

CAPITAL UNIVERSITY OF SCIENCE AND  
TECHNOLOGY, ISLAMABAD



**Impact of Emotional Intelligence  
on Project Success with the  
Mediating Role of Team Cohesion  
and Moderating Role of  
Collectivism**

by

**Sania Tassadaq**

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

in the

Faculty of Management & Social Sciences

Department of Management Sciences

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*I dedicate this thesis to my parents who have been an inspiration throughout my life.*



## CERTIFICATE OF APPROVAL

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## *Abstract*

This study examined the impact of emotional intelligence on project success in project management. This research also investigated the mediating effect of team cohesion and moderating effect of collectivism amongst emotional intelligence and team cohesion. Data was collected from the organizations involved in construction projects, situated in Rawalpindi. Responses from employees and their supervisors were recorded separately through the distributed questionnaires. Out of 400 distributed questionnaires, 213 were retrieved. The findings of the research suggest that the team cohesion mediates the relationship between emotional intelligence and project success. The current study also revealed that collectivism moderates the relationship among emotional intelligence and team cohesion while team cohesion is acting as a mediator between emotional intelligence and project success. This framework will contribute positively in a productive manner towards achievement of the desired goals and milestones of the project along with active involvement of project manager making the best use of emotional intelligence on the project success through team cohesion. This study is a significant contribution in the domain of project management suggesting some directions for further research and it has numerous implications at managerial and academic level.

**Key words: Emotional Intelligence, Team Cohesion, Collectivism, Project Success**



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# Abbreviations

<b>Col</b>	Collectivism
<b>DV</b>	Dependent Variable
<b>EI</b>	Emotional Intelligence
<b>IV</b>	Independent Variable
<b>LLCI</b>	Lower Level Confidence Interval
<b>PS</b>	Project Success
<b>TC</b>	Team Cohesion
<b>ULCI</b>	Upper Level Confidence Interval

# Chapter 1

## Introduction

### 1.1 Background of Study

All the economy now a days hinge on projects which work internationally (Davis, 2011). If an organization want a successful project, the emotional intelligence of the project manager plays a very crucial role. The literature indicates that the emotional intelligence of the project manager impacts the project success. Due to globalization and rapid growth in today's world there has been an increase in project management in all sectors of businesses defense, aerospace and infrastructure (Rezvani et al., 2016). One of the key determining factor of project success has been establish and confirmed to be emotional intelligence (Stephens & Carmeli, 2016). Emotional intelligence is identified as knowing your own sentiments and sentiments of other individuals around you (Troth et al., 2012). Organizations that are working internationally and are using practices of project management need to be more sharp and skilled.

With every passing year organizations are increasing the percentage of money being spent on projects (Reich & Wee, 2006). This amount has reached to billions (Anantatmula, 2008). This rise indicates to an increase in the significance of project manager's skills and practices of project management. Researchers have widely described the importance of project manager's skills and capabilities when it comes to running a successful project (Gehring, 2007). Many researchers have

shown that there is a positive relationship between emotional intelligence of a project manager and the project success (Obradovic et al., 2013). Researchers have demonstrated that those project managers who have high level of emotional intelligence are expected to be more proficient when solving problems and risks as compared to those with low emotional intelligence (Mazur et al., 2014).

Numerous projects are seen to be failing and the main reasons have been cost overruns and failing to deliver the possible objectives of the projects (Chang et al., 2013). It was projected that the cost will be between \$12 billion to \$50 billion of the Sochi Olympics but it turned about to be increased to 300% and just like that the cost of London Olympics also increased up to 101% (Orttung & Zhemukhov, 2014). Researchers have proposed that the problems that are in the projects are due to the complexities and risks which means that the problems as not technical but are managerial (Sauser et al., 2009).

In the organizations the managers need to be proficient in all department. Managers must possess all the capabilities concerning technicalities and those related to management as well. Researchers explicated that the whole emotions are not important but there are parts that contribute to main problem and that problem is also the solution to emotional intelligence problem (Bao et al., 2015). Researchers have described that the emotions that human experience are not very long-lived but are short and are connected to the stimuli and these emotions can affect the different decisions of the project manager and these are the type of emotions that project managers need to keep in check and keep working on it (Elfenbein, 2007).

Researchers like (Salovey & Mayer, 1990) defined emotional intelligence as awareness of your own and those of the other individuals emotions that are around you and using them to control and direct minds of other individuals to your own advantage. Another definition of emotional intelligence set forth by researchers in human behavior literature in the context of project management is the competency of how a person work in group and how that individual converse with other individuals present (Druskat et al., 2013). Another definition by (Rezaeian



& Keshtegar, 2008) is that emotional intelligence is how you manage other people and your own emotion and if there are any differences then you manage them by taking logical actions.

Literature have proved that emotional intelligent individuals have better networks with individuals and it occurs by communicating with the individuals around you and it is expected that emotional intelligent individuals work around other people's mind in positive manner that they get what they want for completing the project in a successful manner. Peslak, 2005 emotional intelligence make the personality of the managers more attractive which in turn makes the team members to socialize with the project manager and discuss complexities of the project. The individuals with high emotional intelligence can easily handle complex problems or any encounters with their team members and are very satisfied with their personal and professional lives. So it is concluded that emotional intelligence have positive outcomes on project outcomes as on the project success.

In latest researches there has been researches which have used emotions as one of the main factors on how much a manager is successful in his projects (Jordan & Lindebaum, 2015). Emotional intelligence has become a very popular subject in researches in both the form qualitative and quantitative researches (O'Boyle Jr et al., 2011). Emotional intelligence is an attraction for researchers as well as the practitioners and the common individuals because it also tells that mental health of a person. Emotional intelligence of a project manager is a direct indicator of how much effective a project manager is or could be (Seal et al., 2009).

Project success is one of the fundamental part of projects for the reason that the organizations are moving towards the achievement of this goal. Researchers have suggested many ways on how organizations can measure project success they are quality, time and cost (Bannerman, 2008). These three measurement tools for project are called iron triangle (Aga et al., 2016).

In the previous researches throughout the history there were many successful projects like Great Wall of China or the pyramids of Egypt. Müller & Jugdev, 2012 have suggested that if researchers are to study the mediators in project success and the qualities of project manager there is a necessity of studying that what

are the factors that can effect this relationship. There is an immediate connection between the human qualities of project managers and project success ([Sunindijo et al., 2007](#)). The effect of emotional intelligence on project success have gone in many directions ([Druskat et al., 2013](#)).

Researchers suggested that in project industry what there is a high rate of project failures as compared to the successful projects. These results made the researchers and the practitioners working in field realize the importance of project manager ([Zwikael & Smyrk, 2015](#)). The main cause of project failures is there uniqueness as we know that all projects are unique from one another in many ways and forms which makes their execution and risks differ from each other also. Many researchers have said that being a leader is a very emotional process. It is very important to socialize with the group and make relationships ([Madera & Smith, 2009](#)). Emotional intelligence is very significant for any project manager to understand the emotions of his team members and help them to work through their hurdles ([Leban & Zulauf, 2004](#)).

[Ashkanasy & Ashton-James, 2005](#) suggested that emotional intelligence leads to better project outcomes. A lot of work has been done with how emotional intelligence impacts the increase in team cohesion but not much research has been done on how one thing is connected to another as the leader's connection with his team members keeping in mind emotional intelligence ([Clarke, 2010](#)).

Linking emotional intelligence with the individuals has gain a lot of popularity in past 10 years ([Adeyemo, 2008](#)). Researchers have suggested that an individual with high emotional intelligence is more capable of handling a curve ball thrown to their way than those who have low emotional intelligence and they are supposed to have high vision towards their future in personal and their professional life.

[Weiss & Cropanzano, 1996](#) suggested that an individual's mood at workplace is dependent upon the mix and match of different emotions like delight, absolve and admiration in the work place. These mood swings rise due to the stimuli that is present in the job environment. [Mignonac & Herrbach, 2004](#) suggested that everyone in the work place experiences emotions it doesn't matter if you are in top level or at the lower level.

Researchers have suggested that there is a vast difference between Emotional Intelligence and intelligence quotient (IQ) of the individuals when it comes to psychology ([Gardner & Stough, 2002](#)). For better individual and organizational performance the managers were told to not only monitor themselves and their own emotions but also those who were working with them according to ([Goleman, 1995](#)).

There is a lot of literature based on emotional intelligence in the field of project management has been studied ([Adams & Anantatmula, 2010](#)). According to the researchers there is a lot of research being carried out considering the human aspects of managers like emotional intelligence, different styles of leaderships and how are they effecting projects outcomes ([Salovey & Mayer, 1990](#)).

## 1.2 Gap Analysis

A research gap is the area or topic that is missing in the previous researchers or if the work is done on the topic it is not very sufficient to give a proper answer to your given problem. In case of this dissertation there has been a lot of research done on emotional intelligence linking project outcomes as project success and it has been proved that there is positive relationship between emotional intelligence and project success ([Salovey & Mayer, 1990](#)).

There has been identified a gap in relationship of emotional intelligence and project success because according to the researchers the research was limited because there was only one industry taken into consideration which was of defense and also the country was different ([Rezvani et al., 2016](#)).

[Rezvani & Khosravi, 2019](#) said that there is a gap because they studied role ambiguity as mediators and for the future researchers suggested that others moderators can also be used in future studies.

In this study author will use collectivism as a moderator because there is cultural gap in the previous researches. [Nabih et al., 2016](#) suggested that future research

can be done in different cultural setting as this study was done in Egypt so author can do it in Pakistani culture which is a collective society.

[Xiang et al., 2016](#) studied two aspects of emotional intelligence out of four which were awareness of your own emotions, management of your own emotions, awareness of other individuals emotions and management of others emotions and out of these he only studied other people emotions and there management. so idea of this thesis was taken from this literature gap.

[Zaccaro et al., 2001](#) ave the idea of leadership capabilities and suggested different mediating variable by which working environment is upgraded and suggested team cohesion to be one and dened it as the degree to which team members were closed to each other.

[Müller & Jugdev, 2012](#) suggested that when future studies are to be taken place then there should be relationship between critical success factor of projects (project success) and project managers competencies (emotional intelligence) should be studied.

In the previous literature on emotional intelligence there is the contextual gap in case of studies conducted in Pakistan. Moreover future researchers should work on the mediating effect of emotional intelligence on team cohesion. It can be very supportive in accounts of projects.

### **1.3 Problem Statement**

When you go through the literature on emotional intelligence and project success then this topic is seen mostly between management and psychology both of them give much importance to this topic and is one of the main studied topic now a days. As emotional intelligence increases then it increases the project success showing direct relationship. Literature have shown that emotional intelligence effects project success positively and the person hiring employees should select individuals belonging to jobs that have high level of social interactions ([Carmeli et al., 2009](#)). Project objectives suffer when individuals focuses on self-interest. In

developing countries the main problem they come across is that the projects are not run by capable people. And in result these individuals not effect negatively on project outcome but also give negative emotions to other team members also. This similarly effects the group members for the reason that projects are not done in isolation so these circumstances make the team environment a living hell for all the others members also. So this advocates that mangers not only have to deal with their emotions and moods but also those working with them in their team. So project managers who have control on their emotions can deal with other people's emotions and the problems and complexities that comes their way during the project.

Researchers are working on different variables explaining emotional intelligence such as team cohesion, self-efficacy and different moderators also such as collectiveness, proactive personality disposition. Direct relationship of emotional intelligence on project success has not been studied in detail. Effect of collectivism as a moderator isnt studied previous literature.

Mostly previous studies were done in western societies and very limited research is present in underdeveloped countries as in case of Pakistan. Emotional intelligence has been studied in other discipline of psychology but in terms of project management this topic is in relatively early stages. Emotional intelligence is very essential in studying the emotions of team members and keeping them motivated towards achievement of the objectives of the project. [Rezvani et al., 2016](#) said to advance the literature on the effect of emotional intelligence on project success in context of other societies then the western societies.

Research on effects of emotional intelligence on project success is on initial stages. Emotional intelligence is used as predictor particularly in the context of creative involvement and moreover researchers used it as an employees' work outcome. Researchers stated that emotional intelligence represent employees talk about new ideas, therefore in an organization there is a need of team cohesion to increase project success. In addition, cultures with high collectivism as of Pakistani culture they are more expected to project success if used as a moderator. These all variables are studied in the literature; however they are not modeled together in a

single conceptual model. The present study is conducted to model these variables by investigating how emotional intelligence affects project success with the mediating role of team cohesion and moderating role of collectivism. This study fills the gap and also the study is conducted in a unique setting of Pakistan.

## 1.4 Research Questions

After going through the above stated problem author came up with the following research questions that author as a researcher need to find:

### Research Question 1

What is the relationship between Emotional Intelligence and Project Success?

### Research Question 2

Does team cohesion mediate the relationship between Emotional Intelligence and Project Success?

### Research Question 3

Does collectivism play a moderating role between Emotional Intelligence and Team Cohesion?

## 1.5 Research Objective

Overall objective of the study is to develop and test the model and expected to see the relationship between emotional intelligence and team cohesion and project success.

Additionally collectivism is added as a moderator to the relationship discussed above. Team cohesion has been added as a mediator in this study to check the impact that if it mediates the relation or not.

The specific objectives of the study are stated below:

1. To explore the relationship between Emotional Intelligence and Project Success.

2. To explore the relationship between Emotional Intelligence and Team Cohesion.
3. To study the relationship between Team Cohesion and Project Success.
4. To study the mediating role of Team Cohesion between Emotional Intelligence and Project Success.
5. To examine the moderating effect of collectivism between Emotional Intelligence and Team cohesion.

## 1.6 Significance of Study

This research will provide concrete evidence that if the emotional intelligence of a leader is high then it will in return have a positive effect on project success. This study provide the evidence that when in Pakistani context if emotional intelligence is given the importance that it deserves then the project success will increase with it which will knock up the criteria of success in projects in project management.

[Barczak et al., 2010](#) proves that emotional intelligence effect the project outcomes. It could be hold true because when the leader is emotionally intelligent then he will have easy time to tend to the problems that the team members are facing then as compared to the leader which is not emotionally intelligent or have low emotional intelligence the reason being that emotional intelligent leader will use positive ways to settles the problems which will give rise to positive work environment. [Barczak et al., 2010](#) suggested that the feelings which are considered to be positive are related to having positive relation with developing new relations in the society.

[Peslak, 2005](#) said that managers with high emotional intelligence can easily tell, show and express their emotions to other people. The reason being that their positive thinking and attitude helps them to easily make new friends and inspire them with their positive energy. That's why managers with high emotional intelligent mesmerizes others which have a positive effect on team members ability to come up with new and innovative idea for the problems and risks that they are facing.

Many researchers have said that when individuals share their feelings they want the person to value them. [Hareli & Rafaeli, 2008](#) said that when an individual is sharing emotion then it is affected by the response of their fellow members by building up the emotion cycles. [Liu & Maitlis, 2014](#) said that when two polar opposite emotions of positivity and negativity meet they form an emotional tug of war.

If individuals think that others will be thoughtful to their emotions then they will display the emotions of closeness with their team members. [Kennedy-Moore & Watson, 2001](#) suggested that if individuals think their emotions are being valued then they will focus on what is being said to one another in the team and will help them to jump all the psychological hurdles.

The present investigation will contribute to the emotional intelligence, collectivism and team cohesion literature in several important ways.

First and foremost the cultures studied are collectivism and individualistic culture; however the indirect relationship between collectivism and project success is the new contribution of the current study.

Secondly, the indirect effect of emotional intelligence on project success through job satisfaction has been studied, however the indirect effect of emotional intelligence on the project success through team cohesion is further a new contribution of this study. And the third and last is that this study contributes to the knowledge in a new way. In previous literature researchers were not studying the moderating of collectivism on emotional intelligence and team cohesion relationship, which is the new contribution of this study.

Emotional intelligence effect on project success and its significance is the main focus of this research. Researchers recommended that the manager should be emotionally intelligent so that he is well aware about his and others emotions and he should be emphasizing openness, accessibility, empowering and create conditions for employees to speak about new ideas, voice opinion and also encourage them to implement useful ideas.



This study is required because in present time every other new business is based upon projects and that's why more and more literature is needed on project management (Goffnett, 2017). This study will help in extending the literature on emotional intelligence, project success, and team cohesion in collectivism.

There is a room for study on the topic of project management. This study will help in advancing the literature on what are the variables that effects project in projects which are working globally. This study will also be very helpful to the project managers in practical lives when they are dealing with understanding other people's emotions. This study will also be very helpful in advancing the literature on advance project management.

## 1.7 Supporting Theory

Some known researchers have introduced some hypothetical variables which helps to study the relationship of emotional intelligence on project success which is known as emotional intelligence theory. Emotional intelligence supports the variables that are being used in this study.

### 1.7.1 Emotional Intelligence Theory

There are some theories which are put forth to explain this study which are social cognitive theory, Affective Events Theory and Emotional Intelligence theory. These theories can explain the effects of emotional intelligence on the conduct of employees but out of all of these Goleman theory of emotional intelligence for the performance is the most appropriate for this study.

Goleman, 1998 defined emotional intelligence as how one person can stop themselves and be considerate to not hurting others and setting aside personal feelings and behaviors accordance with the other people. Salovey & Mayer, 1990 said that emotional intelligence is when you observe emotions of other peoples.

Fullan, 2002 explained that there are top level authorities who are very thoughtful to subordinates ideas and are sensitive to other people emotions because in work

environment individuals come in contact with each others should respect other people emotions. [Goleman, 2001](#) self-awareness means that how one person is courteous and gallant to other human beings emotions and feelings as it is a matter of mannerism. So it can be said that self-awareness is related to the advantages to the person and this is the implication of this particular theory. This is the main reason for choosing this theory for this study.

Another part of emotional intelligence is self-awareness which means the capability of management of your own emotions ([Goleman, 1998](#)). Self-motivation means that what inside the core or gut of a person which is making him/her to keep doing their work without the effect of the external environment. So it can be said that self-motivation comes with ones own skill. Social awareness means that how much you are aware of your surrounding because you need to keep in mind that what type of things are considered socially acceptable and what are condemned in the said society or culture of which you are a part of. Relationship management is a very big part of socializing. When you are looking for workers then all of these four components are to be kept in mind and in sight. Thus it can be said that can easily say that emotional intelligence plays an important role in vesting the carrying out of emissaries. And all of these four modules can increase the productivity of work.

## 1.8 Thesis Structure

The chapter 1 includes the basics of this study as it has the foundation, gaps in the literature related hypothesis and what is the research in the light of these hypothesis. Chapter 2 explained the literature review of all the hypothesis that author hypothesized. Chapter 3 includes the information about all the variables and their quantification their dependability in the model. Chapter 4 discusses all the results that was achieved by the SPSS software. And at last chapter 5 includes the conclusion of the study and the future directions for the new researchers.

# Chapter 2

## Literature Review

### 2.1 Emotional Intelligence and Project Success

There are four main dimensions of emotional intelligence i.e. being sensitive of your own feelings and sentiments of other individuals and being able to manage your own feelings and feelings of the other individuals around you. When individuals are working on projects it is very important for the reason that in projects you are not working in isolation but as teams so you need to be able to assess other individuals sentiments and you should also align your sentiments with them to make them feel welcome and valued. This is imperative because if members feel valued then they will feel comfortable to pitch in when new idea or solutions for complexities will be needed. And in projects employees come about face to face with different problems all the time.

According to ([Goleman, 1998](#)) IQ is not the predictor of success but emotional intelligence is the best predictor of job outcome. [Dulewicz & Higgs, 2000](#) and [Goleman \(1995\)](#) suggested that emotional quotient (EQ) was not able to predict success and emotional intelligence (EI) is twice as important when we compare it to IQ. A lot of researchers have proved in their work that psychosomatic intellect is very important when predicting social interactions ([Malouff et al., 2014](#)). [Nort-house, 2018](#) suggested in his work that an individual who is able to deal with their

emotions is also able to help others with their sentiments. [Pryke et al., 2015](#) suggested that emotional intelligence of the leader have positive effect on the project execution. Sentiments changes with the type of experience in the workplace ([Weiss & Cropanzano, 1996](#)). Employees experience positive and negative sentiments in the work environment ([Lindebaum & Jordan, 2014](#)). [McColl-Kennedy & Anderson, 2002](#) said that the negative emotions can lead to mental imbalance which can thus result into low performance during the working.

In order to understand the significance of emotional intelligence many researchers had been conducting research in this area thus resulting an increases in the project success. There is a constant need of emotional intelligent leader to impact project success positively. There has been a lot of studies conducted related to emotional intelligence, feelings, emotions and how they affect leadership styles. Numerous researchers have suggested that emotional competencies are a major effective components effecting project managers competencies ([Thompson et al., 2015](#)). Project managers with high emotional intelligence are considered to be well equipped with producing project success ([Winter et al., 2006](#)).

Emotional intelligence is considered to be a subsection of social intelligence and consist of four interconnected perceptive capabilities that are linked with handling of emotional information ([Salovey & Mayer, 1990](#)). Countless researchers have evidenced that the now a days economy is mostly depended on projects ([Davis, 2011](#)).

The first part of emotional intelligence is known as awareness of your own emotions. Awareness of your own emotions means that possessing the skills of knowing the emotions that you are feeling of joy, misery, pleasure and so on. If a person is aware of his own emotions that he can change his negative emotions by taking constructive actions and changing the effect of the negative emotions. This part of one's emotional intelligence is very helpful especially when you are working with the team members and you might get frustrated with them then this will be very helpful to show positive reactions to the complexities at hand.

The second module is known as management of your own emotions. Managing your own emotions means that how an individual is able to control the emotions

that they are feeling especially the negative emotions. These individuals are able to control their emotions and don't show sudden reaction and wait for the right and constructive time to show their reactions in a positive way. If a person is not able to control his emotions then it could lead to negative work outcomes. In projects there is always a possibility that you will be faced with the risks and complexities due to novel projects and diverse team members working together to achieve project objectives. In contrast if the person is not able to control his emotions and show the reactions towards the problems then it causes problems negative working environment which can lead to low performance and ultimately impacting the project success.

The third component of emotional intelligence is awareness of other individuals emotions. Awareness of other individuals emotions means that you are able to identify them and use them to create a friendly environment among the team members. This process is possible when you are able to identify others people's emotions not just by their face but also by their body language ([Jordan & Lawrence, 2009](#)). In projects team members are working together and socializing with each other which have positive effect on team member's performance positively. If team members are aware of each other's emotions then they will work in a way that they show appropriate reactions which will increase team closeness and togetherness ([Elfenbein, 2007](#)), and the last factor effecting emotional intelligence is called management of others emotions. This shows that one person can have an impact on someone else emotions and sentiments. During projects risks and problems are bound to come and can cause conflicts and tension among the members. But if there is a team member who is able to affect others and remove the depressed and conflicted environment and become an inspiration to others to overcome the problems then it will be very beneficial for the whole team and the project itself also [Christie et al. \(2015\)](#). So it is very important that team members are courteous to each other emotions because it effects the project success ultimately.

Emotional intelligence is said to be associated with work related behaviors and outcomes. Emotional intelligence is linked to higher managerial efficiency which

means that project leaders are not just based on their technical skills but most importantly on their emotional skills (Fisher, 2011).

Müller & Turner, 2007b have established a relationship between emotional intelligence as an individual attribute and project management efficiency in complex projects. Xiang et al., 2016 have divided emotional intelligence into four modules those are awareness of your personal feelings, managing your own feelings, awareness of other individuals emotions and management of others emotions. Pirola-Merlo et al., 2002 said that emotional intelligence effects the work performance in any organization. Many researchers suggested a strong influence of emotional intelligence on project success (Gehring, 2007).

Projects are giving more failures then success but still more and more growing reason of this growing industry is that organizations are believing that projects are more capable of boosting the financial industry then the functional organizations (Damanpour, 2010). Emotional intelligence means that how you work in an environment and how well you work with other people (Druskat et al., 2013). Researchers have said that individuals who have high emotional intelligence are sharper in resolving issues at home and at work which effects positively on project success, team performance (Hughes, 2005). It is said that if you want to know a project managers effectiveness then you should see their emotional intelligence (Siegling et al., 2014).

Emotionally intelligent project managers express their positive emotions which in return increases project teams constructive conditions which thus increases project success (Ilies et al., 2013). Emotional intelligent leaders help the members to evolve their interest which helps them to engage in more complex projects which increases project success (Peslak, 2005).

Researchers have instituted regularly that emotional intelligence is a criterion for project success (Clarke, 2010). Müller & Turner, 2007a established that emotional intelligence increases project success in complex projects. Thomas et al., 2008 proved that team leaders who have high emotional intelligence are more proficient in overcoming their negative sentiments then compared to those with lower emotional intelligence. Thomas & Mengel, 2008 suggested that when leaders are

low in emotional intelligence then they are more prone to experience thwarting, anxiety and bad work performance the reason being that in complex projects there are too many risks and complexities throughout the projects and the team member spends ample time together for the reason that of which they may experience misunderstandings and there could be rise of tensions and anxiety among team members.

Emotionally intelligence is related to creating positive work output (Druskat & Wolff, 2001). Emotionally intelligent project managers assistances their team members towards becoming more emotionally intelligent by giving them environment and situations in which they are challenged emotionally (Ashkanasy & Humphrey, 2011). Literature justifies that emotional intelligence is very significant in the human life by (Goleman, 1995) because according to him 80% of success in human life depends upon emotional intelligence. Project managers with high emotional intelligence create environment which increases the outcome of team members work performance and efficiency which increases project success (Wong & Law, 2002). It is very essential for project managers to comprehend the emotions of the individuals who are working with them because by understanding their emotions managers can help them to make better decisions and can motivate them also (Leban & Zulauf, 2004). According to literature project success is highly dependent on emotional intelligence of the project managers (Rezvani et al., 2016). So the literature suggests the succeeding hypothesis:

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

## **2.2 Emotional Intelligence and Team Cohesion**

Team cohesion is said to be the degree to which team is united and remains like that till the achievement of their shared goals and objectives (Carron, 1982). If there is a low team cohesion then it can have negative effects on the performance (Harrison et al., 2002). Team cohesion is defined as how close the member of the team are with each other and how much they value each other's bond (Cook

et al., 2013). Team cohesion is impacted by team structure and team contribution (Nelson & Quick, 2013). Team cohesion is considered to be a constructive emotion which means that you are working in accordance with the team members (Hoegl et al., 2007).

Researchers have said that whenever the project members need to study their own or any other team member's emotional intelligence the key point that needs to be kept in mind is their own emotive competences (Seal et al., 2009). Previous work have suggested that the team leaders achieve their collective goals and objectives by other individuals and there are some ancillary ways by which leaders do that. One of the ways by which leaders do that is by giving rise to such an environment that fosters environment of cohesiveness. Beal et al., 2003 suggested that cohesiveness between team members is considered to be very important for having unanimity and covenant to achieve common goals. These team members not only work with unity but also they have feeling of likeness towards each other.

Team cohesion is dependent on many things. Team cohesion either increases or decreases with size of your project team and it is also a factor which impacts the success of your project. Team cohesion changes with different phases during the group. It has been observed that there is high team cohesion in the later stages of the project (Wong & Law, 2002).

Emotionally intelligent leaders base team cohesion on the following bases (1) vesting progressive feelings of congregation personality; (2) setting team values and (3) advising contemporaries to join in sensitive statement and also says that higher emotional intelligence means higher team performance (Kotze & Venter, 2011).

Emotional intelligent managers try different ways by which they can multiply team cohesion by introducing different ideas, objectives and policies (Tran et al., 2011). Team cohesion is something that emotionally intelligent are attracted to which in makes the bond between team members (Mathieu et al., 2015).

Emotional intelligence have achieved attention for of many researchers and is being studied in form of team emotional intelligence in teams. Jordan & Lawrence, 2009 said that when the team members are highly emotionally intelligent then



the risks and competencies don't have negative effects on team cohesion but the effect is positive. Team cohesion helps in making a coherent link between the team members and because of this individuals are bound to outperform their work. [Mathieu et al., 2015](#) suggested that as team cohesion increases so does the members performance and the project success.

If the leader is emotionally intelligent then he will effect team cohesion by building group ethics and rules. These ethics and rule will be helpful when there will be some disputes or concerns during the project.

[Tran et al., 2011](#) suggested that being aligned with the set standards will result into team cohesiveness. An emotionally intelligent leader will acknowledge everybody's feelings and make those standards that are approved by every team member.

[Taggar & Ellis, 2007](#) suggested that those project managers who have high emotional intelligence are able to eliminate negative sentiments because they are able to see the reason for the negative reactions and are able to change them into positive sentiments which yields team cohesiveness as compared to the leaders with low emotional intelligence.

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

### 2.3 Team Cohesion and Project Success

When team members are close to each other they will perform better because they are working together and will give rise to better work performance which will then result into project success. Many researchers contemplate that there is an uneven significances in case of work performance because of it being multifaceted. Researches show that team attachment to each other can be measured by two ways. One way to measure it is by societal way and by that they mean is that how members are pulled inside the group by social connections in the society. While the second way is by responsibility and that means that how one becomes a part of the group by the work that they are assigned ([Castaño et al., 2013](#)). [Barrick](#)

[et al., 1998](#) suggested that if the team cohesion is task bounded it is called task cohesion if it is bounded by society it is called social cohesion.

[Thompson et al., 2015](#) suggested that team cohesion is very helpful because it fosters productive environment which helps in achieving team goals and objectives. Thus team cohesion will give rise to project success. [Mullen & Copper, 1994](#) suggested that the team cohesion increases performance of team. [Kaplançali & Bostan, 2010](#) suggested that the team cohesion can be increased by playing video games together as a team but it is not right for educational purposes ([McKerlich et al., 2011](#)).

[Gully et al., 1995](#) suggested that the teams with high team cohesion are more persistence in facing any risks and problems and in result give greater performance resulting in project success. Managers consider team cohesion as a very important part of making teams. Many managers achieve team cohesion by making a team which includes individuals belonging to different aptitudes ([Salas et al., 2014](#)). [Mach & Baruch, 2015](#) said that the team cohesion is a process in which the team stays united till they achieve their shared goals and objectives.

[Slater & Sewell, 1994](#) suggested that team cohesion is associated with the success of the work and in sync in round model. [Bahli & Buyukkurt, 2005](#) said that the degree of cohesion shows how much the relationship is strong and this cohesion thus increases team performance which will increase project success.

Team cohesion leads to good performance which leads to project success ([Castaño et al., 2013](#)). Some researchers says that team cohesion is based upon the collective assignment or the bond between them which effects the team performance and thus project success positively ([Bahli & Buyukkurt, 2005](#)). The best way to have team cohesion is that managers select those team members which belongs to different backgrounds between work harmonically with each other ([Salas et al., 2014](#)). Team cohesion is how everyone is ready to come together for collective objective as a project ([Mach & Baruch, 2015](#)).

[Man & Lam, 2003](#) said that when organizations see task cohesion as the outcome then they say that the cohesion have positive effect on team performance so the

researchers suggest that team cohesion give rise to idea generations during different problems. So in teams the members should be more attentive to group tasks because without this team cohesion will not take place. For example the group will have problem completing assignment if the group members are lacking the ability to work together on a given task or assignment. So at the end of the day an ideal group is which have same goals and objectives and all members have aligned intellect. Still the team leader should communicate with everybody in the organization from top to bottom. It is done to keep everybody in the team to incorporate in mind the social responsibility, team cohesion and social competency. We humans are social animals and we like to work with individuals who are similar to ourselves. [Carless & De Paola, 2000](#) said that this sense of belonging to be a part of group and keeping your interactions within the group is team cohesion. [Sivasubramaniam et al., 2012](#) have proven that making new relations increases performance.

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

## 2.4 Team Cohesion as a Mediator Between Emotional Intelligence and Project Success

Many researchers have proved that emotional intelligence effects project success immensely. [Goleman, 1995](#) suggested that emotional intelligence is responsible for the 80% of success in an individual's life. [Wong & Law, 2002](#) said that if the team leader have high emotional intelligence then their team members performance is also superior. [Sy et al., 2006](#) proved that emotional intelligence of team leader effects work fulfillment of employees positively. [Berman and West, 2008](#) studied emotional intelligence and found that it may foster suppleness, communication and understanding. [Xiao et al., 2014](#) found that increased emotional intelligent could decrease the emotions of conflict which will decrease the turnover ratio and will lead to project success. [Wong & Law, 2002](#) found association among emotional

intelligence, job performance and project success. [Patra, 2004](#) said that emotional intelligence of one team member can effects its other members work fulfillment and will have positive effect on managerial development. [Sy et al., 2006](#) investigated the personnel emotional intelligence , their project managers emotional intelligence with respect to team members job fulfillment and work performance (success).

In previous researches suggested that team cohesion affects project success and team efficiency. [Quick & Nelson, 2009](#) said that team cohesion will have positive impact on teams performance which will then effect the performance positively and will have improved work serenity and development. Individuals with high team cohesion give rise to increased yield because they have equivalent standard. As data distribution upsurges it facilitate the link between team cohesion and the project success. [Winter et al., 2006](#) suggested that team cohesion have positive effect on team performance. [Man & Lam, 2003](#) suggested that team cohesion is linked to shared goals.

[Winter et al., 2006](#) suggested that teams in which members are constantly helping each other through every small or big problem then these teams are more cohesive. [Lepine & Van Dyne, 2001](#) suggested that those team members who are more efficient in communication should form a supportive group and help other members of the team who are reluctant. [Goffnett, 2017](#) studied team cohesion with respect to team productivity. [Schaubroeck et al., 2007](#) suggested that team cohesion can increase team association when workers are cooperative.

[Brandon & Hollingshead, 2004](#) suggested that success can be achieved if you assign the assignment and task to team members according to their knowledge areas or specialty. [Reagans et al., 2005](#) suggested that proficient association results in assigning tasks to more efficient individuals who will get the job done best. [Ruuska & Teigland, 2009](#) suggested that team cohesion is emotional intelligent members working together to succeed in achieving mutual goal.

**H4: There is a mediating role of Team cohesion between emotional intelligence and project success.**

## 2.5 Moderating Role of Collectivism Between Emotional Intelligence and Team Cohesion

When an individual joins a work force, organization or a project then he/she carries his/her own beliefs, values and culture. Different individuals belonging to different cultures carry different values. [Hofstede & Hofstede, 2005](#) said that there is a lot of research on cultures which has been going on as an individualism and collectivism throughout the globe but we will discuss collectivism because this is the culture of Pakistan and we have conducted this research in Pakistan.

Individuals belonging to collectivism have two types of characteristics one is the in group while the other one is out group. In group means that these individuals are more concern about the overall achievement of the groups goals and achievement while the out group is sort of similar to individualistic culture that they are not very close to each other and are not concerned with the groups wellbeing over their own.

There are different links pertaining to different cultures of collectivism and individualism. [Spence, 1985](#) said that the difference between individualistic culture and collectivism is the prerequisite for attainment. Individuals belonging to individualistic culture are driven by personal goals while those belonging to collectivistic culture keep in mind the shared goals. [Orttung & Zhemukhov, 2014](#) said that individuals belonging to individualistic culture have negative relationship to close support system. When members are working in a team the most important thing is being selfless to other peoples needs and form team cohesion. [Foster et al., 2003](#) found that individuals belonging to individualistic culture have high mean of narcissism while those belonging to collectivistic culture have low mean of narcissism. [Smith, 1990](#) said that when there is high interdependence within the group of collectivistic culture then individuals become less narcissist.

[Singelis, 1994](#) said that individuals belonging to individualistic culture use material possessions for finding solace but the collectivistic culture individuals like to hype up their fellow members and find contentment in this. [Schwartz, 1990](#) said that members of collectivistic culture prefers to maintain interpersonal group relations

and likes to remain harmonious within the group. If researchers compare the two types of culture the individualistic culture members don't care about other people's sentiments and values while the former puts needs of other in front of their own personal sentiments.

Hofstede & Hofstede, 2005 divided culture into six types which are femininity, collectivism, masculinity, indulgence, individualism and reluctance. Hofstede & Hofstede, 2005 defined collectivism as a culture in which individuals live together in a close-knit family and remain close throughout their lives and their collective goals are more important than the individuals goals. Gelfand et al., 2011 said that collectivist societies are those societies where individuals live very close to each other as a one unit. One important question can rise from this definition that how this closeness will impact the project success. So in this study author is going to use collectivism as the moderator for the reason that Pakistan is a collectivism and it is conducted in Pakistan. Hofstede & Hofstede, 2005 defined collectivism as a culture in which person from birth to death is living in a close knit way with family, friends and work colleagues. According to some researchers when there is so much closeness then the individuals support each other in all ways in achieving their shared goals and objectives (Gelfand et al., 2011).

In in group collectivism in china this was observed that there is a positive effect of collectivism on project success as compared to Australia (Shanks et al., 2000). Researchers showed that in group and out group moderates the outcomes of the project as of project success (Kotze & Venter, 2011; O'Boyle Jr et al., 2011). Chatman et al., 1998 said that collectivistic culture influences team cohesion positively because collectivism is based on focusing on the group togetherness. Shemla et al., 2016 said that collectivistic culture has the ability to influence team cohesion because it is the degree of how close the group members are and how much they keep integrated goals and how much shared values are more important than their individuals goals. Frank & Anderson, 1971; Goncalo et al., 2010 suggested that strong team cohesion is dependent on how strong group members closeness is and it is positively related to high collectivistic culture.

Gomez et al., 2000 suggested that strong collectivistic culture enhances team cohesion because members give importance to each other. Jarvenpaa et al., 2004 said that positive characteristics of collectivistic culture like assisting one another, prioritizing groups goals more and recognizing more with the group will lead to higher team cohesion. Marcus & Le, 2013 suggested that the collectivistic culture will give rise to members becoming more close to each other thus influencing team cohesion positively which will give importance to shared goals of the team

**H5: Collectivism moderates the relationship positively between emotional intelligence and team cohesion.**

## 2.6 Research Model

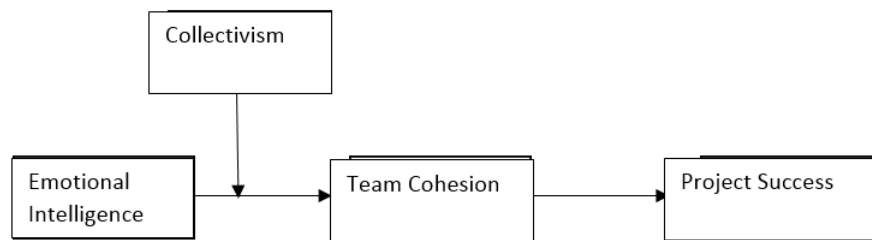


Figure 2.1 Research Model of Impact of Emotional Intelligence on Project Success with Mediating Effect of Team Cohesion and Moderated Effect of Collectivism

FIGURE 2.1: Research Model

## 2.7 Research Hypotheses

**H1:** There is positive association between Emotional Intelligence and Project Success.

**H2:** There is positive and significant relationship between Emotional Intelligence and team cohesion.

**H3:** There exist a positive and significant effect of Team Cohesion and Project Success.

**H4:** There is a mediating effect of Team Cohesion in between Emotional Intelligence and Project Success.

**H5:** There is moderating effect of collectivism on the relationship of Emotional Intelligence and Team Cohesion such that it strengthens the relationship.



# Chapter 3

## Research Methodology

### 3.1 Introduction

In this chapter author is going to elaborate the methods which are being used to find out that what is the relationship of emotional intelligence with project success with team cohesion effecting as a mediator while collectivism effecting as a moderator. This chapter includes the methods that are used to check whether the hypothesis are accepted or rejected.

This chapter includes the checking of hypothesis and to do so we analyze it through research design, population, unit of analysis, sample size, characteristics of sample and also includes the techniques of research and what are the reliabilities of instruments that are being used. All the analyzing will be done according to the results that we will get.

### 3.2 Research Design

In research design author will focus on the method that is used in this study for research. [Zikmund et al., 2003](#) said that research design is the plan and strategy for any researcher to collect and analyze that data that that will receive for their research. In this research design author will create a plan through which we will

collect the data and then analyze it professionally. The research design will include type of study, unit of analysis and time of horizon which are discussed below.

### **3.2.1 Type of Study**

The following research study basically emphasizes on studying the effect of emotional intelligence on the project success in the projects taking place in Pakistani industry. The sample of this study is the individuals working in the project industry of construction.

This is a study where we will see that what is the effect of emotional intelligence on project success with team cohesion acting as a mediator and moderated effect of collectivism was measured on the basis of self-report.

## **3.3 Research Approach and Quantitative Research**

Examined towards the previous work what author gathered was that there is a need of research by putting collectivism as a moderator. By basing this research on this method author then formed a model and deduced hypothesis on the basis of the previous literature. Author made emotional intelligence theories as the base of this research and then investigated that whether these theories supports or rejects the research findings.

## **3.4 Unit of Analysis**

Unit of analysis is a very essential part in any research setting. There are a lot of unit of analysis that can be used in research. They could be individual or they could be groups or when we want to cover more individuals they could be industry or organization or when we are studying different demographics they

could be different culture or countries from where author can collect the data. In this research author used individual as the unit of analysis.

As this research is based on studying the effect of emotional intelligence so the author chose individuals of different projects from Rawalpindi.

### **3.4.1 Time Horizon**

The data that was used in this research was taken from different real estate and construction industry in different areas of Rawalpindi. As this study was time constructed so basically the author collected all the data in almost a period of four weeks because it was a study with the cross sectional nature. The data collected was a one-time thing which means that all of it was collected at a single point in time.

### **3.4.2 Data Collection**

When a researcher is conducting a quantitative research it is very important to know that what the population of the research is because every researcher wants to determine that what will be the sample of the said study. The reason behind knowing this is because the sample needs to represent population and in this study the population belongs to construction sector. As it is very difficult to study the whole population of the real estate and construction sector so what author did was that carried out the research in the real estate and construction taking place in Rawalpindi city only.

To collect the data for this study and analyze it there was a very limited time so it was impossible to collect data from all the individuals working in different construction sites in Rawalpindi. The reason being that it will be very difficult and time consuming process. So what the author did was that the author made a sample size of 400 individuals and took those questionnaires to the individuals employed in Rawalpindi. The data was collected for one time period only. As this research was to study the effect of emotional intelligence on project success

so the questionnaire that used in this study was developed for employees in which they were to fill the questionnaire related to emotional intelligence, team cohesion, project success and collectivism.

For the purpose of collecting the data author had to visit different construction sites in Rawalpindi. Before distributing the questionnaire author asked for permission from either the project manager or the person who was in charge there at the time by telling them what is the purpose of this study.

After telling them the study purpose they took guarantee that their data will be kept confidential and will only be used for study purposes only. Then the questionnaire was filled by the employees before giving them a little background of the research purpose. The questionnaire was given to the employees and all of the variables were filled by them. author initially distributed 400 questionnaires and got 230 back and out of those 213 had valid responses so used them in the analysis. So the response rate was 53.25%.

## **3.5 Population and Sample**

### **3.5.1 Population**

As the author had limited resources and time to collect the data and analyze it and complete the dissertation so it was impossible to collect the data from the entire population. And as the population was the real estate and construction in the city of Rawalpindi. And due to a huge investment by China in Pakistan in the form of CPEC there has been a huge investment from the whole world in Pakistan which had an enormous positive impact on the businesses in Pakistan.

And because of the new opportunities a lot of new infrastructure was needed which made huge new business for the construction industry in Pakistan. And that's why these two sectors were taken into consideration and Rawalpindi was taken. This is the reason that the author selected construction sectors for this research study. It was impossible to include all the population of construction sectors. So what the author did was took only limited sample from these sectors.

For the collection of data quantitative research method was used and from the whole population sample was taken. And for that convenient sampling technique was used in the form of non-probability sampling. This sample size was used to collect the data for representation of the whole population. When convenient sampling is used it is based on selecting the responded randomly so author did the same for this data collection also. author selected those respondent which were easily accessible to get the data filled form.

For this research what needed was to study the influence of emotional intelligence on the success of the project so what we the author was that provided the questionnaire to the employees and asked them to fill in according to their own experience.

The data was collected by the questionnaires that was given to employees in the form of hard copy. The questionnaire included the brief description and reason of this research and also mentioned and assured them that their responses will remain confidential and will not be used other the purpose of education. What the author did was that observed the employees chose those employees which seemed active in their job so that they can represent the whole population.

These questionnaires of the variables were filled by the employees and project managers of the construction sites on the project industry.

### **3.5.2 Sample and Sampling Techniques**

Collecting data was an impossible thing from the entire population because the author didn't have enough time or the resources to do all this so instead sample was used. In convenient sampling author used 53.2% response rate as a valid response. In today's growing projectized industry of Pakistan real estate sector plays an important role.

## 3.6 Sample Characteristics

To get a better understanding of the respondents what the author did was that the author asked the respondents multiple questions regarding their demographics. Different type of studies requires different demographics according to the topic on which the research is being conducted. So in this research age, gender, qualification and experience was used as demographics.

### 3.6.1 Gender

Whenever gender is used in demographics there is always a chance of either underrepresentation or discrimination so what the author tried to do was both the genders get equal chance of representation. As this study includes real estate and construction so we wanted equal representation of both the genders in this study.

TABLE 3.1: Frequency by Gender

Gender	Frequency	Percent
Male	180	84.51
Female	33	15.49
<b>Total</b>	<b>213</b>	<b>100</b>

Table 3.1 shows that there are more male working in the real estate sector. So it shows that women contributes towards this sector in 15.49% while men are in 84.51% in this sector.

### 3.6.2 Age

Age is something that we measure in years. It is said that age is measuring development of a human being measured in forms of number of years that you have spent on this earth.

Table 3.2 above shows that majority of individuals are lying between the ages of 26- 33. There are 35.2% respondents from 213. After that comes individuals of 18-25 with 30% then comes individuals with 34- 41 with 21%. Then comes

TABLE 3.2: Frequency by Age

Age	Frequency	Percent
18-25	64	30.0
26-33	75	35.2
34-41	45	21.1
42-49	20	9.4
50 and Above	9	4.2
<b>Total</b>	<b>213</b>	<b>100</b>

individuals with 42- 49 with 9.4% and at last comes individuals with 50 and above with 4.2% respectively.

### 3.6.3 Qualification

The sectors that was chose for this research are real estate and construction industries. These depends more upon experience then as compared to the qualification.

The reason being that this industry requires more field knowledge than the actual qualification. But it is not that qualification is not important it is a very vital part of this industry. Following table shows the reality of life.

TABLE 3.3: Frequency by Qualification

Qualification	Frequency	Percent
Matriculation	19	8.9
Intermediate	67	31.5
Bachelors	39	18.3
Masters	46	21.6
MS/MPhil	40	18.8
PhD	2	0.9
<b>Total</b>	<b>213</b>	<b>100</b>

This table shows that 31.5% respondent have intermediate qualification, 21.6% have master's degree 18.3% individuals have bachelor's degree, 18.8% have MS/M-Phil degree 0.9% have PhD degree and only 8.9% have matriculation degree.

### 3.6.4 Experience

The last demographic that was used was the experience of the respondents in the industry. As this study is related to emotional intelligence so it will be very interesting to see what the impact of experience on this research is.

When the author was distributing the questionnaire what was emphasized was experience rather than their qualification to check that how experience effects the job of a person in this industry. It is very important factor to know what the maturity level in this sector is.

The table shows that what is the experience of the different individual in project based sector.

TABLE 3.4: Frequency by Experience

Experience	Frequency	Percent
0-5	77	36.2
6-10	78	36.6
11-15	46	21.6
>16	12	5.6
<b>Total</b>	<b>213</b>	<b>100</b>

Table 3.4 shows that 36.6% individuals have 6 – 10 years of experience, 36.2% individuals have 0 – 5 years experience, 21.6% individuals have 11 – 15 years experience and 5.6% individuals have more than 16 years of experience.

## 3.7 Instrumentation

### 3.7.1 Measures

During dissertation the most difficult and time consuming work is collecting data because not everybody was ready to fill questionnaires or not every business allows individuals from outside to come and inquire about the practice and individuals in the organization. Author collected data from the questionnaires that were already given by very prominent scholars.



The questionnaires have 5 points Likert scale where 1 being strongly disagree and 5 was strongly agree. The questionnaire contained four demographics which were discussed above.

### **3.7.2 Emotional Intelligence**

Emotional intelligence was measured through multi factor questionnaire in which emotional intelligence had 16 items. This questionnaire was divided into four parts with each part containing 4 questions.

The first part was termed as awareness of own emotion, second was management of own emotion, third was awareness of others emotions and the last one was management of others emotions. This scale was developed by ([Jordan & Lawrence \(2009\)](#)).

With these questions was 5 point Likert scale attached ranging from 1 to 5 with 1 being strongly disagree and 5 being strongly agree.

### **3.7.3 Team Cohesion**

For measuring team cohesion 4 items scales questionnaire was used which was developed by with ([Jarvenpaa et al. \(2004\)](#)). Team cohesion questionnaire was 5 point Likert scale and 1 was strongly disagree while 5 was strongly agree at the other end of the scale.

### **3.7.4 Project Success**

For project success author used 14 item questionnaire taken from ([Aga et al., 2016](#)). This questionnaire was with 5 point Likert scale with 1 being strongly disagree and 5 being strongly agree.

### 3.7.5 Collectivism

The 6 item scale was developed by (Dorfman & Howell, 1988). This questionnaire had 6 point Likert scale and 1 being strongly disagree and 5 strongly agree at the other spectrum.

## 3.8 Control Variables

To identify that which variables are control variables we conducted one way ANOVA. What we did in this analysis was that we identified demographic variables like age, gender, experience and qualification one by one with dependent variable. In this study all the variables are significant which shows that demographics play a vital role in getting the answers.

TABLE 3.5: Instrumentation

Variables	Sources	Items
Emotional intelligence (IV)	Jordan & Lawrence (2009)	16
Team cohesion (Med)	Jarvenpaa et al. (2004)	4
Project success (DV)	Aga et al. (2016)	14
Collectivism (Mod)	Dorfman & Howell (1988)	6

TABLE 3.6: One-Way ANOVA (Control Variable)

Variables	F	Significance
Gender	10.10	.00
Age	3.02	.01
Qualification	9.66	.00
Experience	2.5	.05

Table 3.6 show that all the control variables such as age, gender, experience and qualification indicate that their p value is less than .05 and it has significant effect on our model.

### 3.9 Reliability Analysis of Scale Used

In this research author used Cronbach alphas and all the scales are reliable. In case of Cronbach alpha if its value is higher that it means that it is more reliable than compared to if the value is lower. The scale for Cronbach alpha ranges from 0 to 1 and all the values of alpha for all variables were higher than 0.7 which means that the data we collected was reliable. The Cronbach alpha values of all the variables are given in the table below.

TABLE 3.7: Reliability Analysis of Scale Used

Variables	Cronbach alpha	Items
Emotional intelligence	.871	16
Team cohesion	.904	4
Project success	.839	14
Collectivism	.771	6

### 3.10 Statistical Tool and Data Analysis Technique

Author collected data from 213 respondents and after collecting data we performed different tests and analyzed the data collected. The data was checked for reliability, regression, correlation and model fitness of all the variables in the study. What is the impact of one variable on other author did regression analysis. And all of this was done on SPSS software.

Following is the sequence of how the collected data was tested:

1. The first thing that author did after collecting the questionnaire was to separate fully filled questionnaires from those which were not filled properly.
2. After sorting the next part was to enter the data in SPSS and calculating the frequency table to check whether there were any values missing or not.
3. The next step author checked the reliability of all the variables.

4. The next thing was to check the model that we hypothesized.
5. After that author calculate the composite variables.
6. In the sixth step what author did was that author did one way ANOVA analysis to check the impact of one variable o another variable.
7. After this author did correlation analysis to check the relationship of the variables in the model.
8. After this author checked the effect of emotional intelligence on project success.
9. After that author ran Andre F. Hayes model 7 to check the mediation and moderation among the variables.
10. In the last step author analyzed the model through the values that was taken from running the above tests.

# Chapter 4

## Results

### 4.1 Data Analysis

#### 4.1.1 Descriptive Statistics

Descriptive statistics tells us about the overall basic information regarding the data that we collected. It tells what is the mean, minimum, maximum, standard deviation and number of questionnaires that were used during the research.

Descriptive statistics gives us the summary of the respondents answer in tabular form. In mean we show the average of the variables. Standard deviation tells us the deviation that how much the collected data is deviated. All the variables (Emotional Intelligence, Project Success, Team Cohesion and Collectivism) were recorded on 5 point Likert scale. Mean value shows that what does the respondents think and how all of them are related.

TABLE 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Emotional intelligence	213	1	5	3.76	0.75
Project success	213	1	4	3.45	0.65
Team cohesion	213	1	5	3.76	0.92
Collectivism	213	1	5	3.65	0.88

Table 4.1 shows that there were 213 respondents in total for this research. This table also shows the minimum and maximum values of each of the variables. The minimum value of emotional intelligence was 1 and maximum was 5. The minimum value of project success was 1 while its maximum was 4. The minimum value of team cohesion was 1 and its maximum was 5. And the minimum value of collectivism was 1 and its maximum was 5.

Mean value of emotional intelligence was 3.76 which means that the respondents were in sync with their answers and its standard deviation was 0.75. Mean of project success was 3.45 which means that they were able to achieve success in their projects and standard deviation was 0.65.

Mean of team cohesion was 3.76 which shows that they were all a united team and its standard deviation was 0.92. And at last the mean of collectivism was 3.65 shows that there was an environment of togetherness among the team members and its standard deviation was 0.88.

#### **4.1.2 Correlation Analysis**

Correlation is always done to check and explain the relationship between variables. And for this purpose we used Pearson correlation to compute the relationship and significance between each variable among each other. It is known that for this analysis the range of correlation is set to be between -1 and 1.

How much there is an association between each variable is shown by the magnitude of the values. And when it comes to sign with the values either negative or positive they show if the relationship is either there is direct relationship or is it the inverse relationship. When there is a positive sign it means that if one variable increases then the other variable also increases with it. But when there is a negative sign it means that when one variable is increased the other variable decreases.

If the value is seen to be near -1 it means that there is either inverse relationship or there is an indirect relationship between the variables. But when the value is near 1 what this means is that the relationship between the said variables is strong direct relationship.

The reason of this research was to study the significance of emotional intelligence on project success and team cohesion as a mediator between them while collectivism as a moderator and prove the hypotheses validity.

Whether the hypothesis should be accepted or rejected it all this can't be interpreted through correlation analysis. For testing the hypothesis author did regression analysis.

TABLE 4.2: Correlations

Variables	1	2	3	4
Emotional intelligence	1			
Team cohesion	.257**	1		
Collectivism	.429**	.752**	1	
Project success	.850**	.596**	.719**	1

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

Whenever researchers are doing correlation they mostly don't take demographics in consideration. The table above shows that moderated relationships exists between the variables by performing the correlation analysis.

It can be seen that there is a positive significant correlation between emotional intelligence (independent variable) and team cohesion (mediator) as  $r = 0.257$  and  $p < 0.01$ . it can be see that there is a positive significant relation existing between emotional intelligence (independent variable) and collectivism (moderator) as  $r = 0.429$  and  $p < 0.01$ . There is a positive significant relationship between emotional intelligence and project success as  $r = 0.850$   $p < 0.01$ .

There is a positive significant relationship between team cohesion and collectivism as  $r = 0.752$   $p < 0.01$ . A positive significant relationship exists between team cohesion and project success as  $r = 0.850$   $p < 0.01$ . And we can see that there is positive significant relationship existing between collectivism and project success being  $r = 0.719$   $p < 0.01$ .

### 4.1.3 Regression Analysis

Whenever researchers perform regression analysis what they come up with is the answer that which variable is the predictor variable and which one is the dependent variable. It doesn't tell us that what is the cause and effect relationship between two variables that how much one variable is effecting the other variable.

TABLE 4.3: Regression Analysis

Predictor	B	$R^2$	$\Delta R^2$	F	Sig.
Model Emotional Intelligence	0.73	0.72	0.71	548.2	.000

The table above shows that the model is statistically significant overall. Proportional variation in project success by emotional intelligence can be explained and shows a variation of 0.73. as it can be seen that value is between 0 to 1 so it can be said that it is acceptable. The p value shows that the model is significant.

By seeing the value of F it can be said that that the model as whole is significant as its value is 548.2. there can be seen a statically significant value between emotional intelligence and project success which means that there is a direct relationship existing between emotional intelligence and project success.so we can say that the hypothesis is accepted that there exist a positive and significant relationship between emotional intelligence and project success.

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

### 4.1.4 Emotional Intelligence and Team Cohesion

TABLE 4.4: Regression Analysis

Predictor	B	$R^2$	$\Delta R^2$	F	Sig.
Model Emotional Intelligence	0.31	0.61	0.60	148.8	.000

In table 4.4 shows that when we see the table we can see that it is statically significant overall. From the table it can be said that there exist a positive and significant relationship between team cohesion and emotional intelligence.



The values of table tells us that the value of  $R^2$  is 0.60 while the value of beta is 0.31 and the value of  $p < 0.001$ . The value of  $R^2$  shows the coefficient of determination and tells us that this model is statically significant and the value of beta shows the amount of rate of change that tells us that 1 unit change in emotional intelligence in turn results into 31% change in team cohesion. And it can be seen that value is between 0 and 1 so it is fine.

Another present is the value of  $p$  which shows that it is significant. Seeing the value of  $F$  which is 144 it can be seen that the model as a whole is significant. it can be said that the association between two variable one being emotional intelligence and team cohesion is positive and significant which shows that there is an existence of direct relationship between emotional intelligence and team cohesion. So it can be confidently said that the hypothesis which was that there is a positive and significant relationship between emotional intelligence and team cohesion is accepted.

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

### **4.1.5 Team Cohesion and Project Success**

TABLE 4.5: Regression Analysis

Predictor	B	$R^2$	$\Delta R^2$	F	Sig.
Model Team Cohesion	0.42	0.35	0.34	116.2	.000

Table 4.5 shows that the results are very impressive. As the beta value is 0.42, value of  $R^2$  is 0.435 and  $p < 0.001$ .

It can be seen that if there is unit change in team cohesion then it will lead to 42% change in project success. The values are significant and the relationship is positive. It shows that there is a positive relationship between team cohesion and project success and when team cohesion increases the project success increases with it. So the third hypothesis is also accepted.

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

## 4.2 Mediation

For showing the mediation author used the process of Andre F. Hayes and used model 7. Author used this model to show the mediated moderation. In any research mediator is a variable that shows that how an independent variable is related to a dependent variable. Mediation works in a way that shows that how the said relationship works. The key emphasis of this is to study the casual chain or the underlying process. Mediation is a process in which researchers study that whether the predictor to the outcome relationship is operated by the third variable as in this case the predictor is emotional intelligence and the outcome is project success and the third variable is team cohesion. So what we will see is that emotional intelligence will effect project success because of some other variable in between or not. In most cases partial mediation is observed rather than the full mediation. This means that there are very low chances that mediator will explain the full variation between emotional intelligence and project success. This shows that there is a need to add more mediators or more mediators that can explain the relationship fully. When you see the results pf the mediation and the independent variable and the dependent variable becomes zero then this type of mediation is called the case of full mediation. When you see mediation there are two effects one is the direct effect and the other is the indirect effect. When you see mediator there is the indirect effect of the independent variable and the dependent so in this case the association between emotional intelligence and the project success. Another thing is the direct and indirect effect and we have the significant value in both the direct and indirect effects. The output of the mediation that we got from Andrew F. Hayes and the model was model number 7 and the bootstrap at 5000. While doing this we gave the command of OLS/ML confidence and compared the direct and indirect effect.

TABLE 4.6: Model Summary

R	R-sq	MSE	F	Df1	Df2	P
0.93	0.87	0.36	109	2	210	.000

	coeff	Se	T	P	LLCI	ULCI
Constant	2.37	0.06	32.38	.000	2.22	2.51
EI	0.64	0.01	15.87	.000	0.25	0.32

The table 4.6 in the above shows the model summary first what we see is that with outcome being the team cohesion. Then after that we see the relationship of the predictor with the mediator. The value of P suggested that team cohesion have a significant relationship with project success and emotional intelligence. Here the value of  $p=.0000$  at  $p<0.05$  the beta coefficient don't have the value of 0 as the LLCI (lower level of confidence) and the ULCI (upper level of confidence) doesn't have 0 between them which shows that the relationship is positive. So this shows that mediation does exist. Just like that in the next section of the table the outcomes of team cohesion and also includes emotional intelligence. The values of emotional intelligence are significant as the value of coefficient is 0.64 where  $p<0.05$  and the value of beta and the LLCI and ULCI don't have zero so the relationship is significant and mediation exist between the variables.

### 4.3 Direct, Indirect and Total Effect

The next mediation is also called as an indirect effect of X (EI) and Y (PS) through M (TC). The confidence interval shows the reasonable range of values for the estimation. If at the 95% of confidence interval doesn't include zero at the level that was selected that it will be significant at  $p<0.05$ . If the indirect effect is also significant then it will also support mediation. the value of  $p < .05$  so it shows significant results.

Table 4.8 shows that there is significant and positive association between team cohesion and project success because the value of p is 0.000 and  $p< 0.05$  and there

TABLE 4.7: Direct Effect of Emotional Intelligence on Project Success

Effect	SE	t	p	LLCI	ULCI
0.64	0.02	32.46	.000	0.6092	0.6880

is no zero between LLCI and ULCI which shows that the relation is positive and the direct effect is between the predictor and the mediating project success.

TABLE 4.8: Total Indirect Effect

Index	BootSE	BootLLCI	BootULCI
TC	-0.06	0.043	-0.13

Now the next table is the table of indirect effect of emotional intelligence on project success through team cohesion. The value is also significant so we can say that indirect effect is also significant. As there is no zero between LLCI and ULCI so the relationship is positive so it shows that there is a mediating effect of team cohesion in between emotional intelligence and project success.

**H4: There is mediating effect of team cohesion in between emotional intelligence and project success.**

## 4.4 Moderation Analysis

Now next come the moderated analysis in which the moderator will show that how the independent variable is related to the dependent variable.

TABLE 4.9: Moderation Analysis

	Coeff	Se	T	P	LLCI	ULCI
Constant	-3.82	0.06	-6.35	.000	-3.70	-3.94
TC	0.28	0.01	15.87	.000	0.25	0.32
EI	0.15	0.08	1.80	.000	0.32	0.01
COL	0.84	0.06	13.1	.000	0.71	0.96
Int_1	-0.21	0.11	-1.86	.000	-0.43	-0.01

Table 4.10 show that there exist a significant moderated relationship exist as the interaction term  $p$  is 0.000 which is  $p < 0.05$  and there is no zero between LLCI and ULCI so moderated mediation is validated.

**H5: There is a moderating effect of collectivism on emotional intelligence and team cohesion.**

## 4.5 Summary of Hypothesis Accepted and Rejected

Following is the table that shows the summary of the accepted and rejected hypotheses.

TABLE 4.10: Summary of Accepted and Rejected Hypotheses

Hypothesis	Statements	Results
H1	There is a positive and significant relationship between EI and PS	Accepted
H2	There is a positive and significant relationship between EI and TC	Accepted
H3	There is a positive and significant relationship between TC and PS	Accepted
H4	There is mediating role of TC in between EI and PS	Accepted
H5	There is a moderating effect of collectivism on the relationship between EI and TC	Accepted

# Chapter 5

## Discussion and Conclusion

### 5.1 Discussion

The purpose of this chapter is to discuss the results of the study which are reported in the previous chapter. In this chapter I will try and explain the results that we gathered from this study and how these results are constant with the earlier works and also how the results are not constant with the earlier works. We will also discuss the theoretical and practical implication of the study, the limitations of this study, future research directions and also the overall conclusion of the study. The main purpose of this study is to discover the effect of emotional intelligence of the project leader on the success of the project. Its aim is to see that what are the abilities of emotional intelligence of the project leader effect the success of the project. this study will answer this question specifically that what is the effect of emotional intelligence leader on the success of the project within the context of Pakistani culture. With the help of different variables we created link between EI and PS. Beside this we worked on investigating the effect of collectivism on the relationship between EI and PS. We gathered data for this understudied proposed hypothesis study from real estate of Pakistan.

Following are the results of the study conducted:

The first hypothesis was that there is a positive and significant relationship between EI and PS which was accepted. Emotional intelligence leads to successful

project outcome in the form of project success which was supported by the earlier literature (Othman et al., 2009) and prove in the context of Pakistan. Furthermore emotional intelligence of the leader leads to team cohesion. That's why the second hypothesis was also proved that emotional intelligence is positive and significant with the team cohesion. Just like this the third hypothesis is also proved which was that team cohesion have positive and significant relationship with the project success.

Yang et al., 2015 team cohesion will help better use of the resources which will result into success of the project also proved by the results and is consistent with this study. There are a lot of studies which explains and proves the relationships between these variables. There are very few studies which shows the indirect effect of these variables so this study did that. So for this we studied the effect of team cohesion as a mediator between the independent and depend variables which are EI and PS. According to the 4th hypothesis team cohesion is acting as a mediator between emotional intelligence and the project success which is also accepted according to the results. The last but not the least hypothesis was that there is a moderating effect of collectivism on the relationship and it is also accepted. the last hypothesis was proved by the analyzing of the results and thus proved that collectivism is moderating the relationship. The detailed discussion of all these results is given below:

### **5.1.1 H1: There is a positive and significant relationship between Emotional Intelligence and Project Success**

Love et al., 2011 said that the emotional intelligence is the key determinant of the project success. Rezvani et al., 2018 suggested that emotional intelligence is the predictor of work performance (project success) in the large size corporations. Barczak et al., 2010 suggested that emotional intelligence leader inspires the project team members to generate positive work resulting in project success. Stephens & Carmeli, 2016 suggested that emotional intelligent leaders maintain positive and friendly relationships with the team members. This in turn make

the team members to communicate with each and solving problems which then enhance project performance thus enhancing project success. [Stephens & Carmeli, 2016](#) also suggested that emotionally intelligent individuals tends to make the environment more productive because they are very enthusiastic about completing the work and results in transferring this energy into the team members leading into project success.

Hence it is proved that the emotionally intelligent leaders traits and encouragement raises the team members to be inventive and improve creative work style which then results into success of the project. The project management institute defines project success as “project success as balancing the competing demands for project quality, scope, time, and cost, as well as meeting the varying concerns and expectations of the project stakeholders” ([Slevin et al., 2004](#)). So it has been acknowledged that emotional intelligent leader meet the prospect of the team members who are the main stockholder for any project and increase the team cohesion , which results into success of the project.

Emotional intelligence is important for incapacitating the problems in the project and resulting into project success. [Rezvani et al., 2016](#) suggested in their work that when new projects come about they come with new risks and problems and emotionally intelligent leaders can handle the complications and make the project successful. They said that the top management of the organization should be emotionally intelligent. The importance of emotionally intelligent leader and their impact towards success of the project has been proved. So if the top administration wants their projects to be successful then it is important to hire emotionally intelligent managers.

Emotionally intelligent project managers are able to handle destructive sentiments and tension of team members. Emotionally intelligent leaders have the skill to align their sentiments with the complications of the projects. Emotionally intelligent managers should be mindful of the destructive sentiments of their team members and should connect with the team members and make those team members feel comfortable to confer their sentiments with them. Emotional expression helps the leader to talk with the members more openly.



### 5.1.2 H2: There is a positive and significant relationship between Emotional Intelligence and Team cohesion

Emotional intelligence have positive and significant relationship with team members got accepted because it should significant relation.

Seeing the results we see that the value of P has significant in relation with the project success and emotional intelligence. The results shows that their relationship between then is strong and is align with the previous work of the researchers. This relationship is proved in the context of Pakistan.

[Stephens & Carmeli, 2016](#) said that expressing emotions leads to project managers to create team cohesion in their team which ultimately results to success of the project. Emotional intelligence is very important when it comes to being mindful of the sentiments and managing the sentiments of the team members but this process is definitely very difficult. Big projects always face problems during the project because they come face to face with new risks everyday which effects negatively on the performance of the team members which ultimately effects the success of the project. [Evans & Dion, 2012](#) suggested that emotional intelligence helps the employees to easily share their sentiments with each other which lessens the frustration and anxiety and leads to improved team cohesion.

Emotional intelligence plays a very critical role specifically in large and complex projects because only an emotionally intelligent leader is someone who is able to cope with all the complications whether the problems are either technical or they could be managerial. An emotionally intelligent leader is able to cope with the sentiments of the team members and is able to encourage them to work. Absence of emotionally intelligent leader can lead the team members into frustration which can thus lead to poor performance which then leads to project failure. [Christie et al., 2015](#) studied the impact of emotional intelligence on the work performance and attitude and found that emotional intelligence have positive effect on the success of the project. So like this we can conclude that the second hypothesis that there is a significant and positive relationship between emotional intelligence and team cohesion is also proved.

### 5.1.3 H3: There is a positive and significant relationship between Team Cohesion and Project Success

McAvoy & Butler, 2009 proved that team cohesion leads to enhanced team performance which leads to success of the project. Literature divides the team cohesion into two ways one is the social cohesion which means that interaction with the team members on the basis of their norms, values and identities (Windeler et al., 2015). Another is the task cohesion which is interacting with the team members on the basis of the task and the resources allotted in the organization (Yang et al., 2015). Team cohesion is said to enhance the better utilization of the resources which leads to project success (Yang et al., 2015).

Team cohesion is very important as it has been proved time to time that if there is no team cohesion then it will lead to project failure. Team cohesion is defined as an optimistic feelings and sentiments to your project team members or using of aligning feelings to produce an encouraging work environment. It is expected that with high team cohesion there is a major increase in the project to be more successful as compared to if there was low team cohesion between the team members. Salas et al., 2014 studied the link of team cohesion with the performance.

Quick & Nelson, 2009 said that team members with high team cohesion works perform persistently and demonstrate their inclination and enthusiasm towards the work. Result of this research shows that high team cohesion give rise to positive work environment and because of which team members are more attracted to their work and are more efficient which then leads to success of the project.

Literature shows that with high team cohesion team members create a positive and more productive environment which results into members to be more productive and attracted towards the work they are given which helps them to overcome any risks and complexities that comes their way every day which increases their work performance which then leads to success of the project. So with the compliance with the literature we can say that with high team cohesion the team members will form an environment in which they will communicate with each other more and will share feelings with each other and will be more encouraged to demonstrate the

successful outcomes which will exploit the likelihoods of success of the project. So the third hypothesis that there is a positive and significant relationship between team cohesion and project success is also proved.

#### **5.1.4 H4: There is a mediating effect of Team Cohesion in Emotional Intelligence and Project Success**

The results of this research and analyses shows that team cohesion is a mediator between emotional intelligence and project success. [Bahli & Buyukkurt, 2005](#) said that team cohesion is the degree to which a person shows that how much he /she is attracted towards the tasks and work and this kind of team cohesion increases the performance which results in success of the project. So by seeing the definition we can conclude that high team cohesion will lead to positive project outcomes or results in the success of the project. And previous literature shows that if the leader is emotionally intelligent and is considerate towards the sentiments of the team members which increases the team cohesion which leads to success of the project.

[Salas et al., 2015](#) said that team cohesion is the shared bond between the team members that makes the to work together. It has been proved that emotional intelligence of the managers leads to team cohesion between the team members ([Troth et al., 2012](#)). [Gelfand et al., 2011](#) said that the emotional intelligent leaders leads to productive work environment which then leads to members working closely each other together on the project which leads to positive project outcomes.

[Fredrickson, 2003](#) said that emotional intelligence has always been a predictor of the success of the project. [Carmeli, 2003](#) suggested that high emotionally intelligent leaders make the team members more engaged which leads to high productivity which the leads to project success.

[Goleman, 2000](#) showed that there is a clear correlation between the emotional intelligence of the leader to the project success. Higher team cohesion leads to project success. Literature have shown that the teams which have high team cohesion sees the risks and complexities in the project with the positive eye and is

eager to solve these problems with coming up with new ideas (Wong & Law, 2002) and then this leads to success of the project (Castaño et al., 2013). Therefore we can prove through literature that team cohesion mediates the relationship between emotional intelligence and project success.

After reviewing the literature researchers found out that emotional intelligence of the leader leads to team cohesion as he makes sure that the team members are inspired because he uses the novel ideas to make the team members feel valued and loved and help them to discuss their sentiments and feel that their feelings are respected within the group which leads to increased team cohesion (Taggar & Ellis, 2007). According to emotional intelligence theory emotional intelligent authority as in this case it is the project manager is aware of the sentiments that the team members are feeling and they should feel welcome if they want to share their emotions of positivity or negativity with the group and not feel judged by any member of the project team (Fullan, 2002). So with compliance with the literature we can say that team cohesion mediates the relationship between emotional intelligence and project success (Adams & Anantatmula, 2010; Reagans et al., 2005). Project success is not associated just with scheduling and executing of the project but there are a lot of aspects that need to be understood (Serrador & Pinto, 2015).

In the previous work it was said that project success is when you complete the project on time and within the allotted budget but now the factors for measuring the project has been broadened in many ways (Thomas & Mengel, 2008). In this research we studied project success on the basis of the emotional intelligence of the leader.

### **5.1.5 H5: There is a moderating effect of Collectivism on the relationship of Emotional Intelligence and Team Cohesion**

Collectivism moderates the relationship between team cohesion and emotional intelligence in a way that if the culture is collectivist then the relationship between

emotional intelligence and team cohesion would be strengthened.

According to the results the hypothesis is accepted and is supported by the previous work of the researchers and practitioners. The results that we obtained was that the values were highly significant and is according to the standards. Team cohesion is indicative of that the association is highly significant. Collectivist culture brings a very visible alteration by strengthening the association amongst emotional intelligence and team cohesion. Hence the results according to the standards and statistics the relationship is significant and approved.

As it has been proven through the previous literature that the culture plays a very important role in any study. Culture has become one of the most discussed topic by the researchers now a days because different types of culture can have different direct and indirect effects on the same research model.

This study is conducted in Pakistan which is a collectivism society which means that individuals live in close contact with their friends and families.

So the hypothesis was accepted. Results of the study shows that collectivism moderates the relationship and the results are significant. When the individuals are living in a culture of collectivism then it moderates this relationship.

[Kotze & Venter, 2011](#) Collectivism makes the team members work with each other in more harmony then those belonging to individualistic culture which leads to team cohesion.

[Chatman et al., 2019](#) suggested that collectivism blurs all the lines that can lead to conflict between the team members and leads to a cohesive team. Collectivism is correlated to team potency ([Jung et al., 2002](#)).

[Schwartz, 1990](#) said that members of collectivistic culture chooses to preserve personal group relations and likes to stay harmonious within the group. Researchers showed that in group and out group moderates the outcomes of the project as of project success ([Kennedy-Moore & Watson, 2001](#)).

[Gomez et al., 2000](#) suggested that strong collectivistic culture improves team cohesion because members give importance to each other.

## 5.2 Implications

### 5.2.1 Theoretical Implications

The current study has a lot of theoretical implication as it fills a lot of gaps in the literature. In this study we explained the importance of soft skills in the project management literature. So we studied the effect of emotional intelligence of the project manager on the project outcomes and for this specific study we chose project success as the relevant outcome of the project. There was very less work of emotional intelligence on project success so it filled that literature gap. This study shows that emotional intelligence effects the project success positively and significantly. Which shows that the emotional intelligence of the project manager is very important because previously only the iron triangle of project management was used to find out the outcome of the project. So it gives more literature to that what are the factors that can affect the project success. We studied the impact of emotional intelligence on team cohesion which was also missing. So it filled the literature gap between these variables and the results confirmed the hypothesis. We also studied the association between team cohesion and project success. This was also missing so we filled the literature gap here also. We confirmed the hypothesis by the results as it was also significant. We studied the mediating effect of team cohesion on the relationship of emotional intelligence and project success. This was also missing in the literature so filled the literature gap here also. The results were accordance with the hypothesis that team cohesion in fact does meditates the relationship between emotional intelligence and project success. At last we studied the effect of collectivism as a mediator between emotional intelligence and team cohesion. This relationship was also missing in the literature. So we filled the literature gap there also. the hypothesis was proved correct because the results showed that collectivism does moderates the relationship of emotional intelligence and project success in such a way that it strengths the relationship. Overall the study has contributed a lot in the project management literature and with this study as the backbone a lot of new researchers can work on it and can achieve many more successful results on the upcoming researches. This study fills a lot

of gaps that were present in the literature in the previous studies and also gave a very clear picture of what is impacting what and how much.

## **5.2.2 Practical Implications**

This dissertation has a lot of practical implications. The findings of this study can be used in a lot of ways in the project management domain. Emotional intelligence in the project management is the soft skill of the manager that he/she needs to have to achieve the project goals and objectives. Results of this study are very important in the case of the impact of emotional intelligence on the success of the project. This study is very important for the whole organization from the top management to the mainline workers. This researches findings suggests that when organizations are hiring or recruiting individuals for their projects they should keep in mind that the project manager they hire he/she should have high emotional intelligence if they want their project to succeed. In project management domain it is seen that emotional intelligence plays a very important role because if the project manager is emotionally intelligent he will make sure that the team members are not in conflict with each other but are doing work together in a cohesive environment. Only an emotionally intelligent project manager will make sure that the sentiments of each and every members are valued and respected and it is seen that if team cohesion is present in the team that there is are very high chances that the project will be successful. Another practical implication of this study is that it is a very high time that this type of research was needed in the context of Pakistan.

Another final finding of this study is that the management should be aware of the importance of emotional intelligence of the project managers because emotionally intelligent leaders leads to high team cohesion, trust and cooperation between the team members which ultimately leads to the success of the project. These results are very important because in project based organizations soft skills of the project manager are very important. But in the case of this dissertation we showed through empirical study that only emotional intelligence can lead to project success by increasing team cohesion in the team members. Results of this study will be

very helpful in teaching the project management and emotional intelligence and it is also very important for the project literature.

### **5.3 Strengths, Limitations, and Directions for Future Research**

Every research has some strengths and limitations and from these limitations future directions to new researchers are given. So in this part of this dissertation we will do that.

There are a lot of qualities of this research. The first thing that is that for the first time cultured based research is being conducted in the case of the society in which this study was conducted which was collectivism. This is the most important part of this study.

Every research have some limitations, inadequacies or impediments and so does this research also have some reservations. As this was a masters level thesis so there were limited resources and very little time. So because of this it was difficult to carry out this research in multiple cities and different industries. This research was carried out by convenient sampling for the sample that was easily accessible to us. As the data was collected through convenient sampling and only few organizations were taken into account so it can't be generalized.

The second limitation of this study was that the data was taken from the project management organizations of Pakistan. So the results may differ if the research is carried out in other cultures or in different cities of Pakistan.

Another limitation of this study was that the sample size was very small due to the time and resource limitations and we used convenient sampling for this dissertation which may affect the generalizability of this research.

Finally the study was conducted in Pakistan so there is a chance that if this same research is carried out in other countries the results could be different as compared to the results of this research. All the hypothesis of this research were accepted but



there is still a need for further research with the other variables like self-efficacy can be used as a moderator in different sectors of the project management.

Emotional intelligence is a very important topic in project management and new researchers can further study to see the impact of emotional intelligence on more project outcomes in project based organization. Emotional intelligence can impact on a lot of different variables so the impact of emotional intelligence on team members' performance can also be studied in the future.

## **5.4 Conclusions**

Main goal of this study was to test the relationship between the two variables that whether the relationship is strong or weak which were emotional intelligence and project success. Success of the project is dependent upon the project team members because they have to complete the project within the time limit, under the specific budget and according to the scope. When the team members are in good mental health then it will surely have positive effect on the project success and outcome of the project as it has been proven by this research.

400 questionnaires were distributed and out of those 400 only 213 were used for analysis. After analyzing the data collected our validity and reliability was suitable. Our hypotheses were proven and were accordance with the emotional intelligence theory.

The effectiveness of the research model was proven by using team cohesion as a mediator between emotional intelligence and project success while collectivism acted as a moderator between emotional intelligence and team cohesion. Hypotheses were proven corrected but as this study was carried only in one city and a specific sector so there is a possibility that the results would be different in different cities and different sectors. Emotional intelligences importance is thoroughly explained in this study and how it effects the project success. This study emphasizes on the feelings and their importance in the work environment and how they affect the project outcomes. This study concludes that a project manager with high

emotional intelligence is able to lead himself and his team in a much superior way and thus effects positively the execution of the project.

This study contributed in the literature of emotional intelligence and project success as there was a limited literature on these variables. This study also made a contribution in a way that it gave a new mediator team cohesion between emotional intelligence and project success. It is high time that organizations start working on the grooming of their employees if they want to succeed in this competitive industry.

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# Appendix-A

## Research-Questionnaire (Time 1)



Dear respondent,

I am a student of MS project management at Capital University of Science & Technology, Islamabad. I am conducting a research on **“Impact of Emotional Intelligence on Project Success with a Mediating Role of Team Cohesion and Moderating Role of Collectivism”**. You can help me by completing the attached questionnaire. I appreciate your participation in my study and I assure that your responses will be held confidential and will only be used for education purpose.

Sincerely,

Sania Tassadaq,  
(MPM181026)

Please provide the following information

	<b>1</b>	<b>2</b>
<b>Gender</b>	Male	Female

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Age</b>	18-25	26-33	34-41	42 and 49	50 and above

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
<b>Qualification</b>	Matriculation	Intermediate	Bachelors	Masters	Mphil	PhD

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Experience</b>	0-5	6-10	11-15	>16

Please tick the relevant choices as specified

(Strongly disagree: 1, Disagree: 2, Neutral: 3, Agree: 4, Strongly agree: 5)

**PART 1: Emotional Intelligence**  
(Awareness of Own Emotions (Own Aware))

1	My leader can explain the emotions he/she feels to team members.	1	2	3	4	5
2	My leader can discuss the emotions he/she feels with other team members.	1	2	3	4	5
3	If my leader feels down, he/she can tell team members what will make him/her feel better.	1	2	3	4	5
4	My leader can talk to other members of the team about the emotions he/she experiences.	1	2	3	4	5

**(Management of Own Emotions (Own Manage))**

5	My leader respect the opinion of team members,	1	2	3	4	5
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	even if he/she think they are wrong.					
6	When my leader is frustrated with fellow team members, he/she can overcome his/her frustration.	1	2	3	4	5
7	When deciding on a dispute, my leader try to see all sides of a disagreement before come to a conclusion.	1	2	3	4	5
8	My leader give a fair hearing to fellow team members' ideas.	1	2	3	4	5

**(Awareness of Others' Emotions (Other Aware))**

9	My leader can read fellow team members 'true' feelings, even if they try to hide them.	1	2	3	4	5
10	My leader is able to describe accurately the way others in the team are feeling .	1	2	3	4	5
11	When my leader talk to a team member he/she can gauge their true feelings from their body language.	1	2	3	4	5
12	My leader can tell when team members don't mean what they say.	1	2	3	4	5

**(Management of Others' Emotions (Other Manage))**

13	My leaders' enthusiasm can be contagious for members of a team.	1	2	3	4	5
14	My leader is able to cheer team members up when they are feeling down.	1	2	3	4	5
15	My leader can get fellow team members to share his/her keenness for a project.	1	2	3	4	5
16	My leader can provide the 'spark' to get fellow team members enthusiastic.	1	2	3	4	5

## PART 2: Project Success

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

**PART 3: Collectivism**

1	Group welfare is more important than individual rewards.	1	2	3	4	5
2	Group success is more important than individual success.	1	2	3	4	5
3	Being accepted by the members of your workgroup is very important.	1	2	3	4	5
4	Employees should only pursue their goals after considering the welfare of the group.	1	2	3	4	5
5	Managers should encourage group loyalty even if individual goals suffer.	1	2	3	4	5
6	Individuals may be expected to give up their goals in order to benefit group success.	1	2	3	4	5

**PART 4: Team Cohesion**

1	I feel that I am a part of the team.	1	2	3	4	5
2	My team works together better than most teams on which I have worked.	1	2	3	4	5
3	My teammates and I help each other better than most other teams on which I have worked.	1	2	3	4	5
4	My teammates and I get along better than most other teams on which I have worked	1	2	3	4	5