPSS and AMOS. Correlation and Reliabilities were also performed through SPSS software. Confirmatory factor analysis was performed in AMOS, in order to check the fitness of 4 factor model; its results are portrayed in next chapter. The regression analysis of independent and dependent variables was carried out through AMOS, because AMOS is good software for generating estimates. Mediation and moderation analysis were also performed through AMOS.

### 3.7 Sample Characteristics

The tables below represent the sample characteristics.

#### Respondent's Gender Percentage

Table 3.1 represents the respondent's gender characteristics.

TABLE 3.1: Gender.

|        | Frequency | Percentage | Cumulative Percentage |
|--------|-----------|------------|-----------------------|
| Male   | 181       | 84.2       | 84.2                  |
| Female | 34        | 15.8       | 100.0                 |

Table 3.1 represents the gender composition of sample in which 84.2% were male and 15.8% were female. The male percentage is high.

## Respondent Age Percentage

Table 3.2 represents respondent's age characteristics.

TABLE 3.2: Age.

|              | Frequency | Percentage | Cumulative Percentage |
|--------------|-----------|------------|-----------------------|
| 18-25        | 115       | 53.5       | 53.5                  |
| 26-33        | 78        | 36.3       | 89.8                  |
| 34-41        | 14        | 6.5        | 96.3                  |
| 42-49        | 5         | 2.3        | 98.6                  |
| 50 and above | 3         | 1.4        | 100.0                 |

Table 3.2 shows the composition of the sample with reference to age groups. 53.5% of respondents age were 18-25, 36.3% respondents age were 26-33, 6.5% respondents age were in 34-41 range, 2.3% respondents age were in 42-49 range and just 1.4% respondents were more than 50 years. In this study, the percentage of 18-25 respondents is high.

## Respondent's Qualification Percentage

Table 3.3 represents the respondent's qualifications characteristics.

TABLE 3.3: Qualification.

|              | Frequency | Percentage | Cumulative Percentage |
|--------------|-----------|------------|-----------------------|
| Matric       | 3         | 1.4        | 1.4                   |
| Intermediate | 21        | 9.8        | 11.2                  |
| Bachelor     | 70        | 32.6       | 43.7                  |
| Masters      | 94        | 43.7       | 87.4                  |
| MS           | 25        | 11.6       | 99.1                  |
| PhD          | 2         | .9         | 100.0                 |

The above table represent the respondents qualification, matric qualified was 1.4%, inter qualified was 9.8%, bachelor qualified was 32.6%, master qualified was 43.7%,

MS/Mphil qualified was 11.6% and PhD qualified was just 0.9%. In Table 3.3, the master qualified percentage is high.

## Respondent's Experience Percentage

Table 3.4 represents the respondent's experience percentage.

TABLE 3.4: Experience.

|       | Frequency | Percentage | Cumulative Percentage |
|-------|-----------|------------|-----------------------|
| 0-5   | 142       | 66.0       | 66.0                  |
| 6-10  | 55        | 25.6       | 91.6                  |
| 11-15 | 13        | 6.0        | 97.7                  |
| 16-20 | 4         | 1.9        | 99.5                  |
| 21-25 | 1         | .5         | 100.0                 |

Table 3.4 represent the respondent experience of the work, in which high percentage of respondent's work experience is 66% in range (0-5), in range (6-10) the respondents experience was 25.6%, in category (11-15) the respondents experience were 6.0%, in category (16-20) the respondent experience was 1.9%, and in category (20-25) the respondent experience was just 0.5%. In this table, respondent of range (0-5) is high.



# Chapter 4

## Results

### 4.1 Initial Data Screening

After data collection, the data was punched in SPSS with respective codes like emotional intelligence, team cohesion, self-efficacy and project success. At the first step, data normality was checked by using different methods such as outliers, missing values, kurtosis and Skewness. The data at this stage showed reasonable consistency and was in the normality range.

### 4.2 Descriptive Statistics

Descriptive statistics table is the basic representation of the data collected and analyzed in this research like sample size, maximum value, minimum value, mean value and standard deviation of the data. Descriptive statistics also present large sum of data into arranged and summarized form. The details of data collected under this research investigation are presented in Table 4.1.

Variables names are in first column, the second column contains the sample size of the study. Third and fourth columns, representing the minimum and maximum values for the mean calculation for the collected data. For all four variables 7 liker scale ranges from 1 to 7 used. The independent variable i.e., emotional intelligence has a mean of 6.50 and a standard deviation of 0.8742. The dependent variable

TABLE 4.1: Descriptive Statistics.

| <b>Variable</b>        | <b>Sample<br/>Size</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Std.<br/>Deviation</b> |
|------------------------|------------------------|----------------|----------------|-------------|---------------------------|
| Emotional Intelligence | 215                    | 3.00           | 6.50           | 5.0930      | .87422                    |
| Team Cohesiveness      | 215                    | 3.00           | 6.75           | 5.0628      | .90727                    |
| Self-Efficacy          | 215                    | 3.38           | 6.88           | 5.0570      | .91479                    |
| Project Success        | 215                    | 2.86           | 6.50           | 4.9542      | .89595                    |

project success shows a mean and standard deviation values of 4.95 and 0.8959 respectively. The mediator of this study, team cohesiveness turned up a mean of 5.06 and a standard deviation of 0.9072 whereas the moderator of the study self-efficacy has these values as 5.056 and 0.9148, respectively.

### 4.3 Reliability Analysis

Table 4.2 shows the reliability analysis of the variables which were evaluated emotional intelligence cronbach's alpha value is .920 in the current study, the cronbach value of team cohesion in this study is .792, project success cronbach's value is in the current study is .899, and self-efficacy value of cronbach's is 0.935.

TABLE 4.2: Instrumentation sources, Items &amp; Reliabilities.

| <b>Variable</b>                | <b>No. of Items</b> | <b>Reliability</b> |
|--------------------------------|---------------------|--------------------|
| Emotional Intelligence<br>(IV) | 16                  | .920               |
| Team Cohesiveness<br>(Med)     | 4                   | .792               |
| Self-Efficacy<br>(Mod)         | 8                   | .899               |
| Project Success<br>(DV)        | 14                  | .935               |

## 4.4 Correlation Analysis

The correlation between independent variable Emotional Intelligence and dependent variable Project success are also significant to moderate level, which confirms that there is no issue of auto correlation and linearity of model.

TABLE 4.3: Correlations Analysis.

| Variable                 | 1      | 2      | 3      | 4 |
|--------------------------|--------|--------|--------|---|
| 1 Emotional Intelligence | 1      |        |        |   |
| 2 Team Cohesiveness      | .381** | 1      |        |   |
| 3 Self-Efficacy          | .207** | .141*  | 1      |   |
| 4 Project Success        | .385** | .324** | .323** | 1 |

\* $p < .05$ , \*\* $p < .01$

Emotional intelligence was found positively and significantly correlated with Team cohesiveness ( $r = .381^{**}$ ,  $p = .000$ ). Emotional intelligence was also found significantly correlated with Project success ( $r = .385^{**}$ ,  $p = .000$ ). Results shows significant existence of correlation between Team cohesiveness and Self-efficacy ( $r = .141^{**}$ ,  $p = .000$ ) and also positive significant correlation found with Project success ( $r = .324^{**}$ ,  $p = .000$ ). Finally, the correlation between Project success and Self-efficacy was found significant results ( $r = .323^{**}$ ,  $p = .000$ ).

## 4.5 Confirmatory Factor Analysis and Competing Models

Confirmatory Factor Analyses (CFA) of all four constructs including Emotional intelligence, Team cohesiveness, Self-efficacy and Project success was performed to check the fitness of Hypothesized 4 factor model before testing directing and mediating relation. Table 4.4 representing that the 4 factor model was fit with ( $\chi^2 = 1023.368$ ,  $Df = 813$ ,  $\chi^2/Df = 1.259$ ,  $p < .000$ ;  $CFI = .950$ ,  $IFI = .950$ ,  $TLI = .947$ ,  $RMSEA = .035$ ).

TABLE 4.4: Competing different models with hypothesized 4 factor measurement model.

| Model   | $\chi^2$ | Df  | $\chi^2/\text{Df}$ | $\Delta\chi^{2a}$ | $\Delta\text{Df}$ | CFI  | IFI  | TLI  | RMSEA |
|---|----------|-----|--------------------|-------------------|-------------------|------|------|------|-------|
| <b>Hypothesized Measurement Model (4 Factor Model)</b>  | 1023.368 | 813 | 1.259              |                   |                   | .950 | .950 | .947 | .035  |
| Alternate Model 1: Combined “Emotional intelligence and Team cohesiveness” (3 Factor Model)   | 1207.465 | 816 | 1.480              | 184.097           | 3                 | .906 | .907 | .901 | .047  |
| Alternate Model 2: Combined “Project success and Self-efficacy” (3 Factor Model)  | 1702.176 | 816 | 2.086              | 678.808           | 3                 | .788 | .790 | .776 | .071  |
| Alternate Model 3: Combined “Emotional intelligence and self-efficacy” and then combined “Project success and Team cohesiveness” (2 Factor Model) | 1989.825 | 818 | 2.433              | 966.457           | 5                 | .719 | .722 | .704 | .082  |
| Alternate Model 4: All factors combined (1 Factor Model)  | 2822.123 | 819 | 3.446              | 1798.755          | 6                 | .520 | .525 | .495 | .068  |

Note:  $n = 215$ ; Values are differences of each of the alternative measurement models with the hypothesized model.

\*\*\* $p < .001$

Alternately, 3 factor model by combining Emotional intelligence and Team cohesiveness was less fit ( $\chi^2 = 1207.465$ , Df = 816,  $\chi^2/\text{Df} = 1.480$ ,  $p < .000$ ; CFI = .906, IFI = .950, TLI = .901, RMSEA = .047) with respect to 4 factor model. Change in chi-square was 184.097. Change in degree of freedom was recorded 3.

Table 4.4 shows another 3 factor alternate model, combining Project success and Self-efficacy comparison with four factor model also found less fit with values ( $\chi^2 = 1702.176$ , Df = 816,  $\chi^2/\text{Df} = 2.086$ ,  $p < .000$ ; CFI = .788, IFI = .790, TLI = .776, RMSEA = .071) and the change in chi-square and degree of freedom were 678.808 and 3, respectively.

Third model represents the comparison of 4 factor model with 2 factor model by combining first two variable Emotional intelligence, self-efficacy and then combining Project success and Team cohesiveness which shows the less fit of 2 factor model with values ( $\chi^2 = 1989.825$ , Df = 818,  $\chi^2/\text{Df} = 2.433$ ,  $p < .000$ ; CFI = .719, IFI = .722, TLI = .704, RMSEA = .082). The change in chi-square value and degree of freedom were 966.457 and 5.

Combining all items on single variable to create 1 factor model and then comparing the values with four factor model. Comparison with four factor model results shows the worse fit ( $\chi^2 = 2822.123$ , Df = 819,  $\chi^2/\text{Df} = 3.446$ ,  $p < .000$ ; CFI = .520, IFI = .525, TLI = .495, RMSEA = .068).

Dependent variable Project success was regressed through independent Emotional intelligence and Mediator Team cohesiveness using SEM in AMOS. Later mediator Team cohesiveness was regressed through IV Emotional intelligence and Interaction term; results are stated in Table 4.5.

TABLE 4.5: Standardized Direct path coefficients of the hypothesized model.

| Direct Paths   | Estimate | SE   | CR    | P    |
|--|----------|------|-------|------|
| Emotional intelligence → Project success               | 0.385    | .065 | 6.098 | .000 |
| Emotional intelligence → Team cohesiveness             | 0.381    | .066 | 6.021 | .000 |
| Team cohesiveness → Project success                    | 0.324    | .064 | 5.011 | .000 |
| Self-efficacy → Project success                        | 0.323    | .063 | 4.987 | .000 |
| Team cohesiveness*, Self-efficacy<br>→ Project success | 0.443    | .008 | 7.230 | .000 |

#### b. Standardized Indirect path coefficients of the hypothesized model

| Indirect Paths  | BC 95% CI       |             |             | P    |
|---|-----------------|-------------|-------------|------|
|   | Indirect Effect | Lower Limit | Upper Limit |      |
| Emotional intelligence → Team Cohesion<br>→ Project success | .040            | .005        | .088        | .000 |

Note:  $n = 215$ ; Bootstrap sample size = 2000, BC 95% CI = Bootstrap confidence Intervals  
 $*p < .05$ ,  $**p < .01$ ,  $***p < .00$

## 4.6 Structural Modeling Results

It is already established that the hypothesized 4 factor model is the best fit ( $\chi^2 = 1023.368$ , Df = 813,  $\chi^2/\text{Df} = 1.259$ ,  $p < .000$ ; CFI = .950, IFI = .950, TLI = .947, RMSEA = .035). To test the mediation, it was supposed to check mediation through different paths. First path was tested from direct path that was from independent variable Emotional intelligence to dependent variable Project success. Results of mediation found reliable ( $\beta = .385$ ,  $p < .000$ ). In second path from independent variable emotional intelligence to mediator team cohesiveness, first hypothesis was tested and the value of beta ( $\beta = .381$ ,  $p < .000$ ) found reliable. In third path from mediator team cohesiveness to dependent variable project success, the results were found reliable as per beta value ( $\beta = .324$ ,  $p < .000$ ). In fourth path, from moderator self-efficacy to dependent variable project success results found reliable and the value of beta ( $\beta = 323$ ,  $p < .000$ ) was .323. In last path,

interaction term created through multiplying mediator team cohesiveness means and moderator self-efficacy means and standardized the values. Moderation tested through interaction term to dependent variable project success and the result ( $\beta = 0.443, p < .000$ ) shows the reliability.

Structure Equation Modeling (SEM) technique used for testing hypothesized relationship through AMOS.

## 4.7 Mod Graph

To check the moderator effect between team cohesiveness, self-efficacy and project success, the mode graph was calculated. The positive relation was proposed between the team cohesiveness and project success would be stronger in the presence of self-efficacy. The graph reflects the same results; if the self-efficacy is low then the slope of graph is not steep. In other case, when the self-efficacy is high, the relation between team cohesiveness and Project Success becomes stronger and the slope line steeper than the moderator value.

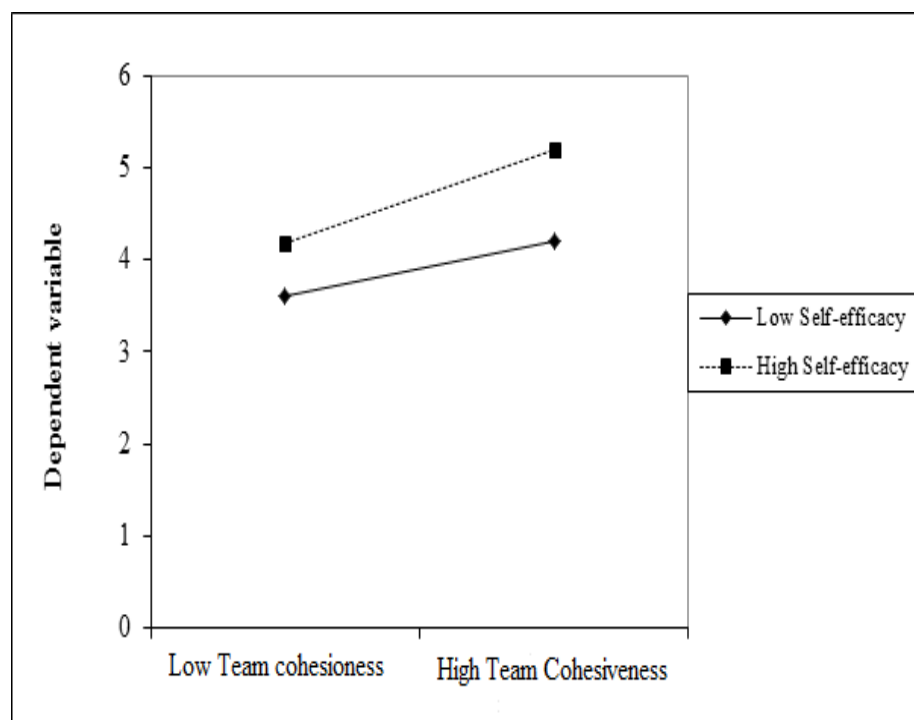


FIGURE 4.1: Mod graph.

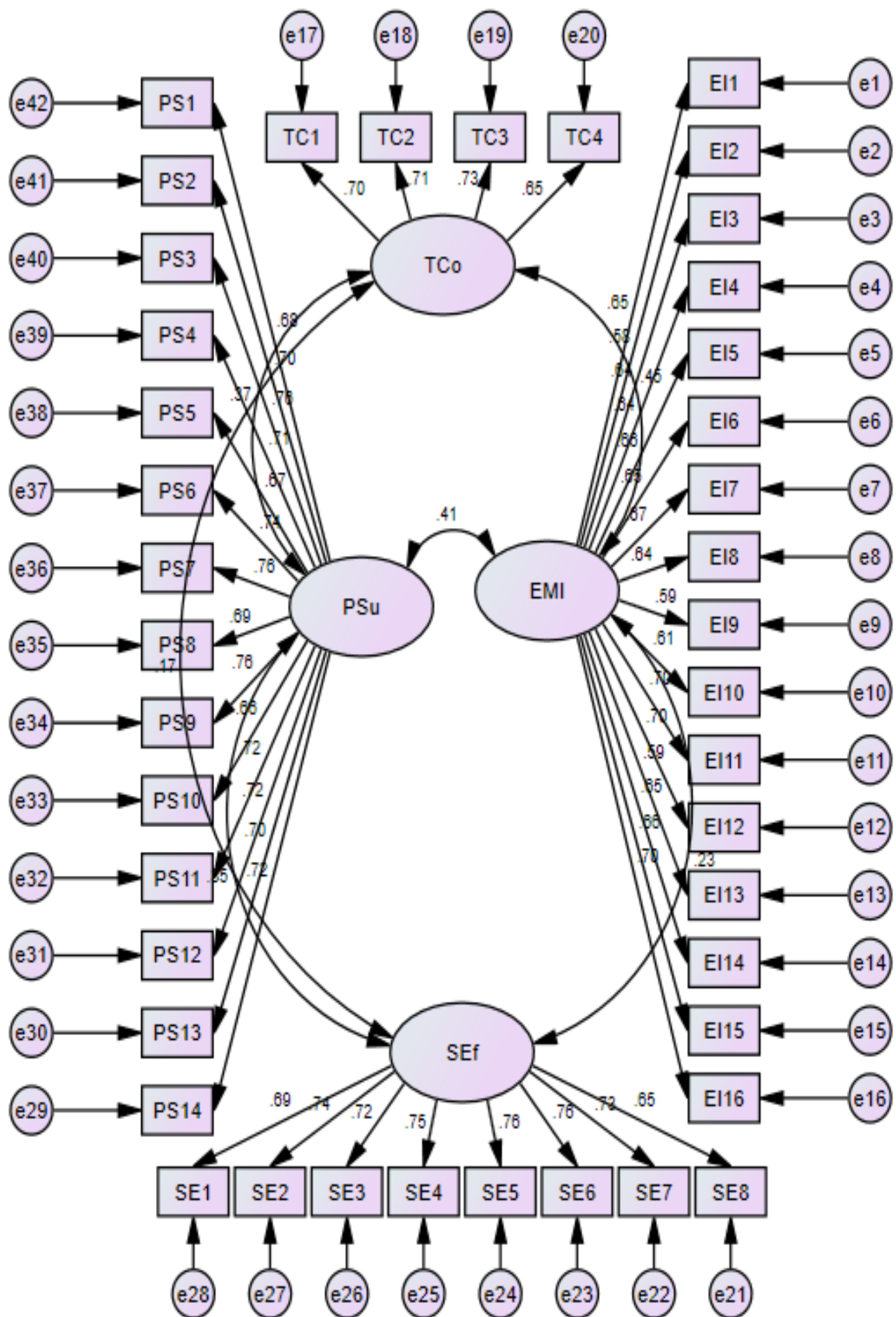


FIGURE 4.2: Measurement model.



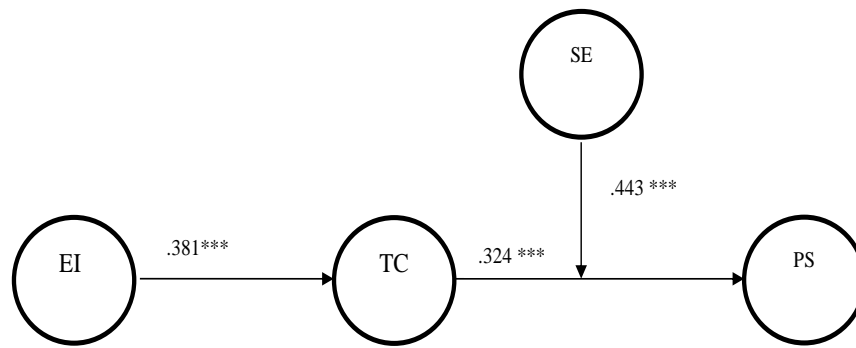


FIGURE 4.3: Hypothesized Structural Model and Structural Equation Modeling (SEM) Results.

$N = 215$ ; Full structural model showing direct and mediating effects. Mediation relations running from team cohesiveness to project success. Standardized regression weight values on paths and asterisks indicate significance values.  $R^2$  values show the percentage variance for each path.

TABLE 4.6: Hypothesis results summary.

**H1:** There is a positive association between emotional intelligence and project success. **(Accepted)**

**H2:** There is a positive association between emotional intelligence and team cohesion. **(Accepted)**

**H3:** There is a positive association between team cohesion and project success. **(Accepted)**

**H4:** Team cohesion plays a mediating role between emotional intelligence and project success. **(Accepted)**

**H5:** Environment pressure moderates the relationship between emotional intelligence and project success; if self-efficacy is high, the relationship between emotional intelligence and project success would be stronger. **(Accepted)**

# Chapter 5

## Discussion and Conclusion

### 5.1 Introduction

In this chapter author discussed the relationship details of hypothesis and also given their justifications of acceptance and rejection, also discussed the theoretical and practical implication, and strength and weakness of the current study and gives future directions.

### 5.2 Discussion

The objective of the current study is to find out the impact of emotional intelligence on project success, with the mediating role of team cohesion and moderating role of self-efficacy.

The result shows that emotional intelligence is positively associated with both project success and team cohesion. Furthermore also found that moderating role of self-efficacy with project success.

As the findings show, emotionally intelligent managers significantly predict the project success because they are capably to resolve the new problems and different types of challenges as well as motivate their team members on work (Mazur, Pisarski, Chang & Ashkanasy, 2014). Similarly there are many other studies that

shows the positive relationship among emotional intelligence and project success such as Muller and Turner (2007) say that while examining the relationship of project managers emotional intelligence with project success they found that this mechanism shows that positive emotions of project manager's result in positive effect on project success.

Our results show that emotional intelligence creates positive work environment that motivates the employees to perform their job effectively and efficiently. Similarly, emotional intelligence creates team cohesion among workers which leads positive working conditions. Ashkanasy and Ashton-James (2005) found that emotional intelligence affects the workers attachment with team members which also affect the project success factors. There are different types of factors that affect the team members motivation and trust which creates team cohesion such as, communication process, goal clarity, how to handle complexities and support from top managements.

Understanding how emotional intelligence affects the project success, we should look our recruitment process. While hiring project professional for projects, we should ensure that they should be highly emotionally intelligent so that they can understand the project requirements and perform with positive work attitude. Clarke (2010) emphasis that while recruiting the project professionals, they should be emotionally intelligent so that they can handle new difficulties and manage the project properly and effectively. Our findings also confirmed the first hypothesis that there is a positive association between emotional intelligence and project success.

Emotional intelligence is important to overcome the complexities of project and to complete the project successful. Rezvani, Chang, Wiewiora, Ashkanasy, Jordan and Zolin (2016) suggest in their results that complexities in new projects increasing and emotionally intelligent project managers can only handle the complexities and make project successful. Their findings show that top management should be aware of the importance of emotionally intelligent project managers and their contribution in project success. If top management wants to save his project from

complexities and complete the project successfully, they should hire emotionally intelligent project managers.

Emotionally intelligent projects have the able to handle the negative emotions and stress of team members. Emotionally intelligent managers have the ability to regulate their emotions towards work in complexities. Emotionally intelligent managers should be aware of the negative emotions of team members and should improve communication among the team members so that they can express their negative emotions with them. Emotional expression helps the project managers to communicate with team members quickly and easily. Emotional expression leads the project managers towards creating team cohesion which leads towards project success (Stephens & Carmeli, 2016). Emotional intelligence play a key role in managing the emotions of own and others behaviors but is not an easy. Large construction projects always face the challenges and complexities in work environment that have major impact on employee's performance and project success. Emotional intelligence help employee's to communicate their emotions at work and reduce their frustration, problems and misunderstanding to create team cohesion among the project team members (Evans & Dion, 2012).

Emotional intelligence in very in important in projects especially in large and complex construction projects because an emotionally intelligent project manager can manage the complexities and new problems either they are technical or managerial. Emotionally intelligent manager can manage the teams and motivate them towards work. Lack of emotional intelligence leads the team members towards frustration, tension, and opposite direction which ultimately leads to project failure. Christie, Jordan and Troth (2015) examine the impact of emotional intelligence on employees work attitude and performance and concluded that emotional intelligence have a significant impact on employee's performance and project success. In this way, our second hypothesis which that there is a positive association among emotional intelligence and team cohesion is also supported.

Team cohesion is an important part in our study which shows that without team cohesion project success is very difficult. Team cohesion is generally described

as positive emotions and feelings toward project team members or using of similar feelings between team members which creates the positive work environment among team members that leads towards project success. It is normal that high team cohesion will assume a major part in project success. Team cohesion, which is viewed as a key variable for group participation, its connection with firm performance has been broadly talked about (Salas, 2015).

Quick and Nelson (2009) says in their research that highly cohesive team members perform in a constant and regular way that shows their willingness and dedication towards work performance. Results of our research shows that team cohesion creates positive work environment in which team members attracted towards project tasks and perform their job with dedication. Cohesion shows the level in which individuals attracted by tasks and in which they show common interest and commitment towards the tasks and this kind of cohesion increases team performance (Bahli & Buyukkurt, 2005). Similarly, our hypothesis says that there is a positive association between team cohesion and project success.

Apart from team cohesion, an individual ability to prepare the inspiration to do the job and the belief that how better he can perform the job is important for project success. Employee's inspiration to do the job is important for project success. Self-efficacy is considered to be a key part in employee's motivation and inspiration (Schunk & Di Benedetto, 2016).

Self-efficacy has been seemed to enhance inspiration and performance. Research studies have inspected the connection among authority self-efficacy and manager's inspiration for modification. Leadership self-efficacy was observed to be identified with direction setting and to achieving employee's commitment (Paglis & Green, 2002). Luszczynska, Chwarzer, Lippke and Mazurkiewicz (2011) utilized self-efficacy as moderate in which they say that self-efficacy is direct behavior connection because individuals believing that self-doubts fail to follow up on their arrangements.

### **5.3 Theoretical Implication**

The current study has many contributions to the project management domain of emotional intelligence and project success, first we conceptualized, the emotional intelligence on project success the current finding of the research fill the literature gap and confirmed the effect of emotional intelligence on project success. Second, we tested the relationship of emotional intelligence and team cohesion, this relationship was also missing in the current project management literature and the finding confirmed the relationship. We tested the relationship of team cohesion and project success, this relationship was also missing in the current project management literature and findings confirmed the relationship. We also tested the mediating role of team cohesion between emotional intelligence and project success, and that relationship was missing in the literature of project management and this study confirmed the relationship. Finally we also test the role of self-efficacy as moderator between team cohesion and project success and that relationship was also confirmed through result.

### **5.4 Practical Implication**

To understand that how emotional intelligence associates with project success, project organizations have some practical implication. Our research findings suggest that organizations should take care while recruiting project managers who have high level of EI so that high level of positive work attitude can be expected. In the recruitment process, emphasis should be given to emotionally intelligent personnel (Clarke, 2010). In the construction industry, emotional intelligence seems a main factor that plays a significant role in make team cohesion and cooperation within teams, especially in complex and stressful work environment. Emotionally intelligent managers are capably to handle the conflicting situations among team members and create positive work attitude towards job (Mount, 2006).

Finally, our research study findings suggest that management of project based organizations should be aware of the importance of emotional intelligence of project

managers which make sure project success in complex situations, such as increases team cohesion, trust and cooperation among team members that leads to project success. The results of this study are important for teaching project leadership topics especially emotional intelligence and it is also important for project literature.

## **5.5 Strengths, Limitations, and Future Directions**

The current study has a strong methodological approach. First, in order to reduce the potential effects of common methods and single source bias, we collected data related to emotional intelligence, team cohesion, self-efficacy and project success from managers and employees of the temporary organization.

Due to time constraint just one mediator and one moderator tested future research can improve the model and also check the other mediator like job satisfaction, trust, and for moderator test the individual personality trait. Second, the data were cross-sectional the researcher can use time lag. Third the data only collected from the Pakistan and limited city the research can improve the data collection method and collect data from different country. Finally, we acknowledge that we focused more on managerial side. In this way, future researchers should focus more on the impact on non-managerial employees and their impact on project success.

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# Appendix

## Questionnaire

Dear Respondent,

I am a student of MS (PM) in Capital University of Science and Technology Islamabad. I am conducting a research on “**The effect of Emotional Intelligence on Project Success: Mediating role of Team Cohesion & Moderating role of Self Efficacy**”. For this endeavor, I need your valuable feedback. You are requested to please spare a few minutes. I assure you that this data will remain confidential and will only be used for academic purpose. It will not be shared with anyone. You need not mention your name.

Thank you.

**Please provide following information**

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

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

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

|            |       |        |         |         |         |     |
|------------|-------|--------|---------|---------|---------|-----|
|            | 1     | 2      | 3       | 4       | 5       | 6   |
| Experience | 0 - 5 | 6 - 10 | 11 - 15 | 16 - 20 | 21 - 25 | >25 |

Please tick the relevant choices: 1 = Strongly disagree, 2 = Disagree, 3 = Slightly Disagree, 4 = Neutral, 5 = Slightly Agree, 6 = Agree, 7 = Strongly Agree.

|       | <b>Emotional Intelligence</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
|-------|---|----------|----------|----------|----------|----------|----------|----------|
|       | <b>Awareness of own emotions (AWE)</b>  |          |          |          |          |          |          |          |
| AWE1: | I can explain the emotions I feel to team members.  |          |          |          |          |          |          |          |
| AWE2: | I can discuss the emotions I feel with other team members.  |          |          |          |          |          |          |          |
| AWE3: | If I feel down, I can tell team members what will make me feel better.                              |          |          |          |          |          |          |          |
| AWE4: | I can talk to other members of the team about the emotions I experience.                            |          |          |          |          |          |          |          |
|       | <b>Management of own emotions (MWE)</b>   |          |          |          |          |          |          |          |
| MWE1: | I respect the opinion of team members, even if I think they are wrong.                              |          |          |          |          |          |          |          |
| MWE2: | When I am frustrated with fellow team members, I can overcome my frustration.                       |          |          |          |          |          |          |          |
| MWE3: | When deciding on a dispute, I try to see all sides of a disagreement before I come to a conclusion. |          |          |          |          |          |          |          |
| MWE4: | I give a fair hearing to fellow team members' ideas.  |          |          |          |          |          |          |          |
|       | <b>Awareness of other's emotions (ATE)</b>  |          |          |          |          |          |          |          |
| ATE1: | I can read fellow team members "true" feelings, even if they try to hide them.                      |          |          |          |          |          |          |          |
| ATE2: | I am able to describe accurately the way others in the team are feeling.                            |          |          |          |          |          |          |          |
| ATE3: | When I talk to a team member, I can gauge their true feelings from their body language.             |          |          |          |          |          |          |          |
| ATE4: | I can tell when team members don't mean what they say.  |          |          |          |          |          |          |          |



|   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| 6 | I am confident that I can perform effectively on many different tasks.   |  |  |  |  |  |  |
| 7 | Compared to other people, I can do most tasks very well.   |  |  |  |  |  |  |
| 8 | Even when things are tough, I can perform quite well.  |  |  |  |  |  |  |
|   | <b>Project Success</b>   |  |  |  |  |  |  |
| 1 | The project was completed on time.   |  |  |  |  |  |  |
| 2 | The project was completed according to the budget Allocated.   |  |  |  |  |  |  |
| 3 | The outcomes of the project are used by its intended end users.  |  |  |  |  |  |  |
| 4 | The outcomes of the project are likely to be sustained.  |  |  |  |  |  |  |
| 5 | The outcomes of the project have directly benefited the intended end users, either through increasing efficiency or effectiveness. |  |  |  |  |  |  |
| 6 | Given the problem for which it was developed, the project seems to do the best job of solving that problem.                        |  |  |  |  |  |  |
| 7 | I was satisfied with the process by which the project was implemented.   |  |  |  |  |  |  |
| 8 | Project team members were satisfied with the process by which the project was implemented.   |  |  |  |  |  |  |
| 9 | The project had no or minimal start-up problems because it was readily accepted by its end users.                                  |  |  |  |  |  |  |



|    |  |  |  |  |  |  |  |  |
|----|--|--|--|--|--|--|--|--|
| 10 | The project has directly led to improved performance for the end users/target beneficiaries. |  |  |  |  |  |  |  |
| 11 | The project has made a visible positive impact on the target beneficiaries.                  |  |  |  |  |  |  |  |
| 12 | Project specifications were met by the time of handover to the target beneficiaries.         |  |  |  |  |  |  |  |
| 13 | The target beneficiaries were satisfied with the outcomes of the project.                    |  |  |  |  |  |  |  |
| 14 | Our principal donors were satisfied with the outcomes of the project implementation.         |  |  |  |  |  |  |  |