

CAPITAL UNIVERSITY OF SCIENCE AND
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**Dimensions of Team Work
Leading to Project Completion,
with the Moderating Role of
Government Interference**

by

Khuram Farid

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 want to dedicate this achievement my parents, teachers and friends who always
encourage and support me in every crucial time*



CERTIFICATE OF APPROVAL

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Abstract

The objective of this study was to test the relationship of Dimensions of Teamwork leading to Project Completion, with the moderating role of Government Interference. The model comprises of three independent variables which includes Flexibility, Task Delegation & Risk avoidance, dependent variable which includes Project Completion and one moderating variable which includes Government Interference. The positivistic approach was used to collect the data. The data was collected from the project supervisors working on information technology industry in Rawalpindi and Islamabad. There are 319 project supervisors were used as a sample for this study. The findings reveals that the three dimensions of teamwork studied in this thesis helps the project supervisors to complete the project on time in normal as well as abnormal conditions.

Keywords: Dimensions, Teamwork, Project Completion, Government Interference, Flexibility, Task Delegation, Risk Avoidance, Project Supervisors, Information Technology, Rawalpindi and Islamabad.

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Abbreviations

AVE	Average Variance Extracted
CCPM	Critical Chain Project Management
F	Flexibility
GDP	Gross Domestic Product
GI	Government Intervention
ITI	Information Technology Industry
PC	Project Completion in Extreme Conditions
RA	Risk Avoidance
RO	Research Objective
RQ	Research Question
SBT	Snow Ball Technique
TD	Task Delegation
TDT	Team Dynamics Theory
WHO	World Health Organization

Chapter 1

Introduction

1.1 Background to the Research

Project management related work has been a part of several industries. For example, in banking industry projects focus on biodata. Whereas in the airline industry projects were initiated in the biodata domain. The information technology industry contribute 25.5% of GDP which is equal to 11.5 trillion USD globally as on 2016 (Lemma, 2017). Moving towards Pakistan, information technology industry contributes 1% of GDP of Pakistan which is nearly about 3.5 billion USD (Adnan et al., 2017). Evolution of COVID-19 created a serious issue for project supervisors (World Health Organization, 2020). For instance, COVID-19 led to global project disasters simultaneously, being a topic of continuous discussion by researchers (Meyer et al., 2013).

These major global disasters have highly influenced the interruptions to the projects in the completion stage (Abdullah et al., 2020). Consequently, resulting in slowing down the progress of global projects. Thus, creating a hurdle for the government and economic policy makers for making a concrete future decision based on past project performances, which has led to an extreme effect on the IT related project around the globe in the completion (Warwick & Fernando, 2020).

Project success has been continuously in discussion among the researchers over the last few decades, they were discussed different criteria of project success (Collins,

& Baccarini, 2017). Project completion is not directly discussed with three dimensions of teamwork in the past literatures.

The past literatures discussed about the project success criteria's, in a similar vein a study was conducted by de Wit, 1916 in which he discussed the appropriate criteria of judging the project success. If the objectives are met, then project is successful otherwise it leads to a failure. It is necessary that the criteria of project success should be set earlier in the project so that everyone knows about the criteria of success.

Overlooking the influence of dimensions of teamwork on Project Completion. Therefore, this quantitative endeavor focused on three facets of teamwork including flexibility, task delegation and risk avoidance which is necessary in the completion of a project in extreme conditions in covid-19 times.

1.2 Problem Statement

Successful Project completion is the ultimate object and target of any project based organization. Researchers previously identified different requirements of the project completion in normal conditions. In literature previously seen that different requirement like speed, cost, flexibility, responsibility, quality, complexity, risk allocation / avoidance etc. were in discussion of various researchers. The growth of epidemic viral infections since last 2 decades have had a profound impact on existing and upcoming projects in the global industries (Warwick & Fernando, 2020).

Also, it has led to labor loss, disturbance in payment cycles, creating problems in logistical movements from suppliers and of the most important initiating project delays and stoppages (Maria et al., 2020). Due to this reason project supervisors fell concerned about the completion of projects in information technology industry of Pakistan (Market data forecast, 2020). For instance Covid-19 has also added delay to the project completion in IT industry.

Despite a wealth of studies were conducted on project outcomes such as project procurement, selection of construction projects, project delivery, client satisfaction, project success, and entrepreneur loyalty (Thomas et. al., 2014). The direct relationship between three dimensions of teamwork including flexibility, task delegation, and risk avoidance influence on Project Completion has been overlooked. Also, several studies tested the impact of cost, quality, and price, speed, project complexity, and project speed, and client requirements influence on several project related outcomes (Richard et. al., 2016).

However, the collective effect of these three dimensions of teamwork with Project Completion has been unnoticed. Minimal attention has been paid towards the role of supervisor in managing teamwork influence on Project Completion in the information technology sector of Pakistan (Market data forecast, 2020). Hence, this thesis aimed to test the moderating role of Government Interference between three dimensions of teamwork and Project Completion in light of Team Dynamics Theory (TDT). The next section would discuss the research questions followed by research objectives. The next section would discuss the research questions for this thesis.

1.3 Research Questions

On the basis of the issues mentioned above. Following are the questions that would be answered in this study:

RQ 1: Does flexibility with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RQ 2: Does task delegation with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RQ 3: Does risk avoidance with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RQ 4: Does Government Interference moderate the relationship between flexibility within a team and Project Completion in Pakistan?

RQ 5: Does Government Interference moderate the relationship between task delegation with in a team and Project Completion in Pakistan?

RQ 6: Does Government Interference moderate the relationship between risk avoidance with in a team and Project Completion in Pakistan?

1.4 Objective of the Study

RO 1: To examine flexibility with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RO 2: To examine task delegation with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RO 3: To examine risk avoidance with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

RO 4: To examine Government Interference moderate the relationship between flexibility within a team and Project Completion in Pakistan?

RO 5: To examine Government Interference moderate the relationship between task delegation with in a team and Project Completion in Pakistan?

RO 6: To examine Government Interference moderate the relationship between risk avoidance with in a team and Project Completion in Pakistan?

1.5 Significance of the Study

The following gaps were identified as a result of this research.

Many studies with the Team Dynamics Theory (TDT) on the Information Technology Industry (ITI) were studied. It was observed that the available literature lacked the evidence of use of Team Dynamics Theory (TDT) in information technology industry while studying the impact of flexibility, task delegation and risk avoidance with Project Completion in times of COVID-19 (Thomas et. al., 2014).

There existed a line of vacuum in these studies as the relationship between dimensions of teamwork leading to the Project Completion in covid-19 times, with the moderating role of Government Interference in light of Team Dynamics Theory (TDT). It was observed from the literature that, the minimal evidence is available that the unit of analysis is project supervisor of information technology industry in the Project Completion, so the unit of analysis of this study is the project supervisor in information technology industry of Pakistan.

A major chunk of the studies were directed towards industries such as construction, automobile, hotel services industry, cleaning service, customs and excise, and food industry, national health care security, education, banking, life insurance, retail and airline (Shen, et. al., 2003). Furthermore, from the previously studies, it was established theoretical and empirical work in applied psychology as a contemporary theory was extensively discussed by researchers for sports, exercise and performance psychology (Edson Filho, 2018). However, the outcomes of these research endeavors were directed towards team performance (Michinov & Juhel, 2018).

It was established that, the minimal evidence is available that the previous studies were conducted in the Information Technology industry, so this study will be conducted in the Information Technology industry in the light of Team Dynamics Theory (TDT). Moreover, majority of the studies on project management field were conducted in different countries like Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan (Richard et. al., 2016).

This constrained the generalization of the findings towards information technology industry of Pakistan. Also, it has been observed that minimal studies have been conducted in Pakistan in light of Team Dynamics Theory (TDT). Thus, this study would have significant contribution in the context of Pakistan.

From the above previously studies, it was established theoretical and empirical work in applied psychology as a contemporary theory was extensively discussed by researchers for sports, exercise and performance psychology etc. (Edson Filho, 2018). However, the outcomes of these research endeavors were directed towards

team performance (Michinov & Juhel, 2018). It was established that, the minimal evidence is available that the previous studies were conducted in the outcome of Project Completion in Covid-19 times, so this study will be conducted in the outcome of Project Completion in Covid-19 times in the light of Team Dynamics Theory (TDT).

1.6 Thesis Scope

The province Punjab in Pakistan has been taken as population of this study, the population comprises of 110 million as per the Census held in 2017, (Pakistan Bureau of Statistics, 2017). The province initiated several projects in different areas. The projects including information technology, banking, industrial manufacturing, agriculture and textile etc. There are numerous SME's who are engaged in different projects of information technology sector in the twin cities including Rawalpindi and Islamabad in Pakistan. Project supervisors leading teams and working in the information technology industry in the twin cities including Rawalpindi and Islamabad in Pakistan were chosen as the unit of analysis in this thesis.

This thesis covers the three dimensions of teamwork which is necessary to complete the project of information technology industry in Rawalpindi and Islamabad in the presence of project supervisors. The project supervisors, clients and project managers will take the benefits in the future from this thesis by keeping in view the results generated by this thesis.

1.7 Structure of this Thesis

This thesis comprises of five chapters.

1.7.1 Chapter 1

This chapter provided the reader with a brief outline on the Project Completion in COVID-19 times in the information technology of Pakistan. At first, this chapter

established the introduction for this thesis. Then, problem statement is explained, followed by research questions and research objectives for this study. After that, the scope of the thesis and significance in terms of theoretical contribution were presented at the end of this chapter.

1.7.2 Chapter 2

This chapter sets the scene for reviewing relevant literature, through a stepwise process. At first, the Project Completion was explored. At second, the significance of information technology was established. Thirdly, the literature included a discussion of dimensions of teamwork leading to Project Completion in the information technology of Pakistan. Fourthly, this chapter included a discussion on the hypothesis, followed by research gaps and conceptual framework. Finally, a summary was established to end this chapter.

1.7.3 Chapter 3

This chapter set up the research paradigm at the beginning. At second, the selected population was examined which is followed by the sample size for this thesis. Then a discussion on the measurement model followed by scale development, and then definitions of every variable. Then procedure and data collection and method was documented. Finally, a conversation was setup on the SMART PLS 3.0 for data analysis of structural and measurement model.

1.7.4 Chapter 4

This chapter consists of quantitative analysis which was based on structural and measurement model. This includes certain tests such as; internal consistency, Convergent validity and Discriminant validity. All these tests have been run on the software using SMART PLS 3.0.

1.7.5 Chapter 5

This chapter established discussions, conclusions and implications of the findings related to the research questions and hypothesis. These included discussions on the theory contribution and supervisory practices. The final part of this chapter presented the conclusion from this research along with a recommendation for further research opportunities.

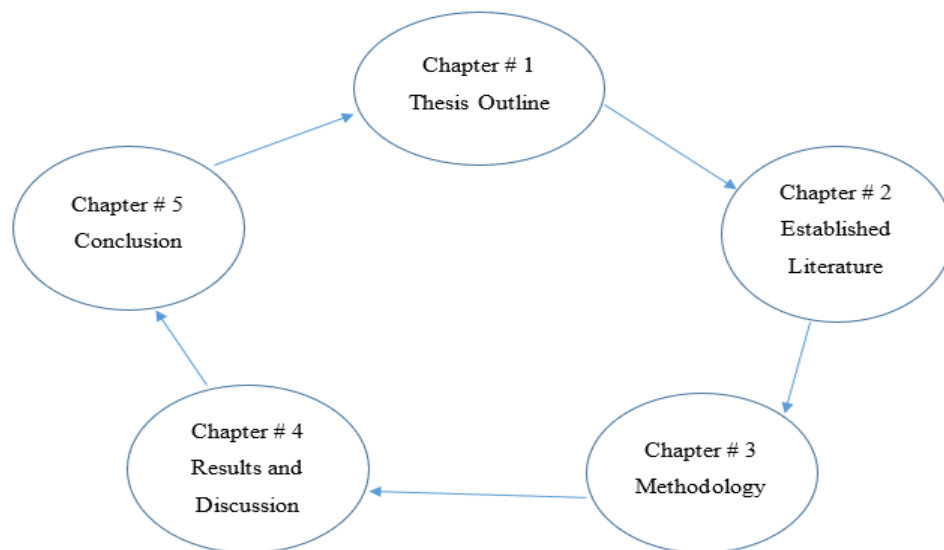


FIGURE 1.1: Structure of this Thesis

1.8 Summery

This chapter highlighted the background of research and identified the current research problems. In relation to the research problems, this chapter also set the research questions, followed by research objectives to be investigated. The contextual setting of this thesis is also discussed, followed by structural details to end this chapter.

Chapter 2

Literature Review

2.1 Introduction

Chapter two gave an overview on established literature globally as well as in the Pakistani context. Moreover this chapter study the relationship between dimensions of teamwork which included flexibility, task delegation and risk avoidance leading to Project Completion in times of COVID-19 in light of Team Dynamics Theory (TDT). Also this chapter included the moderating role of Government Interference between the dimensions of teamwork and Project Completion. Finally six hypothesis were discussed in this chapter which were based on the research objectives, leadings to the conceptual frame work. These derived hypothesis were empirically tested in chapter four.

2.1.1 Influence of Covid-19 and IT Industry

Past research reported that, 24,299,923 individuals were affected by COVID-19, with 827,730 global casualties as on 28-08-2020, moreover, this accounted for 3.4% of mortality rate worldwide (WHO Dashboard, 2020). Due to COVID-19 situation, the IT related projects around the globe was shut down and approximately 20% people who belongs to the IT industry has lost their jobs and faced difficulty in their survivals (Anton et. al., 2020).

Not surprisingly, in this strongly connected and interrelated world, the impact of COVID-19 has badly affected the information technology project-based industries around the globe (Market data forecast, 2020). Consequently, creating difficulty for the project managers to take a concrete step for the completion of the project (Warwick & Fernando, 2020). Furthermore, COVID-19 has slowed down the global activities with highly interruptions to the IT related projects in the completion stage (Maria et al., 2020). For instance, transportation is being limited and even restricted among the countries which further slowed down the global activities. According to the International Monetary Funds (IMF), China slowed down by 0.4 percent points as compared to its initial growth target to 5.6 percent, due to the slow pace of Project Completion around the globe (Warwick & Fernando, 2020).

As there is un-expected situation of COVID-19 has raised around the globe including Pakistan, this results badly affected the information technology project-based industries around the globe (Market data forecast, 2020). This also included vendors and suppliers comprised of raw material production, transportation services, and logistics etc. for the projects related activities (Maria et al., 2020). Additionally, the fixed and liquid resources are also unavailable for the performance of IT related projects (Ahmed et al., 2020). Alongside the fixed and liquid resources, human work force is one of the key resources for the projects. The mortality rate of the infected patients is 3.4% (WHO Dashboard, 2020), which leads to the shortage of human work force for the projects around the globe.

Furthermore, the ongoing projects as well as new started projects are facing difficulty in their performance and this leads the projects to the complex situation in delaying the projects (Florichel et al., 2016). In these tuff times expectations of individuals from each other working with in a team are significant in the completion of a project (Seftyandra, 2020).

Due to the complex nature of the projects, it is difficult for an individual to manage the whole project by itself, therefore team collaboration is very important for the successful completion of projects (Espinosa et al., 2007). Complex and innovative nature of projects want the project team members to adopt a flexible and collaborative tool (Geraldi, 2009) in order to face the situations accordingly.

Different actions of team members have different reliance on each other (Burke Morley, 2016) and different researches proved that team coordination assist the members to reduce the risk during the project performance (Wang et al., 2018).

2.1.2 Project Success

Successful Project Completion has been continuously in discussion among the various researchers over the last few decades and is said to be a core focus of the project managers (Rezvani et al., 2016). Different scholars discussed the different criteria's of project success. Some of the researchers are of the view that the project completion is successful if it fulfills the three main requirement of project management principles i.e. the project is completed within resources, budget & time etc. (Thomas et al., 2014).

A study was conducted in Yemen in the construction industry by Fadhali et al. (2019), it was said that projects exceeding their initial completion time leads to delaying the projects. Furthermore due to delaying the project's it was effected the cost overrun, litigation, arbitration, failure and abandonment to the projects. Consequently, the projects of the construction industry to the failure position for the stakeholder's opinion.

Another study was conducted in the Canada by Floricel et al. (2016) in the multiple industries sectors. It was concluded that the project complexity influences the performance of the project. Furthermore, it was also identified that the ongoing projects as well as new started projects are facing difficulty in their performance in the complex situation which can results in delaying the projects.

Studies on managing projects have been carried in different countries and contexts. Findings of a few have been unleashed here in. A study was conducted in Nigeria by Richard et al. (2016) in construction industry. It was found that Clients procurement selection criteria (Flexibility, Certainty, Complexity, Risk, Responsibility, Quality, Cost & Time) is very complex and demanding task for the stake holders in the construction industry. Moreover, on the other hand, in another country Qatar in the same construction industry by Hafeez et al. (2016).

It was founded that the Clients information requirements (Technical, Management & Commercial) is necessary to develop a set of principles and recommendations for the three areas of the EIR which are applicable to Qatar's construction sector which is known as business information model. In a similar vein a study was conducted in Rwanda by Joleen (2016) in the hotel services industry. It was found that the customer satisfaction enhances customer loyalty in hotels.

The outbreak of epidemic viral disease COVID-19 from Wuhan, China has led to a dramatic effect on the Project Completion in several industries (Warwick & Fernando, 2020). COVID-19 has spread to more than 100 countries around the globe at a fast pace. Furthermore, COVID-19 has slowed down the global economy with highly interruptions to production (Maria et al., 2020). For instance, transportation is being limited and even restricted among the countries which further slowed down the global economic activities. Due to the shutdown of the industry around the globe there are approximately 24 percent people lose their jobs (Maria et al., 2020).

2.1.3 Information Technology Industry

The Information Technology industry is globally a huge investment industry. According to the statistics, the actual size of digital economy was 11.5 trillion USD globally as on 2016, which is about 25.5% of the global GDP (Lemma, 2017). Globally the information technology industry is considered to be the one of the most profitable industries in the world. A study was conducted in USA, shows that the information technology industry has revolutionized the globe to increase the efficiency and responsiveness (Gunasekaran et al., 2017).

But due to the worst situation of COVID-19 around the globe, Covid-19 had a negative impact on IT industry around the globe (Market data forecast, 2020). Due to the restrictions of transport around the globe, the infrastructure of IT industry has slowed down their operations (Market data forecast, 2020). This is the main reason that the IT related projects has faced difficulty in their completion stage. Due to the shutdown of IT related projects around the globe, there are

approximately 20% people who belongs to the IT industry has lost their jobs and faced difficulty in their survivals (Anton et. al., 2020).

Moving towards Pakistan, information technology is one of the fastest growing sectors from different industries & is considered to be the one of the most profitable industries in the Pakistan. (Akhlaq & Ahmed, 2015). It contributes 1 % of GDP of Pakistan which is nearly about 3.5 billion USD (Adnan et al., 2017). An information technology industry is one of such industry which can be a part of any industry, for example textile industry is one of the largest industry of Pakistan but without the information technology the textile industry can't grow very fast. As this is the world of modernization, the information technology industry helps the other industries to modernize their equipment to survive in the market (Iqbal et al., 2018).

Similarly just like the other industries, innovation is necessary in the construction industry as well and information technology industry played a lead role in creating an innovation in the construction industry of Pakistan (Razzaq et al., 2018). Kamboh & Leghari, (2016) conducted a research on the banking sector of Pakistan, they concluded that information technology industry helps the banking sector to attract a huge customers towards the banks of Pakistan, furthermore they concluded that the securities of the banking sector can't be possible without the implementation of the information technology. Due to the Covid-19 mostly the universities has announced the online classes all over the Pakistan, this situation increase the dependency on the information technology and the mostly teachers and students are not aware the usage of technology, this creates a huge problem among the students to proper communicate with the teachers (Verawardina et al., 2020).

As there is un-expected situation of covid-19 has raised around the globe including Pakistan, there is seen an un-expected change in the IT industry of Pakistan (Market data forecast, 2020). The information technology industry makes a revolutionary reforms in the medical history, in a very short time the information technology industry introduced such an equipment which helps the medical staff

to take care of multiple patients at the same time to minimize the risk of transmission of covid-19 to other patients of all over the world including Pakistan (Nicola, et al., 2020).

Where there information technology sector promotes the medically reforms, the IT related projects in Pakistan who are already started, facing difficulty in their completion stage due to certain reasons which includes; the restrictions of transport in Pakistan, the infrastructure of IT industry has slowed down their operations etc. (Market data forecast, 2020). According to WHO Dashboard (2020), the mortality rate of the infected patients is 3.4% which leads to the shortage of human work force for the projects around the globe including in Pakistan, as human work force is one of the key resources for the projects. This creates a difficulty for the supervisors to complete the project on time.

2.1.4 Dimensions of Teamwork

Organizations have understood the significance of team, due to which they are focusing towards the establishments of project team to achieve the organizational goals and also to enhance the performance. Project supervisors and top management are adopting new techniques to make the teams effective and efficient (Fung, 2014). With the advent of latest tool and technologies organizations are going toward virtual teams, in order to utilize the capabilities of employees living in different geographical locations. Study suggested that proper knowledge sharing and collaboration facilitates teams in positive way and overcome the issues evolved (Alsharo et al., 2017). Trust play a challenging role in teams, it influences coordination and collaboration among members (Breuer et al., 2016). Mahembe, & Engelbrecht, (2014) suggested that teams play an important role towards project success. So, team is considered as critical success factor in accomplishing the projects. It is a construct that is involved throughout the life cycle of a project, from identification phase till the execution and customer satisfaction. From start till the end of any type of project team is considered important, without effectiveness of team, projects are incomplete and sometimes considered failure (Zidane & Olsson, 2017).

There are various dimensions of teamwork which should be considered in the successful completion of the projects. Previously many researchers has enlisted the various dimensions of teamwork, which should be considered for the successful completion of projects like flexibility, responsibility, quality, complexity, task delegation and risk avoidance etc. (Thomas et al., 2014). Another study was conducted in New York, in which various dimensions of teamwork was discussed which includes job role, situational stressors, training strategies, cognitive artifacts and communication media etc. (Tiferes & Bisantz, 2018). Mathieu et al., (2019) conducted a study in USA in which they review the past 10 years of team effectiveness research and summarize the effectiveness of teamwork in three dimensions which includes; compositional features, structural features and mediating mechanism of the teamwork.

Similarly, Xing et al., (2020) conducted a research in China & United Kingdom in which they discussed the three different dimensions of entrepreneur team which includes; strategic sensitivity, resource fluidity & leadership unity. Another study was conducted in china by Singh & Malik, (2017) in which the researcher discuss the gender discrimination in the team. They quote an example of bad mention game in which they discussed that there must be combination of male & female team members for a successful completion of the game or a project. Liang et al., (2019) conducted a research in China & United Kingdom, in which they discussed that dimensions was not considered to be useful by the exhibition manager in terms of increasing team performance, therefore their study focus on two dimensions of teamwork that are more relevant to the context investigation, which included conceptual skills and commitment to the growth of people. Their results have implication for managers seeking to create high performance of temporary team work.

From the past literatures it was observed that the various authors discussed the different dimensions of teamwork which includes flexibility, responsibility, quality, complexity, task delegation, risk avoidance, job role, situational stressors, training strategies, cognitive artifacts, communication media, compositional features, structural features, mediating mechanism, strategic sensitivity, resource fluidity,

leadership unity, conceptual skills and commitment to the growth of people etc. in the different countries like New York, USA, China & United Kingdom etc. This research main focus on the three dimensions of teamwork which includes Flexibility, Task delegation and Risk avoidance which is necessary in the completion of a project in the extreme conditions in covid-19 times in the Pakistani context.

In the above literatures it was observed the three dimension of team work which includes flexibility, task delegation and risk avoidance were not discussed collectively with each other. Furthermore these variables were not chosen an independent variables in the information technology industry of Pakistan especially in Rawalpindi and Islamabad. These variables were not discussed with project completion as a dependent variable also. This study discuss these three dimension of team work which includes flexibility, task delegation and risk avoidance with the project completion in the presence of moderating role of government interference.

2.2 Hypothesis

2.2.1 Team Flexibility Relationship with Project Completion

The first hypothesis is developed to satisfy the specific research objective of this study objective number (1). There are various definitions of flexibility defined by different authors. Bennet et al., (1983) defined flexibility is the ability to make changes to the time (when), location (where) and manner (how) in which a project or task is to be completed. Another author said that the flexibility helps to regulate the emotions of the people in order to manage the diverse demand of varying situations (Aldao et al., (2015).

Similarly in another article it was said that the project team flexibility is the ability to manage the project with unanticipated environment circumstances which is essential for the successful completion of the project (Perisic et al., 2017). An article in the California describes that the flexibility is one of the three variables which can enable the traps in the workplace (Kossek et al., 2015). A paper well defined

the Workforce flexibility, Qin et al., (2015) said in their journal that Workforce flexibility is the management organizational labor capacity and capability in the operational environment and is the approach to mitigate the system imbalances caused by uncertainties.

Karam et al., (2017) discuss in his article that there are numerous tasks in the projects, which are necessary to fulfil for the completion of the projects. For all those tasks, some specific skills of project teams are required for the completion of the projects. For this purpose the project team's flexibility is one of the key factor which is necessary in the completion of the projects. Aslam, (2019) discuss in his article from CUST Pakistan, that from different dimensions of teamwork, the project team flexibility which further includes the useful decision making techniques, collaboration amongst the team members, necessary advices when and where required in the completion stage of projects & motivation for the completion of the projects enhance the chances of the successful completion of the projects.

Another study was conducted in New York by Lacerenza et al., (2018) in which they discuss the project teams must be so flexible so that every member of the project team can easily communicate amongst each other, can work independently and have a high level of empowerment for the successful completion of the projects. On the other hand project team is a team whose members belongs to different departments composed of different nation, culture & different experience who are assigned to join the same project. The knowledge sharing among the project helps to increase the project team performance and capability and this helps the project teams to complete the project efficiently and effetely (Navimipour et al., 2016). Szentes et al., (2016) discuss in his article that the project team flexibility is an essential dimension of team work in the successful completion of mega projects.

The above mentioned studies on the project team flexibility has been studied on the areas such as decision making techniques, collaboration & Workforce flexibility etc. However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in team flexibility in the information technology

in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and quantitative study objective (1), the following research hypothesis is presented;

H1: Flexibility with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan.

2.2.2 Task Delegation Relationship with Project Completion

The second hypothesis is developed to satisfy specific research objective of this study, objective number (2). There are various definitions of task delegation defined by different authors. The past research shows that the practice of task delegation among the team members have increased from past few decades, which helps the supervisors of the projects to manage the projects effectively & efficiently in extreme conditions (Søndergaard et al., 2016). In one of the study, the researcher was of the view that the task delegation process is associated with high level of employee job satisfaction (Riisgaard et al., 2017).

Another study was conducted in which the researcher said that the task delegation maintain the health of team members which results in completes the project efficiently and effectively in extreme conditions (Mirhoseiny et al., 2019). Similarly, Rohlfing & Schöttner, (2017) said that the decision making process about the projects increased due to the task delegation within the project team members, which results to complete the projects on time in extreme condition. Besides the completion stage, task delegation also helps the supervisor in the planning stage of the project, planning is also a major part of the project which plays a vital role in the success or failure of the project especially in extreme condition (Heilemann & Schulte, 2019). A research was conducted in Portugal by Ferreira et al., (2018) in which the researcher was of the view that the task delegation amongst the project team members helps to identify the issues with in the projects, organized the delegated tasks effectively & efficiently, which leads to complete the projects in extreme condition successfully. Similarly another research was conducted in

United Kingdom by Alotaibi & Mafimisebi, (2016) in the project management field in which the researcher was of the view that the project management practices is a complex and difficult task, which require the supervisors of the project, to delegate the some decision making authorities to their sub-ordinates so that the time delay in taking the permission regarding different matters may be saved and complete the project effectively & efficiency on time in the extreme conditions.

Ferreira et al., (2018) conducted a research in Portugal in which he reveals that the task delegation among the team members is essential specially in the mega projects where number of team members are working on the same projects of the information technology industry so that the time can save of taking permission and any other formalities and projects may completed on time in the extreme conditions. A research was conducted in the Australia & Singapore, in which the author reveals that the supervisors working on different projects have highly concern on the delegation of the tasks and responsibilities to their efficient sub-ordinates, so that the objectives of the project may be achieved and the project may be completed successfully in the extreme conditions (Zhao et al., 2016). The above mentioned studies on the task delegation has been studied on the areas such as employee job satisfaction, maintain the health of team members & identify the issues with in the projects etc. However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in task delegation in the information technology in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and initial quantitative study objective (2), the following research hypothesis is presented;

H2: Task delegation with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan.

2.2.3 Risk Avoidance Relation with Project Completion

The third hypothesis is developed to satisfy specific research objective of this study, objective number (3). There are various definitions of project risk avoidance

defined by different authors. Project risk is an uncertain event which creates a threat for the supervisors of the projects to failure the project. The supervisors of the projects wish to minimize any kind of risk arised during their project (Benett & Flanagan, 1983). There are various types of risks arise during the project like, project is not completed on time, which leads to the delaying in the project. Project is not completed within the budget, this leads to cost the business client much high (Samuel & Ayirebi, 2017). The project is not completed according to the quality expected by the business client, it is also a risk and leads to failure the completion of the project (Kamra et al., 2015).

Borkovskaya, (2018) conducted a research in Manila in which he explains in his research that to minimize the probability of arising the risk associated with the project is the prime responsibility of the project supervisors, failing to minimize the probability of the risk leads the project to the failure situation. Izmailov et al., (2016) discuss in his article in Russia, that only 44% of the projects completes successfully on time while 30% of the projects die due to the risks arise during the different phases of the project, now a days the project supervisors use advance technique of critical chain project management (CCPM) to minimize the risk arise during the projects. The wise supervisors use various techniques to avoid any kind of risk arise during the project.

A study was conducted in which it reveals that to prioritize the risk is one of the way to avoid the risk by the supervisors in the completion stage of the project in extreme conditions (Liu & Qi, 2019). Hu et al., (2016) explains in his research in China that as risk associated with the project is an uncertain event so create a buffer in decision while scheduling & prioritizing the risk so that the chances of project failure remains minimum and project may be completed on time in extreme conditions. To introduce a capital is one of the most important step in the project, the researcher said that the planning of risk avoidance should be made at the stage when decision of further capital is introduced if the project is completed in extreme condition (Faccioet al., 2016).

Another research was conducted by Muriana & Vizzini, (2017) in Italy in which they reveals that the planning & avoiding the risk is a continuous process which

starts from the planning stage to the completion stage of the project the supervisors of the project consider the risk in every decision so that the project may successfully completed in extreme conditions. A research was conducted in china in which the author elaborates that the supervisors who have worked on multiple projects, have a wise knowledge to manage the risk raised on different phases of the projects. Due to vast interaction of risk, the supervisor can better assess the risk and can make better decision according to the situation of the risk (Wang & Yuan, 2017).

The above mentioned studies on the task delegation has been studied on the areas such as probability of risk, risk leads to failure the project, scheduling & prioritizing the risk etc. However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in risk avoidance in the information technology in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and initial quantitative study objective (3), the following research hypothesis is presented;

H3: Risk avoidance with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan.

2.2.4 Government Interference Moderates between Team Flexibility and Project Completion

The fourth hypothesis is developed to satisfy specific research objective of this study, objective number (4). It entails that Government Interference plays a motivating or moderating role in between relationship of team flexibility and Project Completion. Government Interference can positive or negatively moderates this relationship. Government Interference has been previously studied as moderator in multiple studies; for example, a study was conducted in china by Liyan Zhang and Bin Wu (2018) in the agricultural industry of farmer's innovation system.

It was concluded that the Government Interference plays a lead role as a moderator in the different phases of projects i.e. Their design, execution & successful

completion of the projects. It was concluded that without the Government Interference not a single project starts, executed or finished anywhere in the globe. Another research reveals that the Government Interference act as a moderation in leading different projects in terms of their designs (Zhang & Wu, 2018). In another research it reveals that the Government Interference moderated between private companies, investors and external environment etc. (Standaert, 2019). Similarly a research was conducted in china by Liu, (2019), and it reveals that the government in the china interfere in the matters of national team investment managers in different projects.

Various studies has been conducted in Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan countries mostly (Richard et. al., 2016), in Pakistan there is little evidence that Government Interference act as a moderator between team flexibility and Project Completion. However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in team flexibility in the information technology in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and initial quantitative study objective (4), the following research hypothesis is presented;

H4: Government Interference moderate the relationship between flexibility within a team and Project Completion in Pakistan.

2.2.5 Government Interference Moderates between Task Delegation and Project Completion

The fifth hypothesis is developed to satisfy specific research objective of this study, objective number (5). It entails that Government Interference plays a motivating or moderating role in between relationship of task delegation and Project Completion. Government Interference can positive or negatively moderates this relationship.

Government Interference has been previously studied as moderator in multiple studies; for example, according to Edith Kiragu (2015) in the energy sector of South Africa, there are high involvement of the general public in the projects, therefore in more jurisdiction the Government Interference is necessary in the deployment of the projects. To obtain a domestic and political support for the projects, the government promise domestic economic development due to their competing socio-economic priorities and strategic opportunities that green economy offers in economic development.

A case study was conducted in Netherlands in which governments deviates the task delegation among their different departments (Overman, 2016). Some researchers are of the view that the responsibility of task delegation in the government is not fruitful (Overman, 2016). In another research it was observed that the Government use its various powers to delegate the tasks to the other departments to complete their operations (Cass, 2017). A study was conducted in Turkey, it was observed that government delegates its powers in the crises of Turkey (Terzi, 2018).

Various studies has been conducted in Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan countries mostly (Richard et. al., 2016), in Pakistan there is little evidence that Government Interference act as a moderator between task delegation and Project Completion. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in risk avoidance in the information technology in the Project Completion in the extreme conditions of covid-19 times.

However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that in the context of Pakistan there may be different dimensions of project supervisors in task delegation in the information technology in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and initial quantitative study objective (5), the following research hypothesis is presented;

H5: Government Interference moderate the relationship between task delegation with in a team and Project Completion in Pakistan.

2.2.6 Government Interference Moderates between Risk Avoidance and Project Completion

The sixth hypothesis is developed to satisfy specific research objective of this study, objective number (6). It entails that Government Interference plays a motivating or moderating role in between relationship of risk avoidance and Project Completion. Government Interference can positive or negatively moderates this relationship. Government Interference has been previously studied as moderator in multiple studies; for example, a study was conducted in china but in context of supply chain sector, it was said that Government Interference in the projects maintain the equilibrium condition between the supply and demand policies (Daoming et al., 2017).

A research was conducted in Australia by Dang, (2020), in which he reveals that the in emerging economies where institutional environment is weak the level of risk faced by supervisors is ultimately high. A few studies have attempted to explain the procedures to minimize the risk raised on the projects. Hubbard, (2020) discussed in his book that the poor risk management used by the government authorities creates a hurdle for the supervisors to take concrete decisions to minimize the risk on the projects. Moreover, in the absence of good data the government is unable to plan the risk management process (Peters et al., 2019).

Previously various studies were conducted in the risk management of the construction industry in which the government plays a moderation role in the risk management process (Taofeeq et al., 2020). Furthermore, it reveals that the E-government provides a suitable plan of risk management in different projects of different industries (Sundberg, 2019).

Various studies has been conducted in Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan countries mostly (Richard et. al., 2016), in Pakistan there is little evidence that Government Interference act as a moderator between risk avoidance and Project Completion. However, their results empirically exhibited that it differs by nation. Similarly, it is also widely held that

in the context of Pakistan there may be different dimensions of project supervisors in risk avoidance in the information technology in the Project Completion in the extreme conditions of covid-19 times. Therefore, supported by theory and initial quantitative study objective (6), the following research hypothesis is presented;

H6: Government Interference moderate the relationship between risk avoidance with in a team and Project Completion in Pakistan.

2.3 Research Gaps

The theoretical, contextual & Conceptual contribution of this thesis was established sequentially in the following section.

Many studies with the Team Dynamics Theory (TDT) on the Information Technology Industry (ITI) were studied. It was observed that the available literature lacked the evidence of use of Team Dynamics Theory (TDT) in information technology industry while studying the impact of flexibility, task delegation and risk avoidance with Project Completion in times of COVID-19 (Thomas et. al., 2014).

There existed a line of vacuum in these studies as the relationship between dimensions of teamwork leading to the Project Completion in covid-19 times, with the moderating role of Government Interference in light of Team Dynamics Theory (TDT). It was observed from the literature that, the minimal evidence is available that the unit of analysis is project supervisor of information technology industry in the Project Completion, so the unit of analysis of this study is the project supervisor in information technology industry of Pakistan.

A major chunk of the studies were directed towards industries such as construction, automobile, hotel services industry, cleaning service, customs and excise, and food industry, national health care security, education, banking, life insurance, retail and airline (Shen, et. al., 2003). Furthermore, from the previously studies, it was established theoretical and empirical work in applied psychology as a contemporary theory was extensively discussed by researchers for sports, exercise and performance psychology (Edson Filho, 2018). However, the outcomes of these

research endeavors were directed towards team performance (Michinov & Juhel, 2018).

It was established that, the minimal evidence is available that the previous studies were conducted in the Information Technology industry, so this study will be conducted in the Information Technology industry in the light of Team Dynamics Theory (TDT). Moreover, majority of the studies on project management field were conducted in different countries like Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan (Richard et. al., 2016). Another research reveals that the Government Interference act as a moderation in leading different projects in terms of their designs (Zhang & Wu, 2018).

In another research it reveals that the Government Interference moderated between private companies, investors and external environment etc. (Standaert, 2019). Similarly a research was conducted in china by Liu, (2019), and it reveals that the government in the china interfere in the matters of national team investment managers in different projects. This constrained the generalization of the findings towards information technology industry of Pakistan. Also, it has been observed that minimal studies have been conducted in Pakistan in light of Team Dynamics Theory (TDT). Thus, this study would have significant contribution in the context of Pakistan. Furthermore, from the previously studies, it was established theoretical and empirical work in applied psychology as a contemporary theory was extensively discussed by researchers for sports, exercise and performance psychology (Edson Filho, 2018). From the above previously studies, it was established theoretical and empirical work in applied psychology as a contemporary theory was extensively discussed by researchers for sports, exercise and performance psychology etc (Edson Filho, 2018). However, the outcomes of these research endeavors were directed towards team performance (Michinov & Juhel, 2018). It was established that, the minimal evidence is available that the previous studies were conducted in the outcome of Project Completion in Covid-19 times, so this study will be conducted in the outcome of Project Completion in Covid-19 times in the light of Team Dynamics Theory (TDT).

2.4 Conceptual Framework

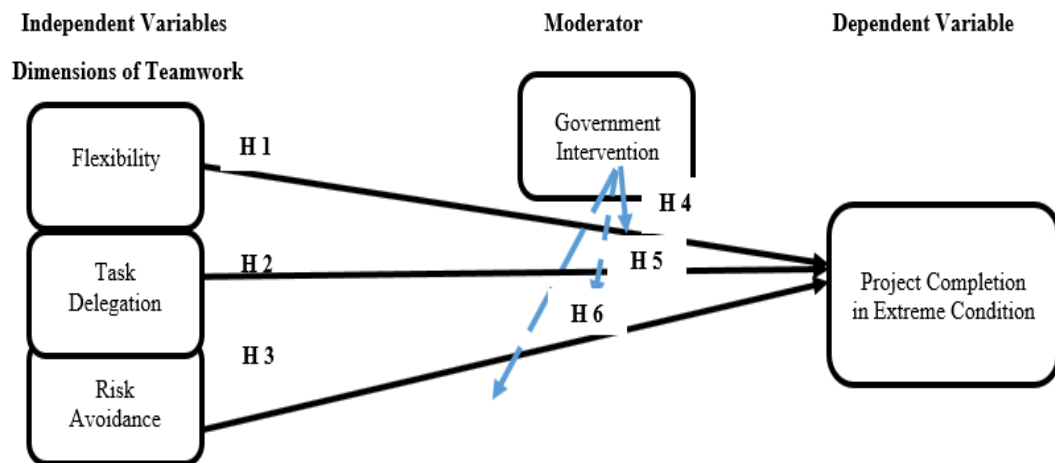


FIGURE 2.1: Research Model

2.5 Summery

Chapter two gives a detailed account of literature laying a foundation of this study, available on project completion in extreme condition in COVID-19 times and information technology industry has been discussed in the contextual, conceptual and theoretical manner. The underpinning theory Team dynamics theory has been discussed in available literature and it has been viewed previously that moreover a comprehensive account of literature has been discussed on dimensions of team work; Flexibility, Task Delegation & Risk Avoidance from the Information technology industry. Consequently, on the basis of research gap identified hypothesis and conceptual framework has been developed in chapter 2.

Chapter 3

Research Methodology

3.1 Introduction

The previously documented chapters reviewed arguments of Project Completion. Evidence indicated that, majority of studies were conducted in Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan (Richard et. al., 2016), with limited studies conducted in Pakistan. Therefore, this thesis dealt with dimensions of teamwork including flexibility, task delegation & risk avoidance leading to Project Completion with the moderating role of Government Interference, in the light of team dynamics theory in information technology of Pakistan.

3.2 Research Paradigm

At the initial stage setting the research strategy, helped in clarifying the philosophical position of this research thesis. Additionally, it help in putting out a certain research strategy that guaranteed the data collected and had the option to satisfy the setup research targets (Kamal, 2019). Keeping in view the research setting of this thesis positivist paradigm was established which helped in answering the research objectives (Kivunja & Kuyini, 2017). Furthermore, this research

strategy relied on deductive reasoning. Moreover, the hypothesis for this thesis were formed on the basis of literature deduced from published research articles and established statistical reports (Kivunja & Kuyini, 2017). The next section would discuss the population for this study.

3.3 Population

The population is said to be a collection of events and a set of people or objects with the similar characteristics, which the researcher wants to examine for their research purposes (Castillo, 2009). For research purpose Punjab, Pakistan has been taken as population of this study, the population is 110 million as per the Census held in 2017, (Pakistan Bureau of Statistics, 2017). The province initiated several projects in areas including information technology, banking, industrial manufacturing, agriculture and textile. The project based organizations operating in the twin cities Rawalpindi and Islamabad were selected as a population for exploring the research thesis. These project based organizations belong to the information technology industry of Pakistan. Furthermore, the project supervisors working on different projects of information technology industry of Pakistan were chosen as a unit of analysis for this research thesis, because it is difficult to collect the data from the top management due to non-availability of time. Furthermore, the list of supervisors from the chosen city was not available, therefore keeping in view the population of Rawalpindi and Islamabad were chosen to purposively chosen the project supervisors. The number of inhabitants in Rawalpindi and Islamabad in Pakistan is shown in **Table: 3.1**.

TABLE 3.1: The Populaton of Rawalpindi and Islamabad

City	Population (Millions)	% of Total Popoulation
Rawalpindi	1,743,101	74.34%
Islamabad	601,600	25.66%
Total Population	2,344,701	100.00%

3.4 Sample Size and Sampling Technique

Population is generally considered a collection of large amount of data and it is very difficult to collect the data from the whole population due to limitation of time and resources. In order to minimize these issues, sample is being taken for the collection of data and generalization of results for the research purposes. The sample is the complete representation of the whole data and ideal sample has all the characteristic of the whole population. In social sciences, it is recommended to use the sampling technique rather than the whole population because it is less time taken and less costly as compared to the collection of data from the whole population.

Sampling has generally of two types. One is probability sampling technique and second one is non-probability sampling technique. As the exact population of supervisors of information technology industry of Pakistan is unknown. So, it is recommended to use the non-probability sampling technique for the collection of data. Hence, this research use the purposive sampling method which is a part of non-probability sampling technique for the collection of data from the supervisors of information technology industry of Pakistan.

Project supervisors leading teams and working in the information technology industry were chosen as the unit of analysis in this thesis. A purposive sampling method which is part of non-probability sampling method, was used in this research thesis accordingly, a minimum sample size of 319 for both Rawalpindi and Islamabad was determined from the recognized population. Self-directed questionnaires will be circulated among the project-based organizations. We will ensure the respondents that data gathered would be kept confidential and will only use for educational purpose.

As already discussed above that it is difficult to collect data due to limitation of time and resource. The researchers used different sampling techniques to analyze the data for their research purposes. The unit of analysis for this research thesis is project supervisors working on different projects in information technology industry of Pakistan. It is a time and cost consuming task to visit the project

supervisors for the collection of data. To avoid this inconvenience, purposive sampling Technique (PST) was used to collect the data for this research thesis. By using google doc a questionnaire distributed among the project supervisors and in a result 319 responses were received with the help of purposive sampling Technique (PST). The number of inhabitants and sample size in Rawalpindi and Islamabad in Pakistan is shown in **Table: 3.2**.

TABLE 3.2: The Populaton of Rawalpindi and Islamabad

City	Population (Millions)	% of Total Population	Sample
Population Rawalpindi & Islamabad	of 2,344,701	100.00%	319

3.5 Measurement Variables

Data collection is not an easy task, adopted questionnaires were used to collect the data which had been utilized by various authors. Three dimensions of team work which includes flexibility, task delegation and risk avoidance leading to Project Completion, showed along with the number of items in Table 3.3. This research thesis used the Seven-point Likert scale to gather the opinion of the respondents. The purpose was that the respondents have more options to disclose their opinion and feel more comfortable to answer the questions in the Seven-point Likert scale (Sullivan, 2013).

3.6 Scale Development

The scales have been introduced in such a course of action, beginning with independent variables, followed by moderating and dependent variable.

TABLE 3.3: A Summary of Constructs Established in the Thesis

Constructs	Authors	Items
Flexibility	(Molleman & Beukel, 2007)	4
Task Delegation	(Jammal et al., 2015)	5
Risk Avoidance	(Hiroyuki et al., 2019)	6
Government Intervention	(Weeden et al., 2005)	5
Project completion in extreme conditions	Zhu et al., 2016	8

3.6.1 Independent Variables

This research has been incorporated three independent variables, which are discussed in the following:

3.6.1.1 Flexibility

(Bennet et al., 1983) defined, flexibility is the capability to make changes to the time (when), area (where) and way (how) in which a project or assignment is to be completed. Likewise, a seven-point Likert scale is used for operationalization of the survey questionnaire. Additionally, one in the scale displayed a high level of agreement, while the seven in the scale demonstrated a high level of disagreement. The general impact of Flexibility was worked out by taking the average of 4 items. The summary of scales was showed in **Table 3.3**.

3.6.1.2 Task Delegation

Douglas & Basil, (1966) defined, Delegation refers to a manager's capability to share their burden with other people. It comprises of giving authority or the right

to decision making in certain defined areas and charging subordinates with responsibility / duties for carrying through an assigned task. Likewise, a seven-point Likert scale is used for operationalization of the survey questionnaire. Additionally, one in the scale displayed a high level of agreement, while the seven in the scale demonstrated a high level of disagreement. The general impact of Task Delegation was worked out by taking the average of 5 items. The summery of scales was showed in **Table 3.3**.

3.6.1.3 Risk Avoidance

Margaret Rouse, (1976) defined, Risk avoidance is the ability of the project managers to removal or minimization of hazards, activities, and exposures that can negatively affect an organization's assets. . Likewise, a seven-point Likert scale is used for operationalization of the survey questionnaire. Additionally, one in the scale displayed a high level of agreement, while the seven in the scale demonstrated a high level of disagreement. The general impact of Risk Avoidance was worked out by taking the average of 6 items. The summery of scales was showed in Table 3.3.

3.6.2 Moderator

3.6.2.1 Government Interference

Weeden et al., (2005) defined, Government Interference is any action carried out by the government or public entity that affects the market economy with the direct objective of having an impact in the economy, beyond the mere regulation of contracts and provision of public goods. Likewise, a seven-point Likert scale is used for operationalization of the survey questionnaire. Additionally, one in the scale displayed a high level of agreement, while the seven in the scale demonstrated a high level of disagreement. The general impact of Government Interference was worked out by taking the average of 5 items. The summery of scales was showed in **Table 3.3**.

3.6.3 Dependent Variable

3.6.3.1 Project Completion

A seven-point Likert scale is used for operationalization of the survey questionnaire. Additionally, one in the scale displayed a high level of agreement, while the seven in the scale demonstrated a high level of disagreement. The general impact of Government Interference was worked out by taking the average of 8 items. The summery of scales was showed in **Table 3.3**.

3.7 Instrument Reliability and Validity (Structural Model)

The reliability method was use to check the reliability of the instruments of this research thesis. For this purpose the Cronbach alpha method was used to validate the reliability of the data. The Cronbach alpha method set the ranges between 0-1 for the validity of the data. If the values of the items in a Cronbach alpha lies between 0–1, it shows that the data is reliable for the research purposes. Hence, the reliability of the data is furthermore investigated in the chapter # 4 of this research thesis.

3.8 Data Collection Procedures and Methods

Data collection is not an easy task for the researcher, in fact without any reference it is very difficult to collect data from the project supervisors of information technology industry of Pakistan. Keeping in view that hurdle, every possible references was used to collect the data form the project supervisors also, Snow ball technique was used to gather the data. For the reliability of the data it was mandatory that the questionnaires was filed by the project supervisors of information technology industry of Pakistan. For this purpose it was ensured that the data was only filed by the project supervisors who are working in information technology industry of

Pakistan. To ensure the project supervisors of information technology industry of Pakistan that the data was used only for the educational purposes. A cover letter was attached with the questionnaires which shows the brief introduction of the project.

There are various methods used by the researchers for the collection of data. While keeping in view that the data collection is time taking process, Google doc had been used for this purpose. The link of google doc is send to the supervisors who are working in Project based organizations in information technology industry in Rawalpindi and Islamabad. With the help of snowball technique the link of google doc questionnaires were further shared among the project supervisors and in result a total of 319 responses were received from the respondents.

3.9 Data Analysis

3.9.1 Smart PLS 3.0

SMART PLS 3.0 algorithm was used to estimate the research thesis with two models: measurement model and structural model. The measurement model provided the assessment of effect to test the hypothesis while, the structural model examined the reliability and validity of the data. (Kwong & Wong, 2013). Additionally, it worked with a more extensive scope sample sizes and due to bootstrapping procedures it didn't need any assumptions of data normality (Kwong & Wong, 2013). Furthermore, in recent year the PLS-SEM was increasingly being adopted in research disciplines, including marketing and business etc. (Kwong & Wong, 2013). Moreover, it guaranteed more theoretical miserliness and delivered better expectations to the models with complex connections (Kwong & Wong, 2013).

3.10 Summery

This chapter set up the research paradigm at the beginning. At second, the selected population was examined which is followed by the sample size for this thesis.

Then a discussion on the procedure and data collection method was documented which is followed by scale development, setup for every variable. Finally, a conversation was setup on the SMART PLS 3.0 for data analysis of measurement and structural model.

Chapter 4

Results

4.1 Analysis of Data

4.1.1 Respondents

A total of 319 (three hundred and nineteen) survey questionnaires were distributed through google doc amongst the supervisors of IT projects in private sector. The respondents of all these questionnaires were belong to Rawalpindi and Islamabad (Appendix A, Survey Questionnaire).

Accordingly, an aggregate of 319 (three hundred and nineteen) responses were gotten back from the respondents of twin cities, consequently considered to be suitable. Unlike SPSS & AMOS; the SMART-PLS 3.0 did not need a huge sample size (Afthanorhan, 2013). Many questions were asked in the questionnaire and I assured them that all their responses were kept confidential and it has only used for the objective of analysis.

The supervisors of information technology industry who are participating as a respondents to this quantitative research were presented according to age, sex, supervisory experience in the information technology industry & no. of team members supervised. A complete detail of demographic and geographic is shown in the **Table: 4.1**.

TABLE 4.1: Geographic and Demographic Characteristics of Respondents

Major Segmentation Variables	Category		%age
Geographic region	Rawalpindi & Islamabad	319	100%
Demographic Gender	Male	222	70%
	Female	97	30%
Age	18 - 25	97	30%
	26 - 33	106	33%
	34 - 41	66	21%
	42 - 49	34	11%
	50 and above	16	5%
Supervisory Experience	0 to 5	146	46%
	06 to 10	91	29%
	11 to 15	55	17%
	16 and above	27	8%
Team members supervised	0 to 5	149	47%
	06 to 10	67	21%
	11 to 15	69	22%
	16 and above	34	11%

4.2 Model Evaluation (SMART PLS 3.0)

SMART PLS 3.0 was used for the analysis of data. The silent features of PLS-SEM includes that it has the ability to handle complex model in an efficient way (Hair et al., 2016). PLS SEM model comprises of two components. The first component is the measurement model, which explains the reliability of the variables. While, second component is structural model that explains the relationship of one construct with other construct (Hair et al., 2016).

4.3 Assessment of Measurement Model

The measurement model is analyzed through internal consistency, convergent validity and discriminant validity. For the assessment of measurement model the internal consistency, convergent validity and discriminant validity was checked.

4.3.1 Internal Consistency

The internal consistency in the measurement model includes the Cronbach's alpha and composite reliability.

4.3.1.1 Cronbach's Alpha

The reliability of the construct can be assessed with the help of Cronbach's alpha. The range of Cronbach's alpha lies between 0 to 1. The higher the value of the Cronbach's alpha means the reliability of the scale is high. It can be seen from the table 4.1 that the value of the constructs F, PC, RA & TD, are close to the 1 which means the reliability of the constructs are high. The values of Cronbach's alpha are shown in **Table 4.2**.

4.3.1.2 Composited Reliability (CR)

Composite reliability is an appropriate measuring reliability which is preferred by Cronbach alpha and the values above 0.7 is considered to be significant (Hair et al., 2016). The CR values of all the variables are above 0.7. Hence the reliability of CR is considered to be significant. The CR values are shown in **Table: 4.2**.

TABLE 4.2: Reliability Analysis

	Cronbach's alpha	Rho A	Composite Reliability	Average Variance
F	0.79	0.81	0.85	0.54
TD	0.82	0.83	0.88	0.65
RA	0.82	0.83	0.87	0.52
PC	0.89	0.9	0.91	0.57

4.3.2 Convergent Validity

According to (Hair et al.,) in 2016, when two or more items of the same construct are relate to each other, it is known was convergent validity. It can be assessed by factor loading and average variance extracted (AVE).

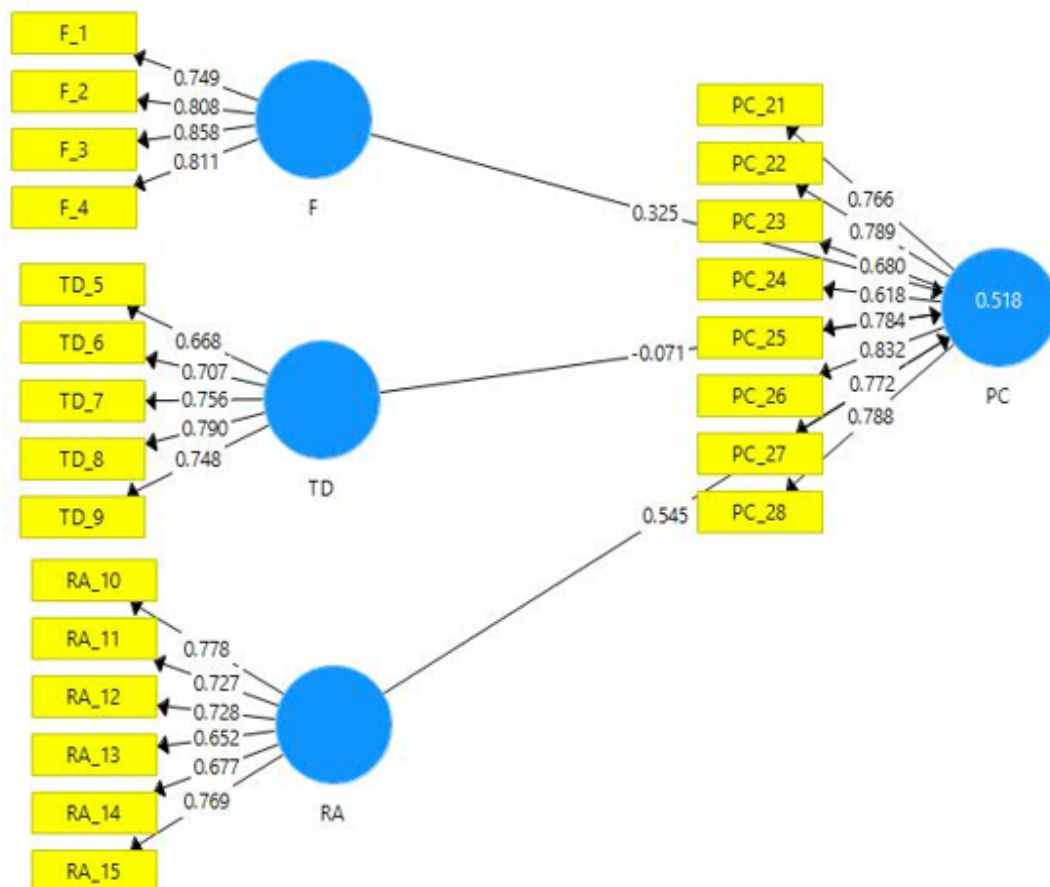


FIGURE 4.1: Illustration of Outer Loadings after Removing the Items with Lower Loadings

4.3.2.1 Average Variance Extracted (AVE)

The average variance extracted AVE can be defined as the variation in percentage between the construct and an item. The value 0.50 and above is considered to be significant in average variance extracted AVE (Fornell & Larcker, 1981). Hence the value of AVE of all the variables are greater than 0.50 and considered to be significant for the reliability of the variables. The AVE values are shown in **Table 4.3**.

4.3.3 Discriminant Validity

When one construct is different from the other construct, it can be said that there is discriminant validity between these constructs (Hair et al., 2019). Discriminant validity can be measured by Fornell-Larcker criterion, cross loading and Heterotrait Monotrait ratio (HTMT).

4.3.3.1 Fornell-Larcker Criterion

To determine the discriminant validity between the construct, the square root value of AVE for construct must be greater than the correlation co-efficient of the other construct (Hair et al., 2019). Results set up in table 4.3 affirmed that, the square roots for F, PC, RA, and TD were greater than other correlation values amongst the variable. The diagonal values in the table represent the square root of AVE for each construct while the values below the diagonal are correlation co-efficient. Hence, results in **Table 4.3** demonstrated that the discriminant validity was established and affirmed.

TABLE 4.3: Fornell-Larker Criterion

	F	TD	RA	PC
F	0.81	0	0	0
TD	0.74	0.76	0	0
RA	0.66	0.67	0.72	0
PC	0.63	0.65	0.67	0.71

Note: F = Flexibility, PC = Project Completion, RA = Risk Avoidance, TD = Task Delegation.

4.3.3.2 Cross Loadings

Discriminant validity can also be measured with the help of loading. The condition to establish the discriminant validity is that the outer loading of related construct is higher than the other constructs (Hair et al., 2019). **Table 4.4** represent the values of the cross loading for each construct. It can be observed from the table that the

factor loading for each related construct is higher than the other constructs. Hence the discriminant validity has been proved with the help of cross loading.

TABLE 4.4: Cross Loading

	F	PC	RA	TD
F1	0.75	0	0	0
F2	0.81	0	0	0
F3	0.86	0	0	0
F4	0.81	0	0	0
PC21	0	0.77	0	0
PC22	0	0.79	0	0
PC23	0	0.76	0	0
PC24	0	0.75	0	0
PC25	0	0.78	0	0
PC26	0	0.83	0	0
PC27	0	0.77	0	0
PC28	0	0.79	0	0
RA10	0	0	0.78	0
RA11	0	0	0.73	0
RA12	0	0	0.73	0
RA13	0	0	0.74	0
RA14	0	0	0.76	0
RA15	0	0	0.77	0
TD5	0	0	0	0.67
TD6	0	0	0	0.71
TD7	0	0	0	0.76
TD8	0	0	0	0.79
TD9	0	0	0	0.75

4.3.3.3 Heterotrait-Monotrait Ratio (HTMT)

It is the average correlation of the indicators among the different construct to the average correlation of indicators of the other related construct. The threshold level of similar construct not below than 0.90, while the threshold level of non-similar construct is 0.85 or below (Henseler et al., 2015). From **Table 4.5**, it can be observed that not a single value is greater than 0.85. Hence, discriminant validity is established.

TABLE 4.5: HTMT Ratio

Constructs	F	TD	RA	PC
F	0.707			
TD	0.677	0.727		
RA	0.6	0.62	0.785	
PC	0.527	0.58	0.6	0.794

4.3.4 Assessment of Second Order Construct

After assessing the validity of the measurement model, structural model was assessed with the help of multicollinearity of items and measure the outer weights along with its significance (Wong, 2013). For the assessment of structural model (Hair et al., 2019) suggest the two stage method. First the latent variable scores of lower order component were obtained through smart pls 3.0 and were utilized to draw a new model for assessment of second order construct. After the construction of new model, multicollinearity of the formative construct was measured through variance inflation factor (VIF). The threshold of multicollinearity is 5 of below. The VIF values in table 4.6 shows that there is no issue in the multicollinearity.

Moreover, formative indicators are also evaluated by their outer weights and their significance was tested through bootstrapping. It can be observed from the table 4.4 that the outer weights of F, TD, RA, GI & PC are significant. According to (Hair et al., 2019), if the weight is insignificant but its outer loading is above 0.50 then item should be retained otherwise item should be discard.

TABLE 4.6: Significance & VF Values of Formative Items

	Original	Sample	Standard	T-Statistics	P Values
	Sample	Mean	Deviation		
F →PC	0.32	0.32	0.11	3.03	0.55
RA→PC	0.54	0.55	0.11	4.97	0.56
TD→PC	0.55	0.56	0.13	4.99	0.57

4.3.5 Assessment of Structural Model

The structural model illustrates how constructs are related to each other in the research framework (Hair et al., 2019). It can be assessed on the basis of significant of path coefficients & coefficients of determination (R^2). However prior to the assessment to the structural model, it is important to check the multicollinearity of the structural model. Therefore it was done by examine the VIF values of constructs in **Table 4.6**. As result shown in the table, all the values are acceptable.

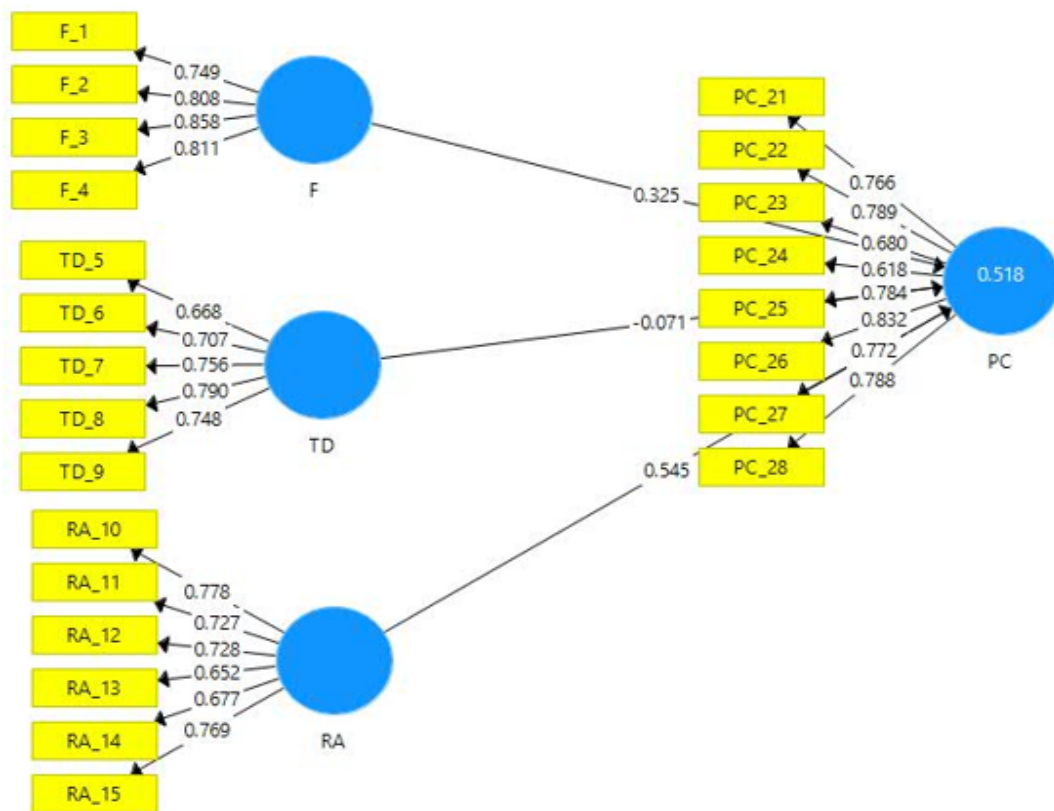


FIGURE 4.2: Illustration of Structural Model

4.3.6 Significant of Path Coefficients

Path coefficients are hypothesized relationship that link the construct with each other (Hair et al., 2019). The values close to +1 shows the strong positive relationship while the values close to -1 shows the strong negative relationship. The significance of path coefficients were obtained through bootstrapping. Table 4.6 shows the path coefficients along with their significant values.

4.3.7 Coefficients of Determination (R^2)

It is a measure of predictive accuracy of a model (Hair et al., 2019). The higher values indicate greater explanatory power. R^2 values of 0.75, 0.5 and 0.25 are considered as a substantial, moderate and weak (Hair et al., 2019).

4.4 Moderation Analysis

The objective of moderation analysis was to test the hypothesis that Government Interference moderates the relationship between dimension of team work and Project Completion. Smart Pls version 3.0 was used to perform moderation analysis through bootstrapping with 319 samples. The moderation model is shown in **Figure: 4.2**.

TABLE 4.7: Significance Analysis of Moderation

Path	Path	Std.	t-value	p-value	Bootstrap Results	
Relationship	Coeff.	Dev.			LLCI	ULCI
Moderating effect F	1.134	0.084	0.145	0.885	0.068	0.321
Moderating effect TD	2.143	0.084	0.145	0.56	0.3	0.573
Moderating effect RA	0.463	0.084	0.145	0.57	0.077	0.344
F → PC	1.172	0.11	3.03	0.55	4.97	0.56
TD → PC	0.153	0.11	4.97	0.56	0.3	0.573
RA → PC	3.032	0.13	0.56	0.57	0.077	0.344

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

From **Table 4.7**, we can observe that the value of interaction term ($\beta=0.012$, $t=0.145$, $p \text{ value} > 0.05$) is insignificant. The bootstrap confidence intervals for interaction term has zero between upper limit and lower limit. Hence, our fifth hypothesis which states that top management support moderates the relationship of technological orientation and project success is rejected. As shown in Fig. 6, whether the top management support is ± 1 standard deviation above or below the average it does not moderates at all because the lines do not converge at any point.

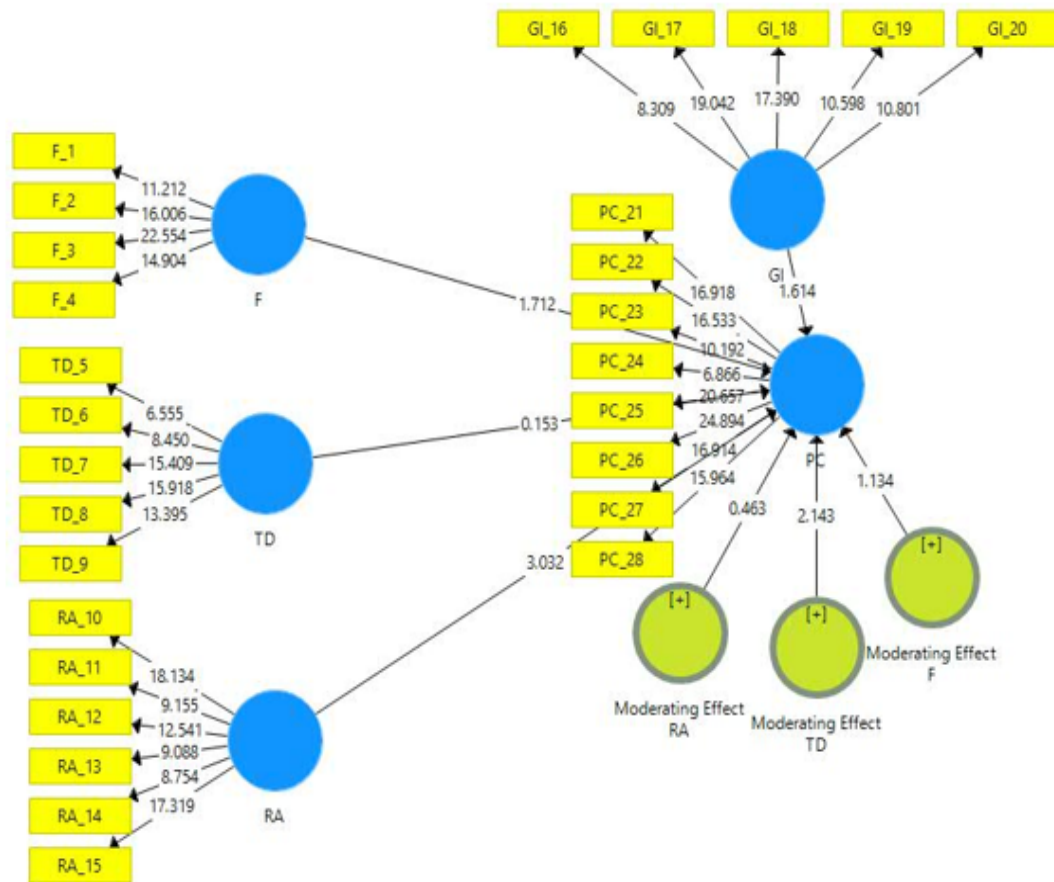


FIGURE 4.3: Moderation Analysis with Path Coefficients

4.5 Chapter Summary

This chapter settled the outcomes in a consecutive way. At first, this chapter started with running the path model estimation for the measurement model. Likewise, internal consistency, convergent validity and discriminant validity. Furthermore, assessment of structural model was tested which includes significant of path coefficients & coefficient of determination R². At last moderation analysis was tested to test the hypothesis. Conclusion and implications were examined in chapter of this thesis.

Chapter 5

Discussion and Conclusion

5.1 Introduction

The previous chapter discussed the results of the model. Chapter five of this thesis summarizes the objectives and presents the discussion of findings, conclusions established as the result of the study, theoretical and practical contribution, limitation of the study and suggestion for future research.

5.2 Summary of the Study

The main intention of this study is to investigate the relationship between three dimensions of team work, which includes flexibility, task delegation & risk avoidance, and Project Completion in the information technology industry, directed towards testing the moderating effect of Government Interference between three dimensions of teamwork.

The data was collected from project supervisors of information technology industry in Rawalpindi and Islamabad. A total of three hundred and nineteen (319) questionnaires were distributed amongst the project supervisors of information technology industry in Rawalpindi and Islamabad.

This study also attempts to answer the following specific objectives: (i) To examine flexibility with in a team have a significant relationship with Project Completion in

the information technology industry of Pakistan? (ii) To examine task delegation with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

(iii) To examine risk avoidance with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan? (iv) To examine Government Interference moderate the relationship between flexibility within a team and Project Completion in Pakistan? (v) To examine Government Interference moderate the relationship between task delegation with in a team and Project Completion in Pakistan? (vi) To examine Government Interference moderate the relationship between risk avoidance with in a team and Project Completion in Pakistan?

5.3 Hypothesis Test Results

5.3.1 Team Flexibility Relationship with Project Completion

The results of the hypothesis shows that the project flexibility have a significant relationship with Project Completion in Pakistan information technology industry. Hypothesis one was related to research question (RQ1): Does flexibility with in a team have a significant relationship with Project Completion in the information technology industry of Pakistan?

According to Perisic et al., 2017, the project team flexibility is the ability to manage the project with unanticipated environment circumstances which is essential for the successful completion of the project.

Karam et al., (2017) discuss in his article that there are numerous tasks in the projects, which are necessary to fulfill for the completion of the projects. For all those tasks, some specific skills of project teams are required for the completion of the projects. For this purpose the project team's flexibility is one of the key factor which is necessary in the completion of the projects.

5.3.2 Task Delegation Relationship with Project Completion

The results of the hypothesis shows that the task delegation have a significant relationship with project completion in extreme conditions in Pakistan information technology industry. Hypothesis two was related to research question (RQ2): Does task delegation with in a team have a significant relationship with project completion in extreme condition in the information technology industry of Pakistan?

Rohlfing & Schöttner, (2017) said that the decision making process about the projects increased due to the task delegation within the project team members, which results to complete the projects on time in extreme condition. Besides the completion stage, task delegation also helps the supervisor in the planning stage of the project, planning is also a major part of the project which plays a vital role in the success or failure of the project especially in extreme condition (Heilemann & Schulte, 2019).

5.3.3 Government Interference Moderates between Team Flexibility and Project Completion

The results of the hypothesis shows that the Traditional medium of Government Interference moderated the relationship between project flexibility and Project Completion in Pakistan information technology industry. Hypothesis four was related to research question (RQ4): Does Government Interference moderate the relationship between flexibility within a team and Project Completion in Pakistan?

Liyan Zhang and Bin Wu (2018) did a research in the agricultural industry of farmer's innovation system. It was concluded that the Government Interference plays a lead role as a moderator in the different phases of projects i.e. their design, execution & successful completion of the projects. It was concluded that without the Government Interference not a single project starts, executed or finished anywhere in the globe.

5.3.4 Government Interference Moderates between Task Delegation and Project Completion

The results of the hypothesis shows that the Traditional medium of Government Interference moderated the relationship between task delegation and Project Completion in Pakistan information technology industry. Hypothesis five was related to research question (RQ5): Does Government Interference moderate the relationship between task delegation with in a team and Project Completion in Pakistan? In a research it was observed that the Government use its various powers to delegate the tasks to the other departments to complete their operations (Cass, 2017). Similarly study was conducted in Netherlands in which governments deviates the task delegation among their different departments (Overman, 2016).

5.3.5 Government Interference Moderates between Risk Avoidance and Project Completion

The results of the hypothesis shows that the Traditional medium of Government Interference moderated the relationship between risk avoidance and Project Completion in Pakistan information technology industry. Hypothesis six was related to research question (RQ6): Does Government Interference moderate the relationship between risk avoidance with in a team and Project Completion in Pakistan? A research was conducted in Australia by Dang, (2020), in which he reveals that the in emerging economies where institutional environment is weak the level of risk. A few studies have attempted to explain the procedures to minimize the risk raised on the projects. Hubbard, (2020) discussed in his book that the poor risk management used by the government authorities creates a hurdle for the supervisors to take concrete decisions to minimize the risk on the projects.

5.4 Theoretical Contribution

At the outset, the significance of team's dynamics theory as a prevalent psychology theory has been discussed extensively by numerous scholars. However, these

scholars applied this theory to understand behavioral outcomes such as flexibility, responsibility, quality, complexity, task delegation and risk avoidance etc. This thesis extended the team's dynamics theory to understand the three dimensions of teamwork towards the Project Completion in Covid-19 times as an outcome variable in the information technology industry of Pakistan. Secondly, a critical review of established literature revealed that studies on different dimensions of team work in light of team's dynamics theory were mostly established in countries such as Hong Kong, Australia, Nigeria, U.S.A, U.K, Brazil, Qatar, Ghana, Rwanda, Taiwan, South Africa, Finland, Indonesia, Malaysia, Srilanka, Romania, Vietnam & Jordan etc. This limited the generalizability of the findings towards South Asian countries, specifically Pakistan. As discussed in previous literature, there existed a difference between west and south Asian culture (Naeem, Butt, & Khanzada, 2018). Also, it was observed that minimal studies have been conducted in Pakistan keeping in view the teams dynamics theory. Hence, this thesis promised to be significant for testing Flexibility, Task Delegation and Risk Avoidance in the information technology industry of Pakistan.

5.5 Conclusion

Project flexibility as an independent variable relied on project complete in extreme conditions. This variable was based on 4-item structure, PF 1, PF 2, PF 3 and PF 4. Project supervisors in Rawalpindi and Islamabad confirmed that, PF moderately effected team member's attitude formation towards Project Completion in Rawalpindi and Islamabad in Pakistan. Keeping in view the past studies, this study did not confirm factor loading for all the 4-items of project flexibility. This signified that, project supervisors in Rawalpindi and Islamabad gave significant weightage towards Project Completion. Therefore, the scale on project flexibility was validated with 4-items for project supervisors of information technology industry operating in the vicinity of Rawalpindi and Islamabad in Pakistan.

Moreover, task delegation as an independent variable relied on Project Completion. This variable was based on 5-item structure, TD 5, TD 6, TD 7, TD 8,

and TD9. Keeping in view the past studies, this study did not confirm factor loading for all the 5-items of task delegation. This signified that, project supervisors in Rawalpindi and Islamabad gave significant weightage towards Project Completion. Therefore, the scale on task delegation was validated with 5-items for project supervisors of information technology industry operating in the vicinity of Rawalpindi and Islamabad in Pakistan.

In a similar vein risk avoidance as an independent variable relied on project complete in extreme conditions. This variable was based on 6-item structure, RA 10, RA 11, RA 12, RA 13, RA 14, and RA 15. Keeping in view the past studies, this study did not confirm factor loading for all the 6-items of risk avoidance. This signified that, project supervisors in Rawalpindi and Islamabad gave significant weightage towards Project Completion. Therefore, the scale on risk avoidance was validated with 6-items for project supervisors of information technology industry operating in the vicinity of Rawalpindi and Islamabad in Pakistan.

Furthermore, Project Completion as a dependent variable don't relied on the Government Interference. The variable was based on 8-item structure. project supervisors of information technology industry in Rawalpindi and Islamabad confirmed the factor loadings for item PC 21, PC 22, PC 23, PC 24, PC 25, PC 26, PC 27 and PC 28 being greater than 0.50. Keeping in view the past studies, this study confirmed the factor loading for all the Project Completion items. This signified that, project supervisors of information technology industry in Rawalpindi and Islamabad gave significant weightage towards the dimensions of teamwork in relation to the project extreme conditions. Therefore, the scale on Project Completion was validated with 8-items for the project supervisors of information technology industry operating in the vicinity of Rawalpindi and Islamabad.

5.6 Limitation and Future Research

Unlike the other thesis, this research thesis also has numerous limitations and opportunities for the future direction. To begin with, the thesis has mainly focused on the supervisors of Rawalpindi and Islamabad in Pakistan. Future studies could

explore other rural areas of Pakistan as well. Since it was also found that different dimensions of team work varied from one country to the other, therefore, a comparative study of two or more countries would bring further insight in understanding the dimensions of team work towards Project Completion in covid-19 times. The thesis has measured project supervisors towards Project Completion in covid-19 times. Future research could incorporate more than one category of managers in the information technology industry. The findings of this thesis were based on the data collected from the project supervisors. This thesis did not consider variation in the context of demographic factors on the attitude formation of project supervisors towards Project Completion in covid-19 times. Therefore, future research could also incorporate demographic factors such as; gender, income group, and status. Pakistan is an ethnically diverse country, and hence their attitude, emotions, and behavior might vary by ethnicity. Future research could be a comparative study by ethnicity on different dimensions of team work in the information technology industry in Pakistan.

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Appendix-A

Survey Questionnaire

Section One: Preamble

Dear Respondent

We are carrying out a survey on looking into the dimensions of team work leading to project completion in risky situation. We should appreciate your participation by answering to all the questions related to this research. This question and answer section shall not take more than 10 minutes of your time. Your participation in this survey is completely voluntary, and you may discontinue this survey at any time. All the information provided by you shall be kept confidential, and will be used for academic purposes only.

Khuram Farid.

Sincerely,

MS (PM) Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section Two: Study Questions

Please tick one column per statement, to indicate your answer towards the statements below. The response scale is based on seven options including; (1) Strongly agree, (2) Agree, (3) Mildly agree, (4) Neutral, (5) Mildly Disagree, (6) disagree, (7) Strongly disagree.

Sr.No	Statement	1	2	3	4	5	6	7
1	As a supervisor I was able to carry out my team-mates' day-to-day tasks.	1	2	3	4	5	6	7
2	As a supervisor I was able to carry out several tasks in my team.	1	2	3	4	5	6	7
3	As a supervisor I was able to help my other team members.	1	2	3	4	5	6	7
4	As a supervisor I was able to delivering good quality of work in my team.	1	2	3	4	5	6	7
5	Task delegation increased positive relations amongst team members.	1	2	3	4	5	6	7
6	Task delegation upgraded level of team performance.	1	2	3	4	5	6	7
7	Task delegation accelerates decision making process amongst team.	1	2	3	4	5	6	7
8	Task delegation raised amount of work achieved inside the team.	1	2	3	4	5	6	7
9	Task delegation helped the team to achieve project related deadlines.	1	2	3	4	5	6	7
10	Risk was avoided through modified assessment methods.	1	2	3	4	5	6	7
11	Risk was avoided through predicting anticipated of problems.	1	2	3	4	5	6	7
12	Risk was avoided through minimizing regular changes.	1	2	3	4	5	6	7

13	Risk was avoided through proper planning.	1	2	3	4	5	6	7
14	Risk was avoided through creating self-learning environment.	1	2	3	4	5	6	7
15	Risk was avoided through circulating results of changes to stakeholders.	1	2	3	4	5	6	7
16	Government interventions in between a project was facilitating.	1	2	3	4	5	6	7
17	Government decisions in between a project was supportive.	1	2	3	4	5	6	7
18	Government interference in between a project provided a solution to the problem.	1	2	3	4	5	6	7
19	Government considered the view point of stake holder while making a decision.	1	2	3	4	5	6	7
20	Government decision on the project was consistent with previous policies.	1	2	3	4	5	6	7
21	Setting an appropriate team dynamics, helped in completing a project in risky conditions.	1	2	3	4	5	6	7
22	Setting an appropriate time frame helped in completing a project in risky conditions.	1	2	3	4	5	6	7
23	Setting a specific budget helped in completing a project in risky conditions.	1	2	3	4	5	6	7
24	Keeping the expectation of clients in view helped in completing a project in risky conditions.							
25	Appropriate utilization of team member's skills helped in completing a project in risky conditions.	1	2	3	4	5	6	7
26	Appropriate team planning helped in completing a project in risky conditions.	1	2	3	4	5	6	7

27	Providing client-based solution helped in completing a project in risky conditions.	1	2	3	4	5	6	7
28	Meeting technical project requirements helped in completing a project in risky conditions.	1	2	3	4	5	6	7

Section Three: : Demographic Information

Please tick the appropriate box that indicates your level of agreement.

Gender	0- Male 1- Female
Age(years)	1 (18-25), 2 (26-33), 3 (34-41), 4 (42-49), 5 (50 and above)
Supervisory Experience(years)	1 (0-5), 2 (6-10), 3 (11-15), 4 (16 and above)
Team Members Supervised	1 (0-5), 2 (6-10), 3 (11-15), 4 (16 and above)

Thank you very much for giving your precious time Much appreciated!!