

**CAPITAL UNIVERSITY OF SCIENCE AND
TECHNOLOGY, ISLAMABAD**



**Impact of Knowledge Sharing on Team
Effectiveness: Mediating Role of Employee
Autonomy and Moderating Role of Project
Team Conflict**

by

Sayab Nadeem Qureshi

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

in the

**Faculty of Management & Social Sciences
Department of Management Sciences**

2019

Copyright © 2019 by Sayab Nadeem Qureshi

All rights reserved. No part of this thesis may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, by any information storage and retrieval system without the prior written permission of the author.

To Almighty Allah who has created us as crown of creation and enable us to learn. This thesis is dedicated to my parents, sisters, and friends who always appreciate me in every step and to my teachers who help me at all stages of study. This journey would not have been possible without your loving support and encouragement.



CERTIFICATE OF APPROVAL

Impact of Knowledge Sharing on Team Effectiveness: Mediating Role of Employee Autonomy and Moderating Role of Project Team Conflict

by

Sayab Nadeem Qureshi

(MPM173023)

THESIS EXAMINING COMMITTEE

| S. No. | Examiner | Name | Organization |
|--------|-------------------|----------------------|-----------------|
| (a) | External Examiner | Dr. Riaz Ahmed | BU, Islamabad |
| (b) | Internal Examiner | Dr. S.M.M Raza Naqvi | CUST, Islamabad |
| (c) | Supervisor | Dr. Muzaffar Asad | CUST, Islamabad |

Dr. Muzaffar Asad

Thesis Supervisor

October, 2019

Dr. Sajid Bashir

Head

Dept. of Management Sciences

October, 2019

Dr. Arshad Hassan

Dean

Faculty of Management & Social Sciences

October, 2019

Author's Declaration

I, **Sayab Nadeem Qureshi** hereby state that my MS thesis titled “**Impact of Knowledge Sharing on Team Effectiveness; Mediating Role of Employee Autonomy and Moderating Role of Team Conflict**” is my own work and has not been submitted previously by me for taking any degree from Capital University of Science and Technology, Islamabad or anywhere else in the country/abroad.

At any time if my statement is found to be incorrect even after my graduation, the University has the right to withdraw my MS Degree.

Sayab Nadeem Qureshi

(MPM173023)

Plagiarism Undertaking

I solemnly declare that research work presented in this thesis titled “**Impact of Knowledge Sharing on Team Effectiveness; Mediating Role of Employee Autonomy and Moderating Role of Team Conflict**” is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been dully acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the HEC and Capital University of Science and Technology towards plagiarism. Therefore, I as an author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after award of MS Degree, the University reserves the right to withdraw/revoke my MS degree and that HEC and the University have the right to publish my name on the HEC/University website on which names of students are placed who submitted plagiarized work.

Sayab Nadeem Qureshi

(MPM173023)

Acknowledgements

Then which of the Blessings of your Lord will you deny. (Surah Ar-Rehman) First, to my creator, my life coach, the most gracious, the most beneficent, ALLAH S.W.T, I owe it all to you, Thank you!

There have been many people who have walked alongside me, who have guided me through all these efforts. I would like to outstretch gratitude to each of them. I would like to extend special gratitude to my supervisor, **Dr. Muzaffar Asad**, whose contributions in simulating suggestions and encouragement, helped me to coordinate my thesis work and especially in achieving the results. It was because of your support and guidance from the beginning that I have done it! Furthermore, I would also like to acknowledge with much appreciation the crucial role of my friends for their support, mentorship, encouragement and technical advice throughout research work. Without you it was not possible!

I choose this moment to acknowledge my parents contributions appreciatively. Here I am indebted to my parents and my family for their stanch support and encouragement throughout my educational career. It was their belief in me that brought me here. Words cannot express my gratitude for everything you have done for me. I am grateful to them and this is a testament of their faith in me. I would like to express my cordial appreciation to all those who provided me the possibility to complete this report.

Sayab Nadeem Qureshi

(MPM173023)

Abstract

The focus of this study was to examine the impact of Knowledge Sharing on team effectiveness with the mediating role of employee autonomy and the moderating role of team conflict. The context was project based organizations in Pakistan. Questionnaires were used to collect data from 242 employees working on various projects. Results indicate Knowledge Sharing is positively linked with team effectiveness while employee autonomy mediates the relationship between Knowledge Sharing and team effectiveness. In addition, the results confirmed the moderating role of team conflict between Knowledge Sharing and Team Effectiveness.

Keywords: Knowledge Sharing, Employee autonomy, Team conflict, Team effectiveness

Contents

| | |
|--|-------------|
| Author’s Declaration | iv |
| Plagiarism Undertaking | v |
| Acknowledgement | vi |
| Abstract | vii |
| List of Figures | xi |
| List of Tables | xii |
| Abbreviations | xiii |
| 1 Introduction | 1 |
| 1.1 Background of the Study | 1 |
| 1.2 Gap Analysis | 5 |
| 1.3 Problem Statement | 5 |
| 1.4 Research Questions | 6 |
| 1.5 Objective of the Study | 6 |
| 1.6 Significance of the Study | 7 |
| 1.7 Theory | 8 |
| 2 Literature Review | 11 |
| 2.1 Knowledge Sharing and Team Effectiveness | 11 |
| 2.2 Employee Autonomy as Mediator | 16 |
| 2.3 Project Team Conflict as Moderator | 19 |
| 2.4 Research Hypotheses | 23 |
| 3 Research Methodology | 24 |
| 3.1 Research Design | 25 |
| 3.1.1 Type of Study | 26 |
| 3.1.2 Study Setting | 26 |
| 3.1.3 Unit of Analysis | 27 |
| 3.2 Population and Sample | 27 |

| | | |
|----------|---|-----------|
| 3.2.1 | Population | 27 |
| 3.2.2 | Sample | 28 |
| 3.2.3 | Data Collection Procedure | 29 |
| 3.2.4 | Handling of Received Questioner | 30 |
| 3.3 | Sample Characteristics | 30 |
| 3.3.1 | Gender | 31 |
| 3.3.2 | Age | 31 |
| 3.3.3 | Qualification | 32 |
| 3.3.4 | Experience | 33 |
| 3.4 | Instrumentation | 33 |
| 3.4.1 | Measures | 34 |
| 3.4.1.1 | Knowledge Sharing | 34 |
| 3.4.1.2 | Team Effectiveness | 35 |
| 3.4.1.3 | Employee Autonomy | 35 |
| 3.4.1.4 | Project Team Conflict | 35 |
| 3.5 | Pilot Testing | 36 |
| 3.6 | Data Analysis | 36 |
| 4 | Results | 38 |
| 4.1 | Confirmatory Factor Analysis | 38 |
| 4.1.1 | Measurement Model | 39 |
| 4.2 | Descriptive Statistics | 41 |
| 4.3 | Control Variables | 42 |
| 4.4 | Reliability Analysis | 43 |
| 4.5 | Correlation Analysis | 44 |
| 4.6 | Regression Analysis | 45 |
| 4.6.1 | Simple Regression | 46 |
| 4.6.2 | Multiple Regression | 47 |
| 4.7 | Summary of Accepted/ Rejected Hypothesis | 50 |
| 5 | Discussion and Conclusion | 51 |
| 5.1 | Discussion | 51 |
| 5.1.1 | Question 1: Does Knowledge Sharing Impact Team Effectiveness in Projects? | 51 |
| 5.1.2 | Question2: Does Employee Autonomy Mediate the Relationship between Knowledge Sharing and Team Effectiveness in Projects? | 52 |
| 5.1.3 | Question 3: Does Project Team Conflict Moderates the Relationship between Employee Autonomy and Team Effectiveness in Projects? | 53 |
| 5.2 | Research Implications | 53 |
| 5.2.1 | Theoretical Implications | 53 |
| 5.2.2 | Practical Implications | 55 |
| 5.3 | Limitations of Research | 56 |
| 5.4 | Future Research Directions | 56 |

| | |
|--------------------------|-----------|
| 5.5 Conclusion | 56 |
| References | 58 |
| Appendix | 64 |

List of Figures

| | | |
|-----|-----------------------------|----|
| 2.1 | Research Model | 23 |
| 4.1 | Measurement Model | 40 |
| 4.2 | Moderation Graph | 49 |

List of Tables

| | | |
|------|---|----|
| 3.1 | Gender Distribution | 31 |
| 3.2 | Age Distribution | 32 |
| 3.3 | Qualification Distribution | 32 |
| 3.4 | Experience Distribution | 33 |
| 3.5 | Instruments. | 36 |
| 4.1 | Measurement Model | 39 |
| 4.2 | Descriptive Statistics | 41 |
| 4.3 | Control Variables | 43 |
| 4.4 | Scale Reliabilities | 44 |
| 4.5 | Correlation | 45 |
| 4.6 | Simple Regression | 46 |
| 4.7 | Simple Regression | 46 |
| 4.8 | Simple Regression | 47 |
| 4.9 | Mediation Analysis | 48 |
| 4.10 | Moderation Analysis | 48 |
| 4.11 | Summary about Accepted/ Rejected hypothesis | 50 |

Abbreviations

| | |
|-----------|----------------------|
| DV | Dependent Variable |
| EA | Employee Autonomy |
| H | Hypothesis |
| IV | Independent Variable |
| KS | Knowledge Sharing |
| TC | Team Conflict |
| TE | Team Effectiveness |

Chapter 1

Introduction

1.1 Background of the Study

Project is explained as a momentary effort which is assumed to produce exceptional products or services (PMI, 2004). Project management has gained hype among researchers (Kaulio, 2008). As it is the most prominent bustle in organizations nowadays. On the source of exertion of Morris and Venkatesh (2010), the undertaking the executives believing is different and talk discipline because of auxiliary and social measurements. Projects are considered as organizations set up momentarily, and for which recourses are allocated to carry out the required work and attain the essential goals (Turner, 2010). Project management as a procedure defines the goals of the project (Walton & Dawson, 2001).

In most corporations ‘Knowledge’ is defined as one of the strongest and significant competitive property (Alexy, George, & Salter, 2013). Project Management is like managing a circus, where every participant not only needs to know the acts but timing along with all the other acts. It’s the synergy among all the acts which leaves the audience stunning and saying wow. In other words, it is the acknowledgement of knowledge being disseminated with well-defined actions and execution time frames. Similarly, knowledge management and sharing is of critical importance in project management for the successful delivery of requirements and to have that required synergy among all the actions performed by the different

teams and individuals which guides to achieve that wow from audience of that project.

In the heavy haze of different concerns, it is a norm to overlook the importance of the knowledge earned through the experience gained while working on either similar projects or in similar environments. While mentioning the factors which lead to success consistently [Cooke-Davis, \(2002\)](#) has explicitly mentioned the need of an effective mechanism, not only to learn from experience but also to combine explicit and tacit knowledge while making learning and implanting that learning into existing practices and processes for the successful completion and continuous progression, fun. Disseminating knowledge is the deed performed by the knowledge provider who makes knowledge available to benefit others within or outside the organization to achieve common goals ([Ipe, 2008](#); [Mooradian et al., 2012](#); [Szulanski, 2005](#)). [Szulanski \(2005\)](#) on the source of the knowledge base theory stated that knowledge dissemination is not an exchange of knowledge between awareness suppliers or beneficiaries but is dependent only on the behavior of knowledge disseminator.

[Teng and Song \(2011\)](#) identified two natures of knowledge sharing, solicited or voluntary. According to them when knowledge sharing happened as a result of sending and receiving request for knowledge is called solicited knowledge sharing but in case of voluntary knowledge sharing is an exchange without any previous requests for knowledge. This stance of [Teng and Song \(2011\)](#) is in disagreement with the earlier viewpoint of [Davenport \(1997\)](#), who branded knowledge sharing purely as a controlled act and instated that the term knowledge sharing itself means that possessor of knowledge presents it voluntarily to benefit others without any obligation or pressure on them.

There are three different types of knowledge shared by stakeholders, know-how based on the subjective knowledge gained through experience, know-what is the objective knowledge about activities, jobs, etc. and dispositional knowledge consists upon an individual's aptitude, talents and capabilities ([Lowendahl, Revang, & Fosstenlokken, 2001](#)). It is a common practice of stakeholders to evaluate the

shared knowledge among them and most of the times scattered stakeholders assumed that knowledge shared among them is unable to describe the common interests or objectives of the tasks on hand in a straight forward manner but rather focuses on the adopted processes and overall common goals (Leinonen & Bluemink, 2008).

New knowledge construction collaboratively requires the explanation of mutual joint mount of situation to all involved stakeholders leading to the successful knowledge sharing by communicating and interacting with all stakeholders (Leinonen & Bluemink, 2008; Cohen & Bailey, 1997). Although in the framework of development projects, Faraj and Sproull (2000) suggested that it is very important for stakeholders to have the ability to manage the knowledge interdependencies effectively i.e. who knows what, where to find the required knowledge, from who they can ask and how accurate that knowledge is, through expert coordination.

The major aim of understanding sharing is to mix the present interdependencies and knowledge inside the agency to increase new dimensions of know-how to get to the bottom of problems and specific matters more successfully (Christensen, 2007). Exchange of assignment records and related professional information in order to create new and novel ideas and innovations in the projects are immediately associated with the knowledge sharing and innovation in work (Kim & Park, 2017). Knowledge sharing is viewed essential element of information management machine and it also affects organizational overall performance (Alavi & Leidner, 2001).

Employee autonomy is referred as “the diploma to which the job presents vast freedom, independence, and discretion to the character in scheduling the work and in figuring out the methods to be used in carrying it out” (Burcharth, Knudsen & Sndergaard, 2017). Employee autonomy is a complicated notion consisting of many distinctive characteristics (Chen & Zheng, 2018). Eventually, individuals with a higher stage of work-related self-efficacy turn out to be in a position to make positive guidelines to improve the operation of their work unit and to talk up about problems that might purpose the unit to trip serious loss (Dedahanov, Rhee & Gapurjanova, 2018). Men and women who skilled high stages of employee

autonomy considered their place of job and provider local weather in a greater positive manner (Dhar, 2017).

Administrators who receive self-sufficiency bolster practices urge their work force to make their own inclinations (individual commencement); give representatives significant, valuable, and intelligent information about the errands to be performed and the rules to be pursued; and capture representatives' sentiments with the guide of communicating compassion (St-Hilaire, 2017).

It is located that team's standard "collective mood" inuenced singular level burnout, showing that the group setting can be vital for character prosperity. Differentiating healthy and unfortunate group conict prole demonstrates that team part burnout ought to be much extra likely in the last mentioned. While groups with the TC-overwhelming prole ought to be occupied with information sharing, critical thinking and analyzation of presumptions, groups with the useless conict prole ought to be restrained from such connections because of their need to address or stay away from relational pressures and technique errors (McLarnon, & Rosehart, 2018).

The mission and relationship elements of conict are systematically particular from one another, and proposed a possibility structure to arrange the quantity of results of intra-group conict on individual and group execution (Flores, Jiang, & Manz, 2018). It is recommended that with acknowledge to vital basic leadership, the determination technique is essential in that it can help to limit the level of gathering strife (Lefley, 2018).

By contrast, at the group level, solely the coordination issue of transactive memory utterly mediated team performance and group member satisfaction; team identification and transactive reminiscence did now not immediately affect team effectiveness (Michinov & Juhel, 2018). Team effectiveness was operationalized as the overall routine of the individuals on their assigned tasks (Church, Elliot, & Gable, 2001). Effective teams have active work related support (Barua, 2016). Pleasure is necessary to team effectiveness, due to the fact it impacts crewmembers' self-efficacy, venture abilities, degree of effort, and their pleasure closer to their work (James, Anthony & Ferris, 2013). One strategy to this conundrum has been

to assume that at the same time as assignment battle (additionally named intellectual clash, or mental clash) can improve group adequacy, relationship fighting (likewise named man or lady struggle, passionate war or full of feeling strife) is reliably inconvenient to it (Kuvaas, 2017).

1.2 Gap Analysis

Alsharo, Gregg, and Ramirez (2017) suggested that future researchers could conduct further exploration on the effect of various team building strategies on team effectiveness. This created the need to conduct further research on knowledge sharing and team effectiveness. With the help of this literature and after a lot of research on team building strategies a new link was created. Further a mediating relationship of employee autonomy was created between knowledge sharing and team effectiveness. Team conflict was taken as moderator. Very limited research was available for these links. Very little research has been conducted using these linkages. Very limited literature was available studying the effect of knowledge sharing on team effectiveness with mediating role of employee autonomy and moderating role of team conflict.

1.3 Problem Statement

Success of a Project is dependent on the effectiveness of project team. Project team effectiveness is influenced by the knowledge sharing and employee autonomy. Team conflict also play a significant role over the effectiveness of projects. At the same time employee autonomy is also considered to have a role over project success.

It is therefore, basic that the project teams build up a decent relationship and comprehension among one another and are aware of the master plan of undertaking achievement and the way that they need to accomplish the task targets together by enjoying the least conceivable measure of contentions and contradictions. Group care, as disclosed prior is by all accounts the upgrade to accomplish group execution through more noteworthy group union.

Likewise, team effectiveness is fundamental to the achievement of the venture as it will guarantee that the project team is shielded from both inside and outside. Notwithstanding these, the undertaking team leader should likewise guarantee that the project team remains concentrated on the task objectives, give their 100 percent and are properly remunerated and perceived for their endeavors. This research paper will identify the impression of knowledge sharing on team effectiveness with the mediating role of employee autonomy. Also team conflict is added as a moderator to look at its weakening effect between knowledge sharing and team effectiveness.

1.4 Research Questions

The current study will help to look for the answers of the following questions:

Research Question 1

Does Knowledge Sharing impact team effectiveness in projects?

Research Question 2

Does Employee Autonomy mediate the relationship between knowledge sharing and team effectiveness in projects?

Research Question 3

Does project team conflict moderates the relationship between Knowledge sharing and team effectiveness in projects?

1.5 Objective of the Study

The reason of this learning is to find the influence of knowledge sharing on team effectiveness with mediating role of employee autonomy and moderating role of team conflict.

The main focus of the present study is based on three things. First, this training aims to test the relationship between Knowledge Sharing and team effectiveness.

Through knowledge sharing team effectiveness increases as knowledge sharing allows the team to achieve its exertion necessities and contribute to an organization's objectives.

Second, the current study, targets to identify the mediating role of Employee autonomy between Knowledge Sharing and team effectiveness. This relationship is not tested much. Very few literature was available on this literature. Employee autonomy as a mediator is not tested with knowledge sharing and team effectiveness. The impact of employee autonomy as a mediator will be tested in this current study.

Third, the moderating role of project team conflict between knowledge sharing and team effectiveness in projects will be tested in the current study. This again is a new link. In previous studies project team conflict was not studied as a moderator between knowledge sharing and team effectiveness. So this study aims to test this link.

The core determination of this study is to test the presented model to find out the relationship between knowledge sharing, team effectiveness and employee autonomy. Moreover, project team conflict is added as a possible moderator to test the relationship of the variables in the research model. The main purpose of this study to study the impact of knowledge sharing on team effectiveness along with the mediating role of employee autonomy and moderating role of project team conflict.

1.6 Significance of the Study

This research intends to empirically test a new model to determine direct relationship of knowledge sharing and its impact on team effectiveness. It is very important for the 21 organizations to effectively manage knowledge but it can only be achieved when employees are ready to share their knowledge. Knowledge sharing subsidizes a lot to modernizations in individual teams as well as in the whole organization (Wang & Wang, 2012). Sharing of understanding has become a basic requirement for the success of assignment (Park & Lee, 2013).

This research also subsidizes in the current literature of knowledge sharing or team effectiveness. The humans with excessive self-efficacy are believed to be extra creative than the people who have low self-efficacy and self-efficacy is the self-assurance of an individual in his/her potential to develop novel thoughts and convey innovation in the agency (Yang & Chu, 2012). In addition, this study aims at enhancing the knowledge sharing and team effectiveness literature by examining the main effect of knowledge sharing on team effectiveness, mediating role of ‘Employee Autonomy’ among the relationship of Knowledge Sharing and Team Effectiveness and moderating role of Project Team Conflict in the relationship of Knowledge sharing and Team Effectiveness.

The other relationships which are the focus of examination in this research, though have been examined before in other contexts, have either inconsistent existing results, or are significant for assurance of their generalizability. In addition, this study underwrites towards our considerate concerning the impact of knowledge sharing on team effectiveness with mediating role of ‘Employee Autonomy’ and moderating role of ‘Project Team Conflict’ in one model.

1.7 Theory

The Knowledge Based Theory of the Firm positions that a firm is a learning producing element (Nonaka, Toyama, & Nagata, 2000; Nonaka & Konno, 1998). Award (1996) underscores the capacity of the individual inside the partnership in making information and contends that the job of the organization is to incorporate, store, and watch the learning made by utilizing the people. Associations accumulate groups of proficient and expert people who are foreseen to use their data to work hierarchical undertakings. Groups capacity improved when they encompass individuals with data important to the current task (Manhotra and Majenrzak 2014; Gartner 2014; Pangilk and Chank, 2016).

The dependent variable that is explored is a character’s knowledge-sharing behavior. Knowledge base theory (Blau, 1964) is one of ordinarily utilized hypothetical

bases for such an examination. As indicated by this hypothesis, people institutionalize their collaborations with different people dependent on a self-intrigued investigation of the expenses and advantages of such a cooperation. Individuals try to augment their advantages and decrease their costs when trading assets with others (Molm, 2001). These advantages need not be substantial since people may take part in a cooperation with the likelihood of trade (Gouldner, 1960).

In such trades, individuals help other people with a general desire for some future return, for example, increasing wanted assets through social correspondence. So as to expand the assets picked up, people may fabricate social associations with others by sharing their insight. Davenport, Prusak, et al. (1998) have broke down information sharing conduct and have characterized a portion of the apparent advantages that may direct the conduct; these incorporate future correspondence, status, employer stability, and special prospects.

From this point of view, information sharing will be decidedly influenced when an separate hopes to acquire some advantage later on concluded response (Cabrera & Cabrera, 2005). Information base hypothesis has been effective in clarifying the learning sharing practices among people. Kankanhalli et al. (2005) accepted that a person's apparent advantage is one of the main considerations that urge workers to contribute learning to electronic information archives.

As per Ma (2007), the sum learning individuals add to a VC relies upon the degree of fulfillment they get from being individuals from the network. Chiu et al. (2006) considered the impact of relational factors, for example, social cooperation, trust, and standard of correspondence on learning partaking in VCs. Past investigations have likewise inspected authoritative setting for clarifying learning sharing (Kim and Lee, 2006). Pai (2006) used the help of the top administration to analyze the connection between learning sharing and the utilization of IS/IT vital arranging. Further, Watson and Hewett (2006) contemplated the impact of expanded information commitment inside the association. In spite of the fact that information base hypothesis may clarify the conduct of learning donors, the builds utilized in past examinations were assorted and some gave changing outcomes. Analysts likewise usually look at the impact of authoritative rewards on learning sharing

conduct. Nonetheless, the investigations on the impact of hierarchical prizes have created blended outcomes. [Kim and Lee \(2006\)](#) presumed that reward frameworks are critical factors that influence worker learning sharing abilities.

However, according to [Lin \(2007\)](#), authoritative prizes don't affect representatives' ability to impart learning to their associates. This research examines the factors related to knowledge base theory based on three dimensions, namely, Knowledge sharing (exchange information, skills or expertise), Employee autonomy (freedom employees have while working), and Team Effectiveness (ability a team has to achieve the objectives or purposes). Besides, this study also tests the moderating effect of Team conflict.

This expertise change can be seen thru the lens of Knowledge base Theory where human conduct is realized as taking region in a social change ([Blah, 2005](#)). People inside a social framework trade errands with a general desire for some future, yet hazy, arrival. Long haul connections acquire where people have sufficient opportunity to work together and trade Favours ([Blah 2005; Molm et al., 2002](#)). With these suspicions, data sharing can be seen as a state of summed up information base; the spot people share their mastery excepting any reasonable desires for an arrival other than the guarantee of a long haul common relationship ([Fulk et al., 1996](#)).

To inspire applicable behavior, agencies are imposing reward structures to inspire group participants to make a influence and share expertise although in some organizations, exhausting employees if they decline to segment the information they hold ([Bartol & Srivastava, 2002](#)).

Chapter 2

Literature Review

2.1 Knowledge Sharing and Team Effectiveness

Organizations are disseminated expertise organizations and the prospective of the employer to become aware of evidence possessions, influence them, and make them on hand for its employees can followed to a specific aggressive gain (Tsonkas, 2006; Davesport & Prusark, 2011; Alavik & Tiwanah, 2008). As demonstrated in our hypothetical model 2.1, it is proposed that knowledge sharing positively affects Job autonomy, project team conflict and team effectiveness. In addition, Employee autonomy mediate the relationship between knowledge sharing and team effectiveness, with higher level of project team conflict negatively persuading the impact of job autonomy on team effectiveness.

In spite of its significance, learning combination inside groups could be testing. Colleagues are regularly hesitant to share vital learning among themselves (Basaglia, Caporarello, Magni, & Pennarola, 2010), and can't be forced to do as such (Staples and Webster, 2008; He et al., 2014). Given that learning joining basically involves mix and amalgamation, group supervisors regularly discover information combination testing because of colleagues' hesitance to merge their individual mastery.

Knowledge sharing authors have various perspectives on implied or unequivocal learning sharing aims since individual's may possibly alter their insight sharing expectations as indicated by the different asset prerequisites of implicit and express information sharing exercises (Haua Kim, Lee & Kim, 2012). Sharing knowledge results different benefits, for example, a great execution assessment what's more, remunerate from the association, for imparting learning to group members, along with offering help to the organization, sorting out and developing essential systems inside an association, which are likewise a piece of auxiliary open doors for knowledge sharing (Chen, Chuang, & Chen, 2012). Knowledge sharing is the component which can likewise delineates the satisfaction of the workers by smooth progression of data and important information all through the association (Isfahani, Nilipour, Aghababapour, & Tanhaei, 2013).

Knowledge sharing is the basic procedures concluded which agents can add to Knowledge application, improvement, and eventually the viable benefit of the organization (Jason, Chuank, Hargen, Jiang, & Joseph, 2007). Knowledge sharing among representatives and inside and slanting over groups enables organizations to misuse and benefit from knowledge based assets (Cabrera & Cabrera, 2005; Davenport et al., 1998).

Study has established that knowledge sharing and blend is positively related to diminishes in progress costs, snappier summit of original thing improvement adventures, bunch execution, firm headway limits, and firm execution including deals, development and pay from new things and organizations (e.g., Mesmer-Magnus & DeChurch, 2008; Lin, 2009; Collins & Smith, 2007; Arthur & Huntley, 2006; Cummings, 2002; Hansen, 2004).

Knowledge sharing alludes to the arrangement of undertaking information and capacity to support other individuals and to cooperate with others to handle issues, grow new contemplations, or execute methodologies or systems (Cummings, 2004; Pulakos, Dorsey, & Borman, 2003). Learning sharing can occur by methods for created correspondence or very close exchanges through frameworks organization with various authorities, or on the other hand announcing, dealing with and getting data for other individuals (Cummings, 2004; Pulakos et al., 2003).

Although the detail that the term knowledge sharing is by and large developed more frequently than information sharing, scientists will in general utilize the expression “knowledge sharing” to allude to offering to others that happens in exploratory examinations in which members are given arrangements of data, manuals, or programs. [Taylor and Wright \(2005\)](#) establish that an atmosphere that empowered new thoughts and concentrated on gaining from disappointment was decidedly identified with powerful knowledge sharing.

People’s requirements for the assessment of their awareness and that through sharing they can progress relationships with others have been confirmed to be identified with positive knowledge sharing characters which thus were identified with knowledge sharing potentials and follows ([Bock, Zmud, Kim, Lee, et al., 2005](#)). [Lin and Lee \(2005\)](#) investigated ranking directors’ view of allowing knowledge sharing between workers as contrasting to those of the individual sharers.

They initiate that manager’s intention of encouragement was positively linked with characteristic sharing performs. Moreover, studies have discovered that tiered frames of mind including work satisfaction and imposing responsibility furthermore encourage knowledge sharing ([De Dreu, 2007](#)). Generally speaking, it creates the impression that activity and authoritative frames of mind impact knowledge sharing.

Knowledge sharing is significant for organizations to have the option to create aptitudes and skills, increment esteem, and continue upper hands (see for instance [Grant, 1996](#); [Spender, 1996b](#)) in light of the fact that development happens when individuals offer and consolidate their own learning with others. As per [Nonaka and Takeuchi \(1995\)](#) knowledge sharing is expected to change over general thoughts and ideas into items and administrations and hence for development. In this way the capacity of moving information from one individual/unit to another fundamentally adds to the authoritative execution of firms ([Argote, Ingram, Levine, & Moreland, 2000](#)).

The capacity to share knowledge relies upon the properties of information, which impact how effectively knowledge can be shared and collected, how much and

where it is held and put away, and how effectively it streams inside and over an association (Argote, McEvily, & Reagans, 2003).

Knowledge sharing in groups has been found to prompt prevalent group execution (Srivastaka et al., 2008). This has been appeared in changed locations, for example, fresh item improvement groups (Madhavan & Grocer, 1999), innovative work groups (Baik et al., 2015) and programming improvement groups (Farak & Sprogl, 2010). In the course of recent years, examination into knowledge sharing in groups has distinguished an assortment of elements containing character characteristics (Kuft et al., 2014), group correspondence styles and knowledge sharing mentalities (deVries et al., 2011), relational recognition (Grucnfeld et al., 2001), basic decent variety (Cummings, 2004) and assorted variety of colleague ability (Stasser, Vaughan, & Stewart, 2000), and little group measure (Stassek & Stewart, 1998).

Knowledge sharing in the group prompts better group execution for three reasons: better basic leadership (Davenport et al., 1998), improved critical thinking (Koguth & Zander 1993; Salicbury, 2001) and upgraded innovativeness (Nonaka & Takeuchi, 1995). Expanded knowledge sharing helps colleagues to think about more alternatives, to gain from the encounters of others and to more readily utilize the knowledge inside the group, prompting better basic leadership. Information sharing can help with critical thinking in light of the fact that the current issue can be better comprehended, possible subjects can be textured before and increasingly assorted options in contrast to the issue can be investigated (Lee, Gillespie, Maln & Wearing, 2011).

Inferred Knowledge may incorporate bits of knowledge into client needs, hunches about what may fix a recalcitrant issue, exercises gained from past experience, how others have moved toward comparative issues and data about new advances. Sharing such implied information makes a progression of clever thoughts that add to effective results, for example, new items, procedures and licenses. Various investigations bolster the view that knowledge sharing is basic for group execution (Anlona & Caldwell, 1992; Farak & Sproll, 2001; Hongk et al., 2005; Hopes & Poiktrel, 2004).

Past researches concerned about the sharing of knowledge and data in and by groups have appeared that well-created “group forms” bring about better planned and prevalent group execution (Bank and Millward, 2000; Erika and Leigh, 1997). Bartol and Srivastava (2002) saw that through Knowledge Sharing, delegates can diffuse pertinent evidence to others over the association. In the “advantage based” point of view on the firm, information is seen as the most intentionally huge resource. The Knowledge Sharing between and among individuals and divisions in the association is seen as a critical method (Osterloh and Frey, 2000).

As knowledge sharing is urgent for good group execution, group advancement ought to likewise be coordinated at learning functional methods for sharing knowledge successfully. Information fairs, coaching, mutual databases, venture surveys and new thoughts introductions are functional approaches to share knowledge. Five factors that can improve group adequacy consolidate having a relentless authoritative culture, a couple of characteristics of the undertaking itself, innovation use, colleague qualities maintained through getting ready and progression, and work and gathering forms (Cohen-Charash & Mueller, 2007).

Team effectiveness require disbursed information to be appropriately shared and built-in via team contributors (Xie & Luan, 2014; Pinjani & Palvia, 2013). Then team will be less effective, grief greater costs linked with information search, statement failure, statistics confusion and misconception, and insufficient choice making due to missing records (Gray, 2001; Pinjani & Palvia, 2013). Knowledge sharing by way of member professionals allows fine crew consequences by ensuring all pieces of a statistics puzzle are on hand for undertaking overall performance and terrific selection making. This permits the group, paying little mind to area, to achieve its work prerequisites and add to an association’s objectives. It is thus, hypothesized as:

H₁: Knowledge sharing has a positive influence on team effectiveness

2.2 Employee Autonomy as Mediator

Team effectiveness have an effect on the way group individuals work collectively and have the conceivable to avoid team success and effectiveness. For example, without the addition of eye to eye communication groups will in general take more time to arrive at regular floor and to team up efficiently (Holtkn, 2004; Pottes and Balthazark, 2010; Kikman et al., 2014; DeOrtentiis et al., 2014; Pangil and Chan, 2014). Self-rule assumes an imperative job in the social adjustment process since it encourages people to specifically absorb outer social weights so that it eventually bolsters self-guideline (Ryan, Kuhl, & Deci, 1997). Self-governance is considered a “basic formative direction” (Ryan et al., 1997) that encourages people to have their different needs met and to act as indicated by and by endorsed qualities and aims. At the point when independence is deficient with regards to, individuals “can’t get to the all encompassing learning important to distinguish what they need” (Ryan et al., 1997).

Concerning development, autonomy is connected to imagination, as a self-governance direction intrinsically implies that one accomplishes something else, with less worry for what is regular. All things considered, advancement might be constrained when autonomy is the essential objective (Gelderen et al., 2006). This bifurcation confines for investigation those people who worked without anyone else and would be destined to have autonomy/freedom grapples independently from proprietors who might almost certain have innovative imagination just as autonomy (Prottas et al., 2008).

Furnishing workers with occupation independence flag that the association esteems representatives’ information and perceives their commitments to the association’s objectives (Park et al., 2016). Langfred (2004) founded that employee autonomy affected group execution relying upon observing framework sand trust inside self-overseeing groups. Until now, be that as it may, no experimental examination has focused on which kind of authoritative technique fortifies or debilitates the connections between employee autonomy and individual representative results.

Further research is expected to explore the vertical fit between occupation self-rule and authoritative technique while focusing on individual representative results. Autonomy refers to how much the activity gives the individual considerable opportunity, freedom and tact when planning work and deciding the strategies to be utilized when completing that work (Hacqman & Oldham, 2002).

Autonomy improves work execution since it propels representatives to invest more prominent exertion. Past research additionally reports that self-rule is basic for characteristic encounters, for example, making self-assurance (Deci and Ryan, 2000). Employee Autonomy is decidedly identified with a scope of valuable results, including work fulfillment, work execution, duty, inborn inspiration and occupation inclusion (Humphrey et al., 2007). Employee autonomy was emphatically connected with knowledge sharing, since it upgraded the inward inspiration to share information (Foess et al., 2009). Autonomy is categorized as “how much the errand gives generous opportunity, autonomy, and circumspection in planning the work and in deciding the techniques to be utilized in completing it” (Hackman & Oldham, 1980).

When the employee role is related with an abnormal state of self-rule, there is regularly both a probability for and a desire for powerful exhibition. The mix of independence and sharing capacity may build work execution (Nesheim et al., 2016). Group viability was operationalized as the introduction of the people on their allocated undertakings. This measure was grasped from work execution scale (Hu & Bentler, 1999). The present investigation upheld the interceding job of representative self-sufficiency in the connection between information sharing and group adequacy. Similarly as social character hypothesis proposed, adherent’s identification with representative self-sufficiency will urge the longing to conciliate, copy, or vicariously gain the powerful execution (Bandura, 1997).

Acknowledgment of the significance of employee autonomy in advancing team effectiveness, might be followed back to crafted by sociotechnical frameworks scholars, whose mediations frequently included the formation of independent or self-overseeing work gatherings (Clekh, 2004; Mank & Stewart, 2005; Pasmoreh, Francis, & Haldman, 2009; Trist & Baforth, 2001). Increased autonomy acts to

lessen unnecessary administrative also, bureaucratic limitations on the utilization of knowledge and aptitude surviving inside the group, empowering its individuals to all the more adequately distinguish and react to specialized 'changes'.

In principle, the increase in team effectiveness emerges on the grounds that there are less deferrals while choices are mentioned to additional level of power, or because operative-level employee's representatives every now and again have definite (frequently inferred) learning about the framework's working qualities, and are in this manner better ready to detail and apply a powerful reaction in the event that they have the essential expert to do as such (Wall, Jacson, & Davids, 2013). Researchers keen on diagnosing the mental effect of work have likewise distinguished autonomy (at both the individual and group level) as an essential supporter of team effectiveness.

Reviewers of research around there have, over various decades, commonly revealed just modest and conflicting connections between autonomy and team effectiveness (Goodman, Devadas, & Hughson, 1988; Guzzo & Dickson, 1996). An ongoing meta-scientific investigation mentioned comparable objective facts, inferring that upgraded independence 'has all the allocates of being useful for groups.

Wall et al. (2002) built up a progressively all-inclusive type of this possibility contention, recommending that any administration work on including the strengthening of representatives through the devolution of basic leadership obligation, for example, work enhancement or the making of autonomous (self-overseeing) work groups, will elevate improved team effectiveness just to the degree that laborers face 'changeability and absence of consistency in work assignments and necessities, including what must be done and the most effective method to do it' (Wallck et al., 2002). They recommended that, where this type of vulnerability is high, improved team autonomy would advance team effectiveness, with the end product that low basic team autonomy will lead to imperfect team presentation in akin situations.

According to Guzzo and Dickson (2009) group is comprised of people who see themselves and who are seen by others as a team member, who are related on account of the undertakings they execute as individuals from a gathering, who are

implanted in at least one bigger social frameworks (for example network, association and so on.), and who perform assignments that influence others (for example clients or collaborators). An association can be considered as a group of working officials saw as a social substance cooperating and cooperating for achievement of shared objectives with best endeavors.

However, independent employee is able to overthrow such complications. As recommended by Interdependence hypothesis, people inside a group will generally work supportively so as to achieve a common detached, ultimately persuading group capability (Del Giudice & Maggioni, 2014). Group members tend to explicit their feelings all the more unreservedly and directly giving slight respect to any social or managerial compels (Duarte and Snyder, 1999). Gathering people are in a situation to check each other extra precisely principally dependent on execution and commitment. Group people additionally display less inclination compared with those in conservative gatherings when assessing each other's general presentation and commitment (Weisband and Atwater, 1999).

Information based workforce watches out for self-rule, underscore on self-administration and self-interest in basic leadership process (Weiers, 2014). The result is an employee autonomy in spite of having conquered difficulties linked with different areas, bunches trade more prominent thoughts, share additional information, and effectively organize errands between one another (Berry, 2011; Mathieu et al., 2008). It is, thus, hypothesized as:

H₂: Employee autonomy plays a mediating role between knowledge sharing and team effectiveness.

2.3 Project Team Conflict as Moderator

Team development theories (Gersick, 2003, 2008; Tuckman, 2013) have recommended that team conflict and union have significant effects on the capacity of colleagues to cooperate successfully after some time. Team Conflict is extensively characterized as “a procedure where one party sees that its advantages are being contradicted or adversely influenced by another party” (Wall & Callister, 1995).

Scarcity of resources will inevitably lead to conflict and revolutionary violence (Chen, 2016). Conflict “exists when two or more people have incompatible goals, and one or both believe that the behavior of the other will prevent his or her own goal attainment” (Laios & Tzetzis, 2005).

A common topic in the literature is that successful consumption of undertaking strife needs preventive team conflict (e.g., (Jehn & Mannix, 2001). de Wit, Jehn, and Scheepers (2013) recommended that it is indispensable that team conflict don't increase to the point that they touch off relationship conflict, as team conflict can spiral into relationship conflicts (Peters & Manz, 2007; Xie & Luan, 2014).

Team conflict is characterized as “a procedure wherein one party sees that its interests are being restricted or adversely influenced by another party” (Wall & Castiller, 1995), is a multidimensional idea (task and relationship). Conflict is a condition of disharmony that can cause negative outcomes in group activities (Rayeski & Bryant, 1990). At the point when conflict is available inside a group and between groups, it influences basic leadership (Jehn, 1995). Conflict can be negative to groups since it brings about animosity among individuals and incorporates contradictions over character and enthusiastic issues.

Korsgaard et al. (2008) found that, conflict is “a procedure that happens inside people however finishes in people's involvement of dyadic conflict”. Jehn and Mannix (2001) inspected conflict profiles, finding that teams performed better with low degrees of relationship conflict crosswise over time, and elevated amounts of task conflict close to the midpoint of the task. Greer, Mannix, and Jehn (2008) in examining the effect of early conflict on later conflict, found that assignment and relationship conflict did not have long haul impacts on future degrees of contention.

Choi and Wang (2009) tried seven unique models of the possible relationship between tasks what's more, relationship conflict, finding that relationship conflict could wind into tasks conflict when actuating negative effect, though task conflict was adept to influence relationship conflict when the group had low degrees of trust. Researchers have proposed that the outcomes of team conflict will be influenced by the methodologies the team takes to overseeing and solving these conflicts (Chen & Huang, 2007; De Dreu, 2007).

In addition, audits point to the impulsive impacts of team conflict happening at the same time (Bradley, Anderson, Baur, & Klotz, 2015; Loughry & C. Amason, 2014). Jehn and Mannix (2001) likewise noticed that procedure conflicts concurring with different types of conflict would be hurtful. Teams can be positive by “adding knowledge and creativity, increasing the understanding and acceptance of ideas, and improving commitment and motivation” or negative by roasting ideas, promising conformism (Jehn & Mannix, 2001). Team conflict reduces collective effort, decreases communication among team members and removes supportive behavior which effects the performance of team (Fong, Men, Luo, & Jia, 2018).

In team settings, individuals can learn, not just from their own direct experiences, yet in addition from the understandings of other team members (Ickes & Gonzalez 1994; Jarvis 1995). Since team members can communicate with each other, knowledge accumulated by one team member can be moved to his/her partners through input, clarification, help, or exhortation (Ellis et al. 2003; Tjepkema 2003). Both Gersick’s (1988) and Tuckman’s (1965) models note that conflict and knowledge work together to shape a team’s effectiveness Trade of knowledge between team members brings knowledge sources together and controls it into new knowledge structures or schedules (Clarkson, 1995).

As for the relation between team conflict and team effectiveness, most researchers concur that team conflict contrarily impact team effectiveness. Individuals from groups who become buried in team conflict commonly show decreases in fulfillment, loving of other colleagues, furthermore, expectations to remain (e.g., Amason, 1996; Ensley, Pearson, & Amason, 2002; Jehn, 1995, 1997; Jehn & Mannix, 2001; Peterson & Behfar, 2003) in light of the fact that “it produces strain, threat, and diverts group individuals from playing out the assignment” (De Dreu, 2007).

At the point when diverse team members bring various sorts of data and expertise to an issue, some level of difference is both unavoidable and alluring, as this makes a chance to burrow further and look for not just agreement, yet innovative third ways that were not obvious previously (Buroon, Bulkr, Ebesu, White, & Rockwell, 1996). However, Conflicts can likewise effectively hurt casual connections

between team members. Accordingly, it very well may be normal that team conflicts (Jehn, 1995) that are caused about by different opinions with respect to the tasks being performed will stimulate team learning whereas team conflict among team members will damage team effectiveness.

Team conflict diminishes correspondence, collaboration, and comprehension among team members (Jehn & Mannix, 2001) leading to a decline in team effectiveness. Team conflict may likewise result in an increase in subjective burden leading to a decline in team effectiveness (Woerkom & Engen, 2009). A superior comprehension of the transaction between the conflict and the board in influencing team effectiveness would be finished in the event that they know regardless of whether these factors eventually have impact on group viability (Tekleab et al., 2015).

As per Jehn and Mannix (2001) conflict asymmetry is tricky for group execution, as it proposes an absence of team cognitive structures inside the group, (for example, shared mental models) where colleagues don't have a mutual comprehension of the objectives, coordination forms, or social reconciliation inside the group. In an observational investigation, Jehn and Mannix (2001) exhibited that, controlling for the mean degree of conflict, conflict asymmetry clarified a novel bit of the fluctuation in innovativeness colleagues may consequently depend on their past encounters rather than scanning for better, increasingly effective methods for getting things done.

Verifiable understanding from colleague's bolsters business as usual as opposed to testing it. In the event that conflict is relied upon to fight off early consensus (in this manner advancing innovative thoughts), the absence of any conflict in the team should constrain the potential for higher execution (Pelled et al., 1999).

Interestingly, a group where everybody is testing every other person would propose something likened to chaos. A team member without imperative learning or ability for an issue who challenges others more educated might be viewed as playing out an improper conduct, hurting the participation of other colleagues (De Cremer & van Knippenberg, 2002; Rusbult, 1983), prompting lower group execution (Aime et al., 2014).

Further project team struggle can upset correspondence and collaboration among colleagues decreasing their openness to thoughts advanced by other colleagues (Elbanna et al., 2011). The writing proposes that since colleagues in such an engaged space will undoubtedly exchange different viewpoints and raise troublesome issues, group strife could incite positive outcomes, for instance, group execution and information sharing abilities (Bhatnagar and Tjosvold, 2012), better basic leadership aptitudes (Tjosvold et al., 1986), chance taking and development (Tjosvold and Yu, 2007).

H₃: Project team conflict plays a moderating role between Knowledge Sharing and team effectiveness.

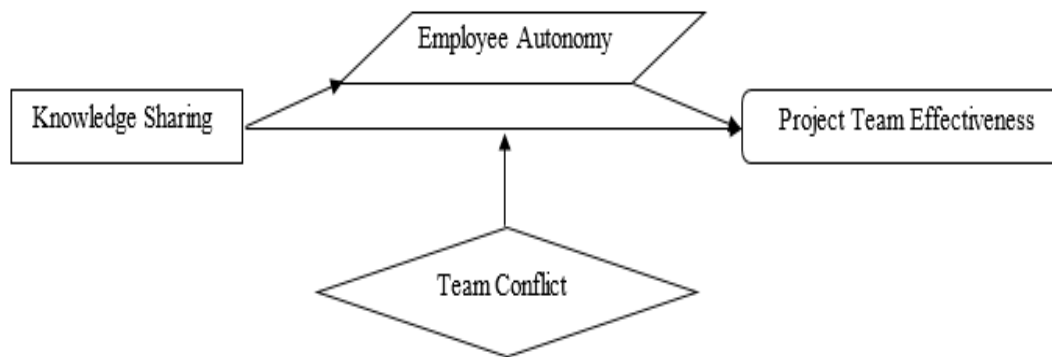


FIGURE 2.1: Research Model

2.4 Research Hypotheses

H₁: Knowledge sharing has a positive influence on team effectiveness.

H₂: Employee autonomy plays a mediating role between knowledge sharing and team effectiveness.

H₃: Project team conflict plays a moderating role between Knowledge Sharing and team effectiveness.

Chapter 3

Research Methodology

It is essential to separate between research methods and research methodology in light of the fact that these two are altogether different from one another. Research method includes every procedure/strategies that has used for coordination of research. Research strategies or procedures allude to the manners in which scientist use in leading look into alternatives. As such, every one of those procedures, which has used by the specialist while contemplating research issue, known as research methods.

Interestingly, inquire about philosophy is an approach to tackle look into issue efficiently. The examination of research procedure is more extensive than that of research methodology. Subsequently, whenever procedure is discussed it doesn't mean just the strategies yet additionally the rationale behind the techniques use with regards to that review and clarify the use of one procedure or technique over another, with the goal that exploration results are equipped for being surveyed either by other or specialist himself.

This chapter specifically indicate the methodology to explore the impact of knowledge sharing on team effectiveness with the mediating role of employee autonomy and moderating role of team conflict. The discussion in this chapter are related to study design, population and sampling techniques, characteristics of the sample and instruments of all the variables and items present in each variable.

3.1 Research Design

A great research configuration helps analysts to get remarkable outcomes, also it helps in raising value of the examination. Prevalently, in sociologies two research configuration methodologies are there known as "quantitative methodology" and "subjective methodology". Dominant part of analysts hold conviction that quantitative research is progressively dependable and successful when contrasted with subjective research structure (de Vaus, 2001). Scientists can verify validated and dependable outcomes with the help of quantitative research configuration (Chase et al., 2016). Research configuration is characterized as the show of conditions for information gathering and examination in such a way, that goal is to mix congruity to the exploration point with economy in strategy (Selltiz et al., 1960).

For the present investigation, support is gathered from quantitative research configuration by using institutionalized systems and apparatuses. As it encourages solid information by changing noticeable reality into numbers, which further broke down to observe affiliations, connections, circumstances and end results. It is indispensable to take note of that by quantifiable and discernible implies that individuals demonstrate their level of acknowledgment with articulation, which go along their character or conduct.

Furthermore, survey procedure was executed to collect data that involves the utilization of questionnaire comprising of demographics such as age, gender, qualification and experience. Different types of surveys are there which executed such as on-line surveys, phone interviews, self-administered questionnaires etc. (Ary et al., 2006). Self-administered questionnaire was used for data gathering in the present study. According to (Cavana et al., 2001; Bowling, 2005), questionnaire usage is valuable in terms of time and cost and it is easy to punch and analyze data. Furthermore, for managing the process of the research, it is a detailed process and included the study details with respect to type of study, study settings, unit analysis and time prospect explained in detail below.

3.1.1 Type of Study

The current study is an explanatory study. According to [Baxter and Jack \(2008\)](#) researchers used this term when they explore answer to question and the objective is to discuss the causal relation between the interventions. This is a causal/relational study in which the impact of learning sharing on group viability incivility has evaluated dependent on respondent self-announced discernment about these factors. Study is a technique for social affair quantitative information in pre-characterized and figured configuration to make simpler information. Information is accumulate from an example and sentiment made on entire populace ([Kerlinger and Lee, 2000](#)). Despite the fact that example ought to be with agreement to logical research system.

Surveys has two types; relational and descriptive ([Rungtusanatham, Salvador, Forza, & Choi, 2003](#)). Relational surveys are utilized to study empirically the links among independent variable and dependent variable while descriptive surveys utilized to study present state of affairs. For current study, relational survey design was utilized, the reason is the researcher plan is to discover the link among knowledge sharing and team effectiveness incivility. In this respect, Pakistani public and private project based organizations have targeted to acquire the needed data to obtain the genuine results. In the first phase, the target was to obtain 350 questionnaires but 302 authentic responses were gathered. The sample selected for this study has reckoned to constitute the overall population of Pakistan. This will aid to generalize the results obtain from sample on whole population.

3.1.2 Study Setting

The present investigation is a field contemplate on the grounds that members, for example representatives and their administrators of open and private undertaking put together association were drawn nearer with respect to their activity and they filled the poll in their regular workplace ([Brennan et al., 2002](#)). Factors incorporated into this examination were neither measured nor controlled, and no fake setting has shaped for learning.

3.1.3 Unit of Analysis

In any research study, the most vital feature is unit of analysis. The unit of analysis means persons or objects whose characteristics and features are to be analyzed in the study. It may be distinct, dyad, group, industry, country, society or a culture from where the researcher collect the data. The present study is designed to see the influence of knowledge sharing on team effectiveness therefore, the unit of analysis were individual because the supervisors of project-based organizations were studied and as the hypothesized variable indicate i.e. project role overload.

3.2 Population and Sample

3.2.1 Population

Population is Set of procedures, possessions, peoples linked with awareness that the investigator ought to explore. Every project is unique irrespective of the industry whether it is a construction project, information technology project or non-governmental organization (NGOs) project etc. It has some specific objectives, deadlines and budgets. It is the sole responsibility of project supervisor to complete the project within specified time, economical and possibility. This creates a hustles on project supervisors because he or she has no other option but to complete the project within the specified requirements. Since the current research, pursue to concentrate on Pakistani public and private project based organizations. As in Pakistan, project based organization is emerging as a source of competitive advantage. There are more than 1000 companies doing more than 5000 projects every year in Pakistan.

Government and private both are included in it. National highway authority, defense housing authority, Nescom, and Bahria town are some biggest project based organizations running different projects in Pakistan. For this particular study, the population will be the supervisors and employees of project based organizations currently operating in different cities of Pakistan. Data was collected from project-based organizations working in Rawalpindi and Islamabad. These involve

both national and international level project based organizations running different projects.

3.2.2 Sample

Sample is the representative of population. The process in which a researcher selects an example of participant for a study from a population in which he is interested, this is called sampling. Similarly, in quantitative research, the sampling objective is to acquire group of personalities who represents of a large group of individuals, or who bestow particular information required. In social sciences research, sample usage is recommended strongly as compared to study overall population. The reason is in sampling fewer resources, money, and time is utilizing, and possibility of data reliability are high. In contrast, it is demanding, expensive, time ingesting and exhausted to include entire population. Therefore, a sample should be sufficient to symbolize whole population.

Sampling has two types. One is probability sampling and another is non-probability sampling. In probability sampling, every observation has equal possibility to be picked as sample and in non-probability sampling it is pre-decided, which observation/case would represent as sample of population. Both types have some advantages and disadvantages but the selection wholly hinge on research objectives, study type and type of data. Probability sampling is effective and suitable when researcher has full information about population otherwise non-probability sampling should be utilize for sampling.

For the current research, convenience sampling was used and it comes under non-probability sampling. As there are different arguments about the population of project-based organizations in Pakistan but the exact population is still unknown as it is in initiating phase. Similarly, researchers suggested that when exact population is not known it is feasible to use non-probability sampling techniques. That is why convenience sampling of non-probability techniques were utilized for this research. Furthermore, the use of convenience sampling is evident from the

research of conducting on Pakistani project based organization. Moreover, convenience sampling for conducting a research. It is also easy to collect data by using convenience sampling when time is short and do not have so much resources.

3.2.3 Data Collection Procedure

Data was collected from project based organizations. Hence, to approach most extreme respondents each conceivable exertion was used. The respondents were mentioned to help and give assent in information accumulation. For guaranteeing privacy of data gave by respondents an introductory letter was joined to the poll. The introductory letter with no uncertainty showed that the examination is being done for academic purposes. Respondents were vowed of the protection of their names and reactions all together that the respondents don't feel faltering to fill the survey conclusively.

Data was collected solely from project-based organizations for all variables. Data on independent variable (i.e. Knowledge sharing), mediating variable (i.e. Employee autonomy) and moderating variable (i.e. Team conflict), were reported by the employees of different projects, as the current research main objective is to study the supervisors. The reason for obtaining data from subordinates on this particular variable is to reduce biasness. Similarly, the questions included in this specific variable is for subordinates to rate their supervisors. Lastly, Different steps were carried out to ensure the responses anonymity and accuracy (exmal et al., 2014; Taylor et al., 2011).

For data collection approximately, 285 employees and subordinates were approached. However, 242 responses were obtained from supervisor and employees, which were complete. Subsequent to data consolidation, the eventual sample accommodated 242 workable responses. The ratio used for data collection was 1:1, as different studies have adopted this approach for similar studies.

3.2.4 Handling of Received Questioner

Received questionnaires were carefully examined for missing data. The questionnaires received were having problem of missing values means that there are some questions in a questionnaire that were not answered by the respondents. In quantitative study, an important aspect is to handle missing data, because it generates some serious problems. One it constitutes to statistical power of the data. Statistical power means statistical technique analytical ability to discover any significant impact in observed data set (Roth & Switzer III, 1995). Secondly, missing data also influence the accuracy of estimated variables.

Guidelines are present in the literature for handling of missing data. The dominant techniques for misplaced data handling according to (Rothe and Switzerh III, (2002) are mean substitution, regression imputation and list wise deletion. In mean substitution, mean value is entered for missing response. In regression imputation, regression equation is devised based on related variables for attributing and approximating missing values. In list wise deletion, if there is any missing data, all the data are deleted regarding to that respondent. All the methods have their own pros and cons.

If talk about list wise deletion approach it takes into consideration only respondents original responses and researcher doesn't enter anything in data set but if there is little missing values then this approach cause loss of large amount of data and influence sample size as well. Mean substitution approach assists saving large amount of data but the disadvantage is that it might interrupt original links that have been shown by respondents. Although, this issue can be disparaged if complete section in questionnaire is missed or missing values are small.

3.3 Sample Characteristics

To recognize characteristics of a sample in your survey, there are many aspects to reflect of your samples. The first four characteristics you need to focus on are gender, age, experience, and education level. All four of these characteristics

must be comparative to that of the population. An important characteristic of the survey is the sample size. You do not want to ask too many people because the border of error will be too high.

3.3.1 Gender

Gender is an important element of demographics. The reason is it distinguishes between male and female in a given sample. In current study, it has been tried to make sure gender equality but still it has been seen that male respondent ratio is much greater than female respondents are.

TABLE 3.1: Gender Distribution

| Gender | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| Male | 179 | 74.0 | 74.0 | 74.0 |
| Female | 63 | 26.0 | 26.0 | 100.0 |
| Total | 242 | 100.0 | 100.0 | |

Table 3.1 represents the information about gender. Table revealed that the more respondents were male respondent comprised of 74% and the remaining 26% were female respondents.

3.3.2 Age

Age is considered as one of the demographics, to which respondents sometimes feel uncomfortable to reveal openly. So, for the suitability of respondents, scale/range was used to collect information regarding their age.

Table 3.2 shows the arrangement of the sample with orientation to age group. 39.7% of respondents were having age between the ranges of 18-25 years. 32.2% of plaintiffs were having age between the ranges of 26-33 years. 28.1% of respondents were having age between the ranges of 34-41 years. In this study, most of the respondent lie in the range of 18-25 years.

TABLE 3.2: Age Distribution

| Age | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| 18-25 | 96 | 39.7 | 39.7 | 39.7 |
| 26-33 | 78 | 32.2 | 32.2 | 71.9 |
| 34-41 | 68 | 28.1 | 28.1 | 100.0 |
| Total | 242 | 100.0 | 100.0 | |

3.3.3 Qualification

Education is the major element which contributes towards the prosperity of the whole Nation and it is also the basic need of the time to compete globally. Hence after gender, qualification/education is another dynamic dimension of the demographics. Education opens up many new and unique paths for success and creativity in order to gain reasonable advantage amongst all the other countries around the world. Probably education plays an important role in demonstrating creativity and innovation in project tasks.

TABLE 3.3: Qualification Distribution

| Qualification | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| Bachelor | 151 | 62.4 | 62.4 | 62.4 |
| Masters | 91 | 37.6 | 37.6 | 100.0 |
| Total | 242 | 100.0 | 100.0 | |

Table 3.3 represents the qualification of the respondents, 62.4% were Bachelors qualified, and 37.6% were Masters qualified. The large number of responded were having a Bachelor's degree.

3.3.4 Experience

Again to collect information regarding the experience of the respondents, different ranges of experience time period were developed so that every respondent can easily indicate the specific occupation of their experience in the relevant field of projects. As experience includes gaining knowledge about concerns of projectized organizations toward adopting new strategies for safety and protection of environment.

TABLE 3.4: Experience Distribution

| Experience | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------|-----------|---------|---------------|--------------------|
| 5 and Less | 169 | 69.8 | 69.8 | 69.8 |
| 6-13 | 70 | 28.9 | 28.9 | 98.8 |
| 22-29 | 3 | 1.2 | 1.2 | 100.0 |
| Total | 242 | 100.0 | 100.0 | |

Table 3.4 represent that 69.8% of the persons were having job expertise ranging from (5 and less) years, 28.9% of persons were having job expertise ranging from (6 - 13) years, 1.2% of persons were having job expertise ranging from (22-29) years. Most of the respondents were lying in the work expertise of (5 and less) years.

3.4 Instrumentation

Main items of this questionnaire are team effectiveness, knowledge sharing, team conflict and employee autonomy. Responses of objects in the questionnaire were filled using a 5 point Likert scale.

3.4.1 Measures

The data was collected through approved questionnaires from diverse authentic sources. Almost 50-60 questionnaires were distributed in each project based organization and each organization was visited during spreading period of questionnaires. Online questionnaires were also distributed to the websites of project based organizations for the quick response. Past researches indicate that, online collection of data is the more convenient way of data collection, as defendants find it easier to fill the questionnaires in contrast to the process of filling questionnaires by paper-pen method and regardless of data collection approach, there is no substantial effect on the quality of data while utilizing any of the two aforementioned methods.

According to the nature of research, objects encompassed in the questionnaire that is (Knowledge sharing), moderator (Team conflict) were reported by the projects employees and mediator of this study (Employee autonomy) were reported by project managers. All the items in the questionnaire were responded using a 5-points Likert-scale where 1 (strongly disagree) to 5 (strongly agree), unless otherwise stated. Questionnaires also cover demographic variables like Gender, Age, Qualification and Experience. 285 questionnaires were distributed in total but only 250 were received. But the actual numbers of questionnaires used for the analysis of data for demonstrating the results were 242. The rejected questionnaires out of 250 questionnaires were those which were not having the complete information or many of the questions were unfilled in those questionnaires hence making them not authentic for the study.

3.4.1.1 Knowledge Sharing

Knowledge sharing was measured on a 5 item Likert scale. This scale was developed by [Park and Lee \(2014\)](#). Sample items include: “We shared the minutes of meetings or discussion records in an effective way”; “We always provided technical documents, including manuals, books, training materials to each other”; “We

shared project plans and the project status in an effective way”; “We always provided know-where or know-whom information to each other in an effective way”; “We tried to share expertise from education or training in an effective way”; “We always shared experience or know-how from work in a responsive and effective way”.

3.4.1.2 Team Effectiveness

This item was measured on a 5 point Likert scale developed by [De Dreu \(2007\)](#). Sample items include: “This team is good in coming up with ways to complete their tasks.”; “This team effectively deals with uncertainty and unexpected events.”. “At times, this team fails to approach its task adequately.”

3.4.1.3 Employee Autonomy

This item was measured using a 5 point likert scale developed by [Morris and Venkatesh \(2010\)](#). Sample items include: “My manager makes it more efficient for my team to do our job by keeping the rules and regulations simple”; “My manager allows my team to do our job our way”; “My manager allows our team to make important decisions quickly to satisfy customer needs”; “My manager allows my team to determine what needs to be done”; “My manager allows our team to make its own choices”.

3.4.1.4 Project Team Conflict

This item was measured using a 5 point Likert scale developed by [Wakefield, Leidner, and Garrison \(2008\)](#). Sample items include: “Team members confront each other on personal matters”; “Team members made negative remarks about each other”; “Negative comments made by some of team members were targeted at others”; “Some of team members tended to ridicule others”; “The differences experienced by team were interpersonal related”.

TABLE 3.5: Instruments.

| No | Variable | Source | Items |
|----|-----------------------------|-----------------------------|-------|
| 1 | Knowledge Sharing (IV) | Park and Lee (2014) | 6 |
| 2 | Employee Autonomy (Med) | Morris and Venkatesh (2010) | 5 |
| 3 | Team Effectiveness (DV) | De Dreu (2007) | 3 |
| 4 | Project Team Conflict (Mod) | Wakefield et al. (2008) | 5 |

3.5 Pilot Testing

Pilot testing helps in testing the usefulness of a questionnaire. It tells about the appropriateness of the questionnaire and tells whether they need correction or not. Before conducting the complete research, it is very necessary to carry out pilot testing in order to save time, money and effort. For this purpose, pilot testing of almost 50 questionnaires were conducted in order to test the rationality and reliability of the questionnaire. It is also done to check that whether the results are in line with the proposed hypothesis or not. After conducting pilot testing it was found that there was no significant issue in the data and the data was completely reliable and all the variables match the threshold value of Cronbach's alpha. All the variables have Cronbach's alpha greater than 0.7

3.6 Data Analysis

To check the links between variables different tests were conducted like correlation, reliability. To study the role of mediation and moderation Preacher and Hayes process macros are used. To check the impact of independent variable on dependent variable simple regression was conducted. Frequencies, Reliability, Regression Moderation and Mediation test was conducted on SPSS whereas CFA was conducted on AMOS. CFA (Confirmatory Factor Analysis) is done to study the

link between observed and latent variable. This helps in analyzing whether the model is consistent with the data or not.

Demographic variables such as age, gender, qualification and experience was measured. Reliabilities of variables like knowledge sharing, team effectiveness, employee autonomy and team conflict were measured. According to researchers the reliability of Cronbach's alpha should be greater than 0.7. In this research all the variables have reliability greater than 0.7. Descriptive statistics, frequencies, reliability and correlation was measured using SPSS.

Next the link between variables was tested using both simple linear and multiple regression. Multiple regression was carried out using Preacher and Hayes model 5. This too was done on SPSS. Moderating impact of team conflict between knowledge sharing and team effectiveness and mediating role of employee autonomy between knowledge sharing and team effectiveness was tested.

Chapter 4

Results

For data analysis different software were adopted such as SPSS and AMOS. Confirmatory factor analysis was conducted for checking the model fitness utilizing Amos. Moreover, to examine relationships between variables, descriptive statistics, Pearson correlation and mediation and moderation analysis SPSS was utilized.

4.1 Confirmatory Factor Analysis

To analyze the measurement model IBM AMOS was utilized. Confirmatory Factor Analysis (CFA) was used to validate the capacity model ([Anderson, Potočnik, & Zhou, 2014](#)) which consisted of four (4) latent variables: knowledge sharing, employee autonomy, team conflict and team effectiveness. The model was checked via fit statistics. These statistics involve multiple indices, such as chi square, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Indices (CFI), Goodness of Fit Index (GFI) and Adjusted Goodness of Fit Index (AGFI).

Comparative Fit Index assumes that there is no correlation between all latent variables and compares sample covariance matrix with null model. The acceptable range is between 0 and 1 and for good model fit the value should be close to 1. Value above 0.90 shows good model fit and below exhibits poor model fit. According to [Gefen, Straub, and Boudreau \(2000\)](#) Goodness of Fit Index (GFI)

asserts absolute fit for measurement model. [Raykov and Marcoulides \(2000\)](#) defined GFI as degree of variance and covariance proportion. The range of GFI is between 0 and 1 and the value should be close to 1. For good model fit the value of GFI should be greater than 0.80 and below this threshold is consider as poor model fit.

Furthermore, according to [\(Byrne, 1998\)](#) Root Mean Square Error of Approximation (RMSEA) evaluate model goodness with population covariance matrix. For RMSEA different authors suggest different threshold values. [Hu and Bentler \(1999\)](#) commended the acceptable range should be between 0.06-0.08, while Lomax and Schumacker (2004) recommended that for good model fit the value should be less than 0.05. Whereas, [\(MacCallum, Browne, & Sugawara, 1996\)](#) suggested that for good model fit the acceptable value should be equal to 0.10 or less than 0.10.

4.1.1 Measurement Model

For validating the measurement model, confirmatory factor analysis were conducted following [Anderson and Gerbing \(1988\)](#) suggestions that composed of four latent variables, knowledge sharing, employee autonomy, team conflict and team effectiveness. The fusion of different fit indices such as model chi-square, comparative fit index (CFI), Tucker-Lewis Index (TLI), incremental fit index (IFI), goodness of fit index (GFI), and root mean square of approximation (RMSEA).

TABLE 4.1: Measurement Model

| | χ^2 | Df | CMIN | GFI | TLI | CFI | RMSEA |
|--------------|-----------|-----|-------|------|------|------|-------|
| | DF | | | | | | |
| Baseline | 152.425** | 134 | 1.137 | .938 | .985 | .988 | .024 |
| Hypothesized | | | | | | | |
| Model | | | | | | | |

* $P > 0$

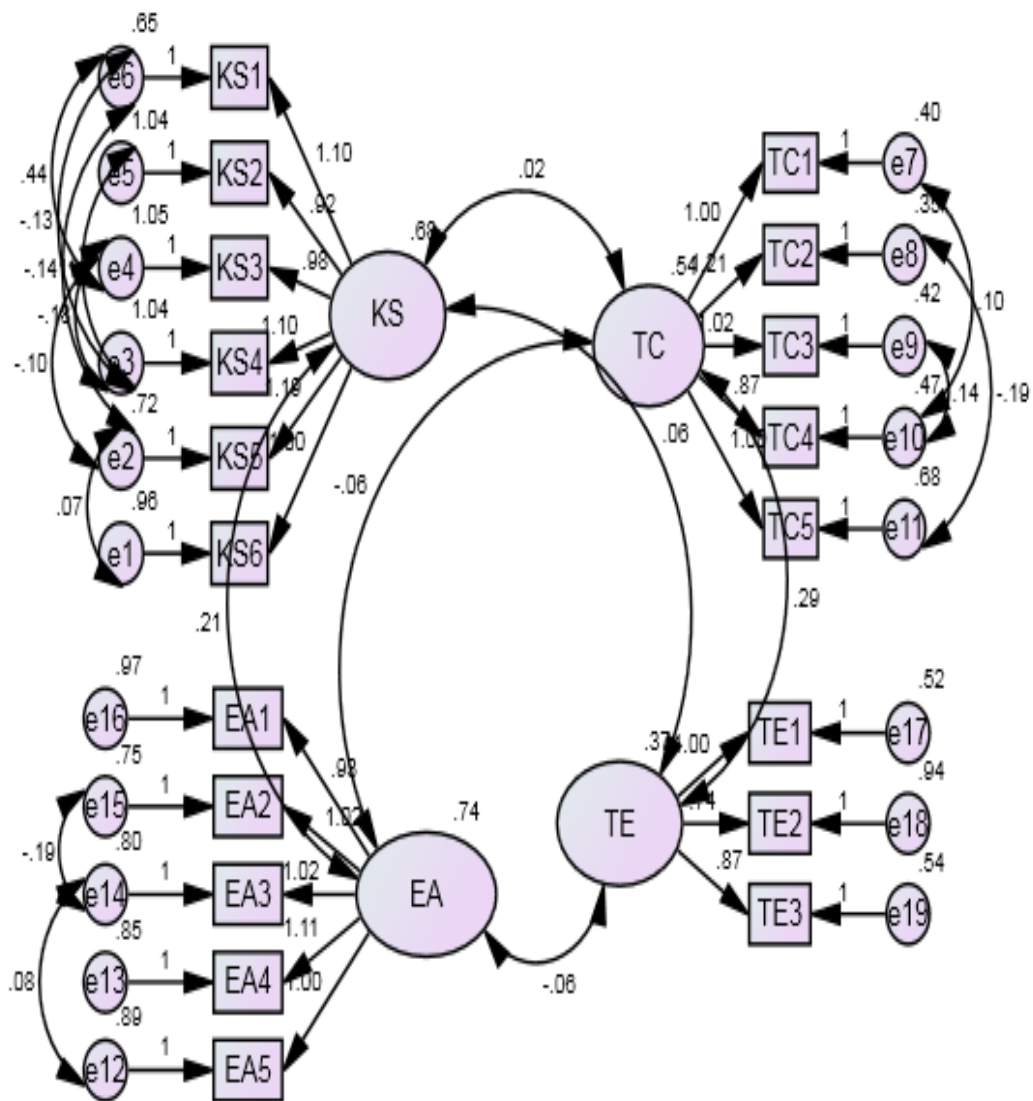


FIGURE 4.1: Measurement Model

Before interpreting, the table given above it is important to clarify the figure 4.1. The PROO latent variable indicates project role overload, EEE indicates emotional exhaustion, TCC exhibits time consciousness and PSII depicts project supervisor incivility. Table 4.1 revealed the results for model fit. For getting good model, certain changes were made to the model like linking certain error terms.

Therefore, as the table depicts that all values meet the threshold values suggested by Hair et al (2009). Incremental fit index (IFI) value is greater than 0.90 that was 0.964, which exhibits excellent fit, comparative fit index (CFI) value, should be greater than 0.90 that was 0.988, which again illustrates good model fit, root

mean square error of approximation value, should be less than 0.07 that was .024, which depicts good model fit. Similarly, the value of Tucker-Lewis index should be greater than 0.90 that was 0.938, which represents good model fit. Moreover, the value of goodness of fit index should be greater than 0.80 that was .938 which indicates excellent model fit. Last but not the least the value of chi-square for model fit should be less than 3 that was 1.611 which represents good model fit.

4.2 Descriptive Statistics

Descriptive statistics of all variables such as knowledge sharing, employee autonomy, team conflict and team effectiveness are show in the table below. The means and standard deviations of all variables are depicted in the table 4.2. The mean values show the response of respondents towards agreements and disagreements with the questions. Higher mean values exhibit respondents' propensity toward agreement side and lower value depicts tendency of respondents towards disagreement.

TABLE 4.2: Descriptive Statistics

| | N | Minimum Value | Maximum Value | Mean | Standard Deviation |
|---------------------------|----------|----------------------|----------------------|-------------|---------------------------|
| Knowledge Sharing | 242 | 1.00 | 5.00 | 3.1439 | .93190 |
| Team Effectiveness | 242 | 1.00 | 5.00 | 3.6017 | .83034 |
| Employee Autonomy | 242 | 1.00 | 5.00 | 3.2906 | 1.00964 |
| Team Conflict | 242 | 1.00 | 5.00 | 3.2025 | .73184 |

Table 4.2 depicts information regarding variables minimum and maximum values and means and standard deviations. Higher mean values are the indication of respondent's propensity towards agreement side and lower mean values are the indication of respondent's tendency towards disagreement side. As the mean value of knowledge sharing in the table was 3.1439 and standard deviation was 0.93 shows that respondents agree that knowledge sharing have impact on team effectiveness. The mean value of team effectiveness was 3.6017 and standard deviation was 0.83 reveals that respondents are agree that they get effective performance in their teams.

The mean value of employee autonomy was 3.29 and standard deviation was 1.09 exhibits that most of the respondents had a propensity towards agreement side. The mean value of team conflict was 3.20 and standard deviation was 0.73 represents that employees are agree that their team shows less effective performance when they have conflict.

4.3 Control Variables

For control variables, one-way ANOVA test was run in SPSS. The main aim of conducting one-way ANOVA is to see that whether the demographic variables have any impact on dependent variable, which is team effectiveness. Hence, our main purpose is to see the relationships, which were proposed in the model and their influence. Similarly, different studies revealed the significance of demographic variables as they probably influence propose relationships (Hunter & Hunter, 1984; McDaniel et al., 1988; Allworth & Hesketh, 1999). If any demographic variables effect the dependent variable, its influence will be control then. As the research main objective is to study project teams, therefore only members working in a team related demographics were included.

TABLE 4.3: Control Variables

| Variables | Team Effectiveness | |
|---------------|--------------------|------|
| | F Value | Sig. |
| Gender | .751 | .387 |
| Age | .521 | .595 |
| Qualification | .167 | .683 |
| Experience | .564 | .570 |

The table 4.3 revealed information regarding control variables. As result exhibits insignificant difference in team effectiveness across gender ($F=0.751$, $p > 0.05$), age ($F=0.521$, $p > 0.05$), qualification ($F=0.167$, $p > 0.05$), experience ($F=0.564$, $p > 0.05$). Hence, all the values showed insignificant relationships, it means that there is no need of controlling any demographic variable because no demographic effect the dependent variable.

4.4 Reliability Analysis

In psychometrics, consistency of scale is called reliability. According to (Carlson & George, 2004), a scale that gives similar results in different situations is known as reliable scale. To anticipate scale internal consistency reliability analysis were conducted. Value of Cronbach alpha is between 0 and 1. High value of Cronbach alpha signifies good reliability and low value of Cronbach value signifies poor reliability and poor scale. According to , the acceptable value of Cronbach alpha is greater than 0.7.

TABLE 4.4: Scale Reliabilities

| Variables | Cronbach's Alpha | Items |
|-------------------------|------------------|-------|
| Knowledge Sharing (IV) | .863 | 6 |
| Employee Autonomy (Med) | .779 | 5 |
| Team Effectiveness (DV) | .801 | 3 |
| Team Conflict (Mod) | .743 | 5 |

Table 4.4 depicts information regarding reliability of the scales. The results revealed that the reliability of knowledge sharing was 0.863, which is greater than threshold value. Moreover, the reliability of employee autonomy was 0.779, which is also greater than threshold value. Furthermore, the reliability of team effectiveness was 0.801 as depicted in the table, which was also high, such a high reliability for this specific variable is present in the study of (Kleijnen et al., 2007). The reliability of team conflict was 0.743, which was greater than the threshold value and the value was high but such high reliability is evident in the study of (Reio Jr, 2011) for this particular variable as in the aforementioned the reliability was 0.93. Overall all the measures have good reliability and greater than the threshold value.

4.5 Correlation Analysis

In any study correlation analysis is carried out in order to check the relations between the variables either they are linked with each other or not. In this research correlation analysis is carried out in order to examine the direct link between knowledge sharing and team effectiveness, the mediating role of employee autonomy between knowledge sharing and team effectiveness and the moderating role of project team conflict between knowledge sharing and team effectiveness.

The positive and negative signs indicate the nature of correlation among variables. Positive sign indicates the positive correlation whereas negative sign shows the

negative correlation. If the value of correlation is between .1 to .3, it shows weak correlation. If the value of correlation is between .3 to .5, it shows moderate correlation and if the value of correlation is above .5 it shows high correlation.

TABLE 4.5: Correlation

| S.No | Variables | 1 | 2 | 3 | 4 |
|------|--------------------|---------|--------|---------|---|
| 1 | Knowledge Sharing | 1 | | | |
| 2 | Employee Autonomy | .292** | 1 | | |
| 3 | Team Effectiveness | .328** | .506** | 1 | |
| 4 | Team Conflict | -.207** | .061 | -.181** | 1 |

* $P < 0.05$, ** $p < 0.01$, *** $p < .001$ N=242 **Correlation is significant at the level 0.01(2-tailed)

Table 4.5 shows that employee autonomy has a positive and significant relation with knowledge sharing. The value of the correlation between employee autonomy and knowledge sharing is ($r = .292^{**}$, $p < .01$). Team effectiveness has a positive correlation with knowledge sharing ($r = .328^{**}$, $p < .01$). Team conflict is negatively associated with knowledge sharing ($r = -.207^{**}$, $p < .01$). Team effectiveness is positively associated with employee autonomy ($r = .506$, $p < .01$) and with team conflict ($r = .061$, $p < .01$). Team conflict is negatively associated with team effectiveness ($r = -.181$, $p < .01$).

4.6 Regression Analysis

Correlation analysis only shows the link between variables whereas regression analysis helps in finding out the causal relationships among variables. There are two types of regressions namely simple regression and multiple regression. Simple regression is carried out in the presence of two variables only in order to establish

causal relationship whereas multiple regression is carried out when there are more than two variables for example mediation and moderation.

4.6.1 Simple Regression

TABLE 4.6: Simple Regression

| Team Effectiveness | | | |
|---------------------------|---------|-------|------------|
| Predictor | β | R^2 | Sig |
| Knowledge Sharing | .355 | .107 | .000 |

P < 0.05, **p < 0.01, *p < .001* N=242 Un-standardized regression coefficient reported

Hypothesis 1 stated that there is a positive relation between knowledge sharing and team effectiveness. The results prove the same hypothesis. Results show that the knowledge sharing behavior of individuals is positively related with team effectiveness. The value of β is 0.355 and the value of its significance is .000. This shows that the relation between knowledge sharing and team effectiveness is highly significant. The value of R^2 is .107. This shows that knowledge sharing brings about 11% variation in team effectiveness

TABLE 4.7: Simple Regression

| Employee Autonomy | | | |
|--------------------------|---------|-------|------------|
| Predictor | β | R^2 | Sig |
| Knowledge Sharing | .260 | .085 | .000 |

P < 0.05, **p < 0.01, *p < .001* N=242 Un-standardized regression coefficient reported

Table 4.7 shows the relationship between knowledge sharing and employee autonomy. The results in the hypothesis strongly justify this relationship. Results reveal

that knowledge sharing is positively linked with employee autonomy. The value of β is .260 and the value of its significance is .000 which shows that the data is highly significant. The value of R^2 is .085. This shows that knowledge sharing brings about 8% variation in employee autonomy

TABLE 4.8: Simple Regression

| Team Effectiveness | | | |
|---------------------------|---------|-------|------------|
| Predictor | β | R^2 | Sig |
| Employee Autonomy | .615 | .256 | .000 |

P < 0.05, **p < 0.01, *p < .001* N=242 Un-standardized regression coefficient reported

Table 4.8 represent the relationship between employee autonomy and team effectiveness. Results strongly support this relationship. The results depict positive relationship between the two variables. The value of β is .615 and the value of p is .000 which is highly significant and represents the positive relationship between the two. The value of R^2 is .256. This shows that employee autonomy brings about 25% variation in team effectiveness.

4.6.2 Multiple Regression

In the current research, mediation and moderation analysis was carried out using Preacher and Hayes (2013) process macros. Mediation analysis was carried out to study the mediating effect of employee autonomy between knowledge sharing and team effectiveness. Whereas, moderation analysis was conducted to study the effect of project team conflict as a moderator between knowledge sharing and team effectiveness. For this purpose, Preacher and Hayes model 5 was used.

Hypothesis 2 states that employee autonomy plays a mediating role between knowledge sharing and team effectiveness. The results shown in table 4.9 strongly support and justify this hypothesis. The table shows that the indirect effect of knowledge sharing on team effectiveness has the lower level confidence interval and upper

TABLE 4.9: Mediation Analysis

| IV | Effect of IV on M (a path) | Effect of M on DV (b path) | Direct Effect of IV on DV (c' path) | Total Effect of IV on DV (c path) | Bootstrapping for Indirect | Results Effect |
|--------------------------|-------------------------------|-------------------------------|--|--------------------------------------|----------------------------|----------------|
| | β | β | β | β | LL95%CI | UL95%CI |
| Knowledge Sharing | .2600 | .5449 | .2135 | 3.4602 | .0641 | .2477 |

Note. Un-standardized regression coefficient indicated. Bootstrap sample size 5000. LL = lower limit; CI = confidence interval; UL = upper limit. N=242, *P < .05; **P < .01

level confidence interval of .0641 and .2477. Both the values of LLCI and ULCI have positive and same signs which shows the strong mediating role of employee autonomy between knowledge sharing and team effectiveness. Table 4.9 concludes that mediation is taking place between the variables. Hence hypothesis 3 is accepted, employee autonomy mediates the relationship between knowledge sharing and team effectiveness.

TABLE 4.10: Moderation Analysis

| | β | se | t | p |
|--|------------------|-------|------------------|------|
| Int_term → knowledge Sharing* | -.2218 | .0427 | -5.1961 | .000 |
| Team Conflict | | | | |
| | LL 95% CI | | UL 95% CI | |
| Bootstrap results for indirect effect | -.3059 | | -.1377 | |

Note. Un-standardized regression coefficient indicated. Bootstrap sample size 5000. LL = lower limit; CI = confidence interval; UL = upper limit. N=242, * P < .05; ** P < .01

Table 4.10 shows the role of moderator between knowledge sharing and team effectiveness. The results in the above table strongly support this hypothesis. This is mainly because the interaction term of knowledge sharing and team effectiveness has the lower level confidence interval and upper level confidence interval of -.3059 and -.1377 respectively. Since both the LLCI and ULCI have same negative signs this shows the negative role of moderator between knowledge sharing and team

effectiveness. The value of β is .2218 and the value of p is .000 which is highly significant. This means that project team conflict moderates the relationship between knowledge sharing and team effectiveness. Hence it is concluded that hypothesis 3 is accepted.

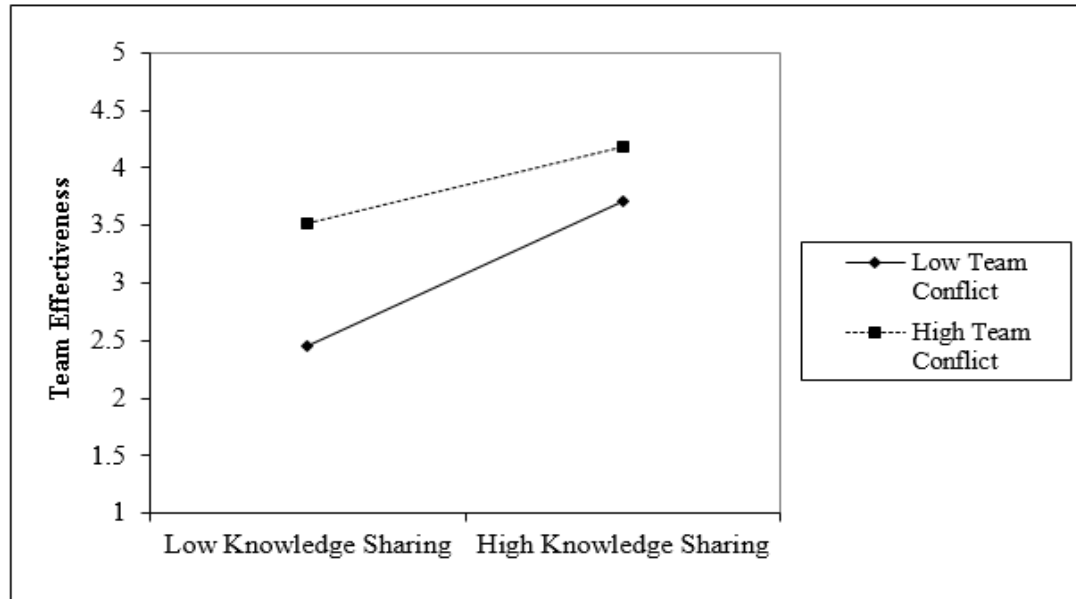


FIGURE 4.2: Moderation Graph

In this figure it is shown that high project team conflict lowers the knowledge sharing attitude of employees. The upward slope indicates the positive relation between team conflict and knowledge sharing. Position of lines represent the relationship between knowledge sharing and team effectiveness. Dotted lines represent high team conflict whereas the bold lines represent low team conflict. Since the dotted lines are above the bold lines it shows that in case of high team conflict the relation between knowledge sharing and team effectiveness will be weaker and in case of low team conflict the relation between knowledge sharing and team effectiveness will be stronger.

4.7 Summary of Accepted/ Rejected Hypothesis

TABLE 4.11: Summary about Accepted/ Rejected hypothesis

| Hypothesis | Statements | Results |
|------------|---|-----------------|
| H_1 | Knowledge sharing has a positive influence on team effectiveness | Accepted |
| H_2 | Employee autonomy plays a mediating role between knowledge sharing and team effectiveness. | Accepted |
| H_3 | Project team conflict plays a moderating role between Knowledge Sharing and team effectiveness. | Accepted |

Chapter 5

Discussion and Conclusion

5.1 Discussion

Utilizing knowledge based theory (Nonaka et al., 2000), the purpose of the present study was to suggest and test a model of knowledge sharing on team effectiveness in project based organizations. For this purpose, data from project-based organizations in Pakistan was collected. As anticipated, the findings of the study were in congruous with hypothesized model. Particularly, the findings showed that project role overload and emotional exhaustion are the possible backgrounds.

The details discussion of each hypothesis is following.

5.1.1 Question 1: Does Knowledge Sharing Impact Team Effectiveness in Projects?

To examine the answer of the first question Does Knowledge Sharing impact team effectiveness in projects hypothesis 1 was framed. Hypothesis 1 states that knowledge sharing positively and significantly connected with team effectiveness. The results for this particular was found significant and hypothesis 1 was accepted as the findings suggests that knowledge sharing was significantly linked with team effectiveness. The findings are consistent with knowledge base theory. Similarly,

previous studies have discussed that Team effectiveness require disbursed information to be appropriately shared and built-in via team contributors (Xie & Luan, 2014; Pinjani & Palvia, 2013; Panteli & Sockalingam, 2005).

Otherwise team will be less effective, suffering greater costs connected with information search, announcement failure, statistics confusion and misconception, and insufficient choice making due to missing records (Gray, 2001; Pinjani & Palvia, 2013). Knowledge sharing by way of member professionals allows fine crew consequences by ensuring all pieces of a statistics puzzle are on hand for undertaking overall performance and terrific selection making. This allows the team, irrespective of location, to achieve its work requirements and contribute to an organization's objectives.

5.1.2 Question2: Does Employee Autonomy Mediate the Relationship between Knowledge Sharing and Team Effectiveness in Projects?

To examine answers for question 2 that Does Employee Autonomy mediate the relationship between knowledge sharing and team effectiveness in projects hypothesis 2 was framed. Hypothesis 2 states that employee autonomy positively and significantly linked with team effectiveness. The results for this hypothesis distinguish strong justifications. In that capacity, self-rule is considered a "basic formative direction" (Ryan et al., 1997) that encourages people to have their different needs met and to act as per by and by endorsed qualities and aims. At the point when independence is deficient with regards to, individuals "can't get to the comprehensive learning important to distinguish what they need" (Ryan et al., 1997).

Team participants have a tendency to specific their thoughts more freely and openly irrespective of any social or administrative obliges (Duarte & Snyder, 1999). Group individuals are in a position to check each other extra accurately primarily built on performance and involvement.

5.1.3 Question 3: Does Project Team Conflict Moderates the Relationship between Employee Autonomy and Team Effectiveness in Projects?

For examining answer for question 3, hypothesis 3 formulated based on literature. Hypothesis 3 states that team conflict moderates the relationship between knowledge sharing and team effectiveness; such that knowledge sharing will have stronger positive relationship with team effectiveness. According to the results of the study, team conflict moderates the relationship between knowledge sharing and team effectiveness such that team conflict weakens the relationship between knowledge sharing and team effectiveness. [Jehn and Mannix \(2001\)](#) likewise noticed that procedure conflicts concurring with different types of conflict would be hurtful.

Teams can be positive by “adding knowledge and creativity, increasing the understanding and acceptance of ideas, and improving commitment and motivation” or negative by stifling ideas, encouraging conformity ([Jehn & Mannix, 2001](#)). Team conflict reduces collective effort, decreases communication among team members and removes supportive behavior which effects the performance of team ([Fong et al., 2018](#)). Further project team conflict can disrupt communication and cooperation among team members reducing their receptiveness to ideas promoted by other team members ([Elbanna et al., 2011](#)).

5.2 Research Implications

5.2.1 Theoretical Implications

The current study findings advance the literature in various ways. In this research the role of knowledge sharing and its impact on team effectiveness was studied. knowledge is seen as an organizational strength that can be used to produce and stand a upper hand for the two associations and people. Associations, as learning based frameworks, must perceive the criticalness of information as a significant

resource that can possibly affect prosperity, maximize economic value, and improve effectiveness (Gold et al., 2001; Alavi & Leidner, 2001). As information is dispersed among hierarchical workers and other non-partnered people, the utilization of groups can encourage the distribution and combination of learning to progress execution and results.

Associations build up groups to unite people with the vital aptitude and abilities to team up on hierarchical undertakings (Hoegl & Parboteeah, 2007). The upside of the group structure is that it incorporates the information that is appropriated among contemporaries, which encourages collaborations and the achievement of increasingly successful results (Lam, 2000). Notwithstanding, learning sharing is subject to the eagerness of individual colleagues to share the remarkable information they have (Bock et al., 2005) and shockingly, a typical observation is that sharing learning may prompt lost learning possession and related loss of intensity.

This can prompt the storing of learning by workers and a hesitance to sharing (Phang, Kankanhalli, & Sabherwal, 2009). As learning sharing and thought trade is vital for virtual group coordinated effort, a powerful virtual group requires its individuals to put the achievement of the group in front of their propensity to store information.

Employee autonomy is a key factor for addressing these challenges and is central element that can mediate team effectiveness (Jarvenpaa & Leidner, 1998; Zolin et al., 2004; Henttonen & Blomqvist, 2005). However, building trust between colleagues in a free group situation is a mind boggling task. Colleagues can't watch physical practices which customary up close and personal colleagues depend upon to build up and continue trust. Colleagues are dependent upon on various practices, one of a kind to virtual settings, to survey dependability and make up for the absence of physically watched practices. Information input was viewed as a key conduct that colleagues can watch and depend upon to manufacture viability inside their group.

Expanding the Knowledge Based Theory of the Firm, a new calculated model which clarifies the connection among learning sharing, group struggle, and group

viability, considering the one of a kind qualities of worker self-sufficiency was recommended. This model was tested utilizing information produced on an arbitrary arrangement of undertakings in projectized authoritative setting. The consequences of basic condition displaying investigations demonstrate that learning sharing emphatically group viability. The discoveries likewise recommend that worker self-governance completely intercedes the connection between information sharing and group adequacy and group strife moderate or debilitate the connection between learning sharing and group viability.

Our research covers the Knowledge Based Theory of the Firm by refining our considerate of how knowledge sharing effects team effectiveness. It is one of the first revisions to examine the role knowledge sharing plays in team effectiveness and association with employee autonomy. Our examination likewise adds to an ongoing require the examination concerning socio-enthusiastic procedures in social settings to all the more likely comprehend what adds to group adequacy (Berry, 2014; DeOrtentiis et al., 2011; Pinjani & Palvia, 2013).

5.2.2 Practical Implications

The current study has numerous managerial inferences. It demonstrates that knowledge sharing improves team effectiveness. Therefore, it is suggested that project managers in different project based organizations should share knowledge with their team members. Managers should also ensure that this knowledge will not be misused in or out of the organization. When project managers share knowledge with their team member they should also trust their subordinates that they will not misuse this information. This sharing of knowledge and innovative behavior of the managers eventually leads to the effective presentation of the team. Successful implementation of project activities, accordingly enables the group to achieve the preferred objective of an actual project.

5.3 Limitations of Research

There is nothing in the world that are flawless everything has some kind of discrepancies. This research has also some limitations, which were faced while conducting this particular research. Like, as the current study foundation was established on knowledge base theory, which bestow support for the series of links represented in the study (knowledge sharing to employee autonomy to team effectiveness). Secondly, the data collection for the current study is cross sectional due to time and resources limitations, as this does not permit for making deduction regarding causality between variables study as shown in hypothesized model.

Similarly, the current research takes only project based organizations into consideration the limitation is the generalizability of the study. Another limitation is to find out team based working environment where number of people working on a single task so that data can be gathered related to our hypothesis. Another limitation is due to time constraint, only one mediator and moderator were tested.

5.4 Future Research Directions

Future researchers can improve the model by checking other mediators like selective hiring, conflict management, relationship building and job involvement. They can also check other moderators like communication and personality traits. The data were collected only from only one city of Pakistan so it was very limited. The future researcher can improve the data collection method and collect data from different cities and countries. They can also check other traits of knowledge like knowledge management, knowledge transfers and implicit or explicit knowledge impact on team effectiveness.

5.5 Conclusion

The purpose of the study is to discover the effect of knowledge sharing on team effectiveness with mediating role of employee autonomy and moderating role of

team conflict. To find the objectivity of the result, 285 questionnaires were distributed and collected 242 and only those 242 questionnaires were considered for analysis. According to the outcome of the study, H1, H2 and H3 are accepted. Justifications of hypothesis acceptance and rejection were discussed and practical and theoretical implications of the study were also discussed.

Managers in project based organizations must share knowledge with their employees which should be properly documented and accessible to everyone. This increases collaboration and access to the information of their subordinates. When managers focus on their employee they can easily assess the changes required according to their needs. The current study proposes that managers of the project base organization must realize how to increase the creative self-efficacy of team members so that they bring innovative ideas for the performance of team.

Managers can do this by empowering their subordinates by respecting their ideas and efforts. Therefore, personnel can recognize the influence of their determinations and work on the success of different projects. Managers can also empower their employees by training to improve their skills which will enable them to perform their role more efficiently, effectively and confidently.

References

- Alexy, O., George, G., & Salter, A. J. (2013). Cui bono? the selective revealing of knowledge and its implications for innovative activity. *Academy of management review*, *38*(2), 270–291.
- Alsharo, M., Gregg, D., & Ramirez, R. (2017). Virtual team effectiveness: The role of knowledge sharing and trust. *Information & Management*, *54*(4), 479–490.
- Anderson, & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, *103*(3), 411–424.
- Anderson, Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of management*, *40*(5), 1297–1333.
- Argote, L., Ingram, P., Levine, J. M., & Moreland, R. L. (2000). Knowledge transfer in organizations: Learning from the experience of others. *Organizational behavior and human decision processes*, *82*(1), 1–8.
- Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management science*, *49*(4), 571–582.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Macmillan.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, *9*(1), 64–76.
- Basaglia, S., Caporarello, L., Magni, M., & Pennarola, F. (2010). It knowledge

- integration capability and team performance: the role of team climate. *International Journal of Information Management*, 30(6), 542–551.
- Blau, P. M. (1964). *Exchange and power in social life* (Vol. 33) (No. 3). New Jersey: Transaction Publishers.
- Bock, G.-W., Zmud, R. W., Kim, Y.-G., Lee, J.-N., et al. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological factors, and organizational climate. *MIS quarterly*, 29(1), 87–111.
- Bradley, B. H., Anderson, H. J., Baur, J. E., & Klotz, A. C. (2015). When conflict helps: Integrating evidence for beneficial conflict in groups and teams under three perspectives. *Group Dynamics: Theory, Research, and Practice*, 19(4), 243–253.
- Buroon, J. K., Bulkr, D. B., Ebesu, A. S., White, C. H., & Rockwell, P. A. (1996). Testing interpersonal deception theory: Effects of suspicion on communication behaviors and perceptions. *Communication Theory*, 6(3), 243–267.
- Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The international journal of human resource management*, 16(5), 720–735.
- Carlson, J. R., & George, J. F. (2004). Media appropriateness in the conduct and discovery of deceptive communication: The relative influence of richness and synchronicity. *Group Decision and Negotiation*, 13(2), 191–210.
- Chen, Chuang, Y.-W., & Chen, P.-Y. (2012). Behavioral intention formation in knowledge sharing: Examining the roles of kms quality, kms self-efficacy, and organizational climate. *Knowledge-Based Systems*, 31(3), 106–118.
- Chen, & Huang, J.-W. (2007). How organizational climate and structure affect knowledge management—the social interaction perspective. *International journal of information management*, 27(2), 104–118.
- Chen, & Zheng, L. (2018). How does subsidiary autonomy influence performance? the moderating role of uncertainty. *Nankai Business Review International*, 9(3), 348–365.
- Choi, J., & Wang, H. (2009). Stakeholder relations and the persistence of corporate

- financial performance. *Strategic management journal*, 30(8), 895–907.
- Church, M. A., Elliot, A. J., & Gable, S. L. (2001). Perceptions of classroom environment, achievement goals, and achievement outcomes. *Journal of educational psychology*, 93(1), 43–58.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, 20(1), 92–117.
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of management*, 23(3), 239–290.
- Cohen-Charash, Y., & Mueller, J. S. (2007). Does perceived unfairness exacerbate or mitigate interpersonal counterproductive work behaviors related to envy? *Journal of applied psychology*, 92(3), 66–86.
- Cummings, J. N. (2004). Work groups, structural diversity, and knowledge sharing in a global organization. *Management science*, 50(3), 352–364.
- Davenport, T. H. (1997). Ten principles of knowledge management and four case studies. *Knowledge and process Management*, 4(3), 187–208.
- Davenport, T. H., Prusak, L., et al. (1998). *Working knowledge: How organizations manage what they know*. Harvard Business Press.
- De Dreu, C. K. (2007). Cooperative outcome interdependence, task reflexivity, and team effectiveness: a motivated information processing perspective. *Journal of applied psychology*, 92(3), 628–648.
- Del Giudice, M., & Maggioni, V. (2014). Managerial practices and operative directions of knowledge management within inter-firm networks: a global view. *Journal of Knowledge Management*, 18(5), 841–846.
- de Wit, F. R., Jehn, K. A., & Scheepers, D. (2013). Task conflict, information processing, and decision-making: The damaging effect of relationship conflict. *Organizational Behavior and Human Decision Processes*, 122(2), 177–189.
- Fong, P. S., Men, C., Luo, J., & Jia, R. (2018). Knowledge hiding and team creativity: The contingent role of task interdependence. *Management Decision*, 56(2), 329–343.

- Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, 4(1), 7–18.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American sociological review*, 85(3), 161–178.
- Hoegl, M., & Parboteeah, K. P. (2007). Creativity in innovative projects: How teamwork matters. *Journal of engineering and technology management*, 24(1-2), 148–166.
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1–55.
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative science quarterly*, 44(2), 256–282.
- Jehn, K. A., & Mannix, E. A. (2001). The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of management journal*, 44(2), 238–251.
- Leinonen, P., & Bluemink, J. (2008). The distributed team members' explanations of knowledge they assume to be shared. *Journal of Workplace Learning*, 20(1), 38–53.
- Loughry, M., & C. Amason, A. (2014). Why wont task conflict cooperate? deciphering stubborn results. *International Journal of Conflict Management*, 25(4), 333–358.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, 1(2), 130–142.
- Michinov, E., & Juhel, J. (2018). Multilevel influences of team identification and transactive memory on team effectiveness. *Team Performance Management: An International Journal*, 24(1/2), 106–120.
- Morris, M. G., & Venkatesh, V. (2010). Job characteristics and job satisfaction: understanding the role of enterprise resource planning system implementation. *Mis Quarterly*, 34(1), 20–32.

- Nonaka, I., & Konno, N. (1998). The concept of ba: Building a foundation for knowledge creation. *California management review*, 40(3), 40–54.
- Nonaka, I., & Takeuchi, H. (1995). The knowledge creating. *New York*, 82(1), 304.
- Nonaka, I., Toyama, R., & Nagata, A. (2000). A firm as a knowledge-creating entity: a new perspective on the theory of the firm. *Industrial and corporate change*, 9(1), 1–20.
- Panteli, N., & Sockalingam, S. (2005). Trust and conflict within virtual inter-organizational alliances: a framework for facilitating knowledge sharing. *Decision support systems*, 39(4), 599–617.
- Park, J.-G., & Lee, J. (2014). Knowledge sharing in information systems development projects: Explicating the role of dependence and trust. *International Journal of Project Management*, 32(1), 153–165.
- Peters, L. M., & Manz, C. C. (2007). Identifying antecedents of virtual team collaboration. *Team Performance Management: An International Journal*, 13(3/4), 117–129.
- Phang, C. W., Kankanhalli, A., & Sabherwal, R. (2009). Usability and sociability in online communities: A comparative study of knowledge seeking and contribution. *Journal of the association for Information Systems*, 10(10), 2–12.
- Pinjani, P., & Palvia, P. (2013). Trust and knowledge sharing in diverse global virtual teams. *Information & Management*, 50(4), 144–153.
- Pulakos, E., Dorsey, D., & Borman, W. (2003). Managing knowledge for sustained competitive advantage: Designing strategies for effective human resource management. *Hiring for knowledge-based competition.()*. San Francisco: Jossey-Bass, 82(1), 1–8.
- Rayeski, E., & Bryant, J. (1990). Team resolution process: A guideline for teams to manage conflict, performance, and discipline. In *The international conference on work teams proceedings: Anniversary collection. the best of* (Vol. 19, pp. 215–221).
- Raykov, T., & Marcoulides, G. A. (2000). A method for comparing completely

- standardized solutions in multiple groups. *Structural equation modeling*, 7(2), 292–308.
- Rungtusanatham, M., Salvador, F., Forza, C., & Choi, T. Y. (2003). Supply-chain linkages and operational performance: a resource-based-view perspective. *International Journal of Operations & Production Management*, 23(9), 1084–1099.
- Ryan, R. M., Kuhl, J., & Deci, E. L. (1997). Nature and autonomy: An organizational view of social and neurobiological aspects of self-regulation in behavior and development. *Development and psychopathology*, 9(4), 701–728.
- Stasser, G., Vaughan, S. I., & Stewart, D. D. (2000). Pooling unshared information: The benefits of knowing how access to information is distributed among group members. *Organizational behavior and human decision processes*, 82(1), 102–116.
- Teng, J. T., & Song, S. (2011). An exploratory examination of knowledge-sharing behaviors: solicited and voluntary. *Journal of knowledge management*, 15(1), 104–117.
- Wakefield, R. L., Leidner, D. E., & Garrison, G. (2008). Research note: a model of conflict, leadership, and performance in virtual teams. *Information systems research*, 19(4), 434–455.
- Xie, X.-Y., & Luan, K. (2014). When business becomes personal: The catalyst implication of subgroup perception underlying the co-occurrence of task and relationship conflict. *Group Dynamics: Theory, Research, and Practice*, 18(1), 87–98.
- Yang, X., & Chu, X. (2012). People value for team effectiveness in china: the mediating role of leader identification. *Nankai Business Review International*, 3(1), 65–74.

Appendix

Survey Questionnaire

Dear respondent,

I am a student of MS Project Management at Capital University of Sciences and Technology, Islamabad. I am conducting a research on impact of knowledge sharing on team effectiveness, mediating role of employee autonomy, moderating role of project team conflict. You can help me by completing the questionnaire, which I think you will find quite interesting. I appreciate your participation in my study and I assure that your **responses will be held confidential** and will only be used for education purposes.

Regards,

Sayab Nadeem Qureshi

Capital University of Science & Technology (CUST), Islamabad.

Section 1**Demographics**

| | | | | | |
|----------------------|------------|----------|--------|-----------|--------------|
| | 1 | 2 | | | |
| Gender | Male | Female | | | |
| | 1 | 2 | 3 | 4 | 5 |
| Age | 18-25 | 26-33 | 34-41 | 42-49 | 50 and Above |
| | 1 | 2 | 3 | 4 | 5 |
| Qualification | Matric | Bachelor | Master | MS/M.Phil | PhD |
| | 1 | 2 | 3 | 4 | 5 |
| Experience | 5 and Less | 6-13 | 14-21 | 22-29 | 30 and Above |

Section 2**Knowledge Sharing**

Please insert a check mark in the appropriate column to indicate whether you agree or disagree with each of the following statements:

1= Strongly Disagree 2= Disagree 3= Neither Agree/nor Disagree 4= Agree 5= Strongly Agree

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | We share the minutes of meetings or discussion records in an effective way. | 1 | 2 | 3 | 4 | 5 |
| 2 | We always provided technical documents, including manuals, Books, training materials to each other. | 1 | 2 | 3 | 4 | 5 |
| 3 | We shared project plans and the project status in an effective way. | 1 | 2 | 3 | 4 | 5 |
| 4 | We always provided know-where or know-whom information to each other in an effective way. | 1 | 2 | 3 | 4 | 5 |
| 5 | We tried to share expertise from education or training in an effective way. | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|---|--|---|---|---|---|---|
| 6 | We always shared experience or know-how from work in a responsive and effective way. | 1 | 2 | 3 | 4 | 5 |
|---|--|---|---|---|---|---|

Section 3

Employee Autonomy

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 | My manager makes it more efficient for my team to do our job by keeping the rules and regulations simple. | 1 | 2 | 3 | 4 | 5 |
| 2 | My manager allows my team to do our job our way. | 1 | 2 | 3 | 4 | 5 |
| 3 | My manager allows our team to make important decisions quickly to satisfy customer needs. | 1 | 2 | 3 | 4 | 5 |
| 4 | My manager allows my team to determine what needs to be done. | 1 | 2 | 3 | 4 | 5 |
| 5 | My manager allows our team to make its own choices. | 1 | 2 | 3 | 4 | 5 |

Section 4

Team Conflict

| | | | | | | |
|---|--|---|---|---|---|---|
| 1 | Team members confront each other on personal matters | 1 | 2 | 3 | 4 | 5 |
| 2 | Team members made negative remarks about each other | 1 | 2 | 3 | 4 | 5 |
| 3 | Negative comments made by some of team members were targeted at others | 1 | 2 | 3 | 4 | 5 |
| 4 | Some of team members tended to ridicule others | 1 | 2 | 3 | 4 | 5 |
| 5 | The differences experienced by team were interpersonal related | 1 | 2 | 3 | 4 | 5 |

Section 5

Team Effectiveness

| | | | | | | |
|---|--|---|---|---|---|---|
| 1 | This team is good in coming up with ways to complete | 1 | 2 | 3 | 4 | 5 |
|---|--|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| | their tasks. | | | | | |
| 2 | This team effectively deals with uncertainty and unexpected events. | 1 | 2 | 3 | 4 | 5 |
| 3 | At times, this team fails to approach its task adequately. | 1 | 2 | 3 | 4 | 5 |

Thank you for your time and cooperation