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TECHNOLOGY, ISLAMABAD



**Impact of Inclusive Leadership on  
Project Innovation: Mediating  
Role of Psychology Safety and  
Moderating Role of Organization  
Culture**

by

**Iqra Bukhari**

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

in the

**Faculty of Management & Social Sciences**

**Department of Management Sciences**

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*This research is dedicated to my family siblings and teacher.*



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## *Acknowledgement*

I am very thankful to AL-Mighty ALLAH he give me strength and power to achieve my goals, I want to dedicate this work first of all to ALLAH, everything is done just because of ALLAH after that I will dedicate to my loving and caring parents and siblings they support me and encourage me in every possible way. I always remember and dedicate to my close and best friends who motivate me and help me every time. I always appreciate and never forget what they have done for me. My respectable teachers those who guide me in every phase of work specially dedicate to my teachers.

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**(Iqra Bukhari)**

## *Abstract*

This study focuses on the relationship between inclusive leadership and project innovation with mediating role of psychology safety and moderating role of organizational culture. The specific context of the study is the project based organizations in Pakistan. Data were collected using questionnaires from 223 employees working on various projects across the twin cities (Islamabad and Rawalpindi) of Pakistan. Results indicate that inclusive leadership is positively associated with project innovation. Moreover, mediating role of psychology safety and moderating role of organizational culture was also established. Results, theoretical and practical implications are discussed.

**Keywords: Inclusive Leadership, Psychology Safety, Project Innovation, Organizational Culture.**



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# Abbreviations

<b>DV</b>	Dependent Variable
<b>IL</b>	Inclusive Leadership
<b>IV</b>	Independent Variable
<b>LLCI</b>	Lower Level Confidence Interval
<b>LMX</b>	Leader-Member Exchange Theory
<b>OC</b>	Organizational Culture
<b>PI</b>	Project Innovation
<b>PS</b>	Psychology Safety
<b>SME</b>	Small and medium sized companies
<b>ULCI</b>	Upper Level Confidence Interval

# Chapter 1

## Introduction

### 1.1 Background

In today's chaotic and uncertain business environment, organizations are striving for survival and growth. (Battistelli, Montani, Odoardi, Vandenberghe, & Picci, 2014; Chowhan, Pries, & Mann, 2017; Lauser, 2010). Thus, maintaining market competitiveness requires an organization's focus on creativity or innovation, as the innovation is a basic or fundamental factor of both competitiveness and success. In this context, academic scholars and researchers have focused their efforts on individual and organizational innovation (Chen, Zheng, Yang, & Bai, 2016; Gumusluoglu & Ilsev, 2009; Ye, Wang, & Guo, 2019). Organizations are continuously involved in multiple projects for exploiting and sustaining market share.

Besides, this innovation promotes enterprise development and now organizations are more dependent on the employees innovative behaviors for the sustaining and strong their competitive advantage against market rivalry (Odoardi, Montani, Boudrias, & Battistelli, 2015).

Hence, for organizational innovation management leadership plays very critical role because leadership performs a vital decisive role in increasing the project creativity(Kesting, Ulhøi, Song, & Niu, 2015). Moreover, corporate top management are the major source and drivers of the innovation management in the whole organization which they design and implement by their different strategies and

leadership styles (Somech, 2006). Bel (2010) concludes that various leadership styles impact various dimensions of employee's characteristics such as employee involvement, creativity and commitment which further leads towards creation of the climate for the innovation management in the organization. However, few studies have been undertaken to determine the long-term viability of various leadership styles used to form working groups and the extent to which they foster innovative behavior (Fang, Chen, Wang, & Chen, 2019).

Therefore, leadership is the most important variable in the organizational scenario due to its impacts on the employee innovation behaviors (B. Liu, Qi, & Xu, 2017; Zubair, Bashir, Abrar, Baig, & Hassan, 2015). According to the B. Liu et al. (2017) different leadership styles are used in the organization for managing workforce in order to accomplish all organizational activities and procedures but the inclusive leadership is a main highlight and prominent style of leadership that emphasizes a people-oriented approach, fairness and justice (Liu, 2016). Y. Liu, Zhu, and Zhao (2016) which further leads towards the innovation in the organization. Because, fundamentally leadership inclusiveness are the words, deeds, optimism, actions and promotes collaboration leaders shown the other team members contribution they appreciate and leadership is "The ability of an individual to influence, motivate and enable others to contribute towards the effectiveness and success of organization of which they are members" (House & Javidan, 2004).

Many recognized firms have incorporated the necessity for innovation and have created processes, procedures, and even whole new R&D departments to discover new technologies and opportunities (Das et al, 2017). The increasing number of project configurations that value innovation in impulsive situations, such as, drive project managers beyond evidence-based policies, even when they are uninformed of the requests pull (Huff, 2016). Various factors like individual, job and environment play significant roles during the process of innovation, particularly in terms of concept generation and subsequent implementation (Farr et al., 2003).

Inclusive leadership allows the multi-dimensional teams to collaborate in the project innovation by overcoming the inhibiting effects of status differences. As the structure of organization is becoming more complex, project team members are ever more appreciated for their potential to implement change, innovation and solve

problems (Carvalho, Patah, & de Souza Bido, 2015). As Ye et al. (2019) noted, independent variable inclusive leadership foster team performance and innovation by establishing a strong indirect positive correlation between independent variable inclusive leadership and dependent variable project innovation, they are mediate by the psychology safety. Additionally, empirical findings indicate the existence of a direct relationship among inclusive leadership project innovation. Carmeli, Reiter-Palmon, and Ziv (2010) Concludes that inclusive leadership always provide the intellectual and emotional support to their team to balance the work and they motivate and encourage the team members to perform the creative behavior. Inclusive leaders are available to discuss innovative ideas by supplying opportunities to employees to increase their knowledge, skill and cognitive thinking (Carmeli et al., 2010).

Numerous studies undertaken in this area demonstrate that innovation serves as a central power or ensures core sufficiency. Sustain and create the competitive environment in a complex bussiness (Choi and Chang, 2009; Somech and Drach-Zahavy, 2011). If organizations and work groups are willing to modify, enhance, and value new concepts and ideas before publicly identifying and compensating them, and managers, supervisors, teams and colleagues are willing to maintain and implement new ideas, innovation will have a greater chance of occurring (Scott & Bruce, 1994;Madjar, Oldham, & Pratt, 2002; Shin & Zhou, 2003).

Actions and cognition of teams are enhanced when the employees experience positive feelings and emotions (Fredrickson, 2001).Hollander (2009) suggests that when the leaders behave inclusively, employees experience positive emotions and feelings that results in more innovative and creative ideas (Ramazani & Jergeas, 2015). Therefore, Inclusive leadership style also enables the management of the organization to effectively and efficiently supervise, execute and completion of multiple organizational projects due to the influencing characteristic of the inclusive leader on the sub ordinates. Among the identified critical success factors of the project's leadership is the major parameter which determines the project innovation (Geoghegan and Dulewicz (2008); Müller and Jugdev (2012); Müller and Turner (2007)) and later empirical findings of Aga, Noorderhaven, and Vallejo (2016); Anantatmula (2010); Khan, Jaafar, Javed, Mubarak, and Saudagar (2020);



Lindgren and Packendorff (2009); Malik, Javed, and Hassan (2017) confirms that project leadership is the integral component of the project innovation.

Khan et al. (2020) Conclude that inclusive leadership is the most effective leadership style which perceive the psychological empowerment and psychological safety through direct or indirect that promote the project innovation. Because project whatever the nature of the project it have constraints in which the major constrain is limited time for the completion of the projects Aarseth, Ahola, Aaltonen, Økland, and Andersen (2017); Khedhaouria, Montani, and Thurik (2017); Nordqvist, Hovmark, and Zika-Viktorsson (2004) which requires a leaders to available and accessible to their subordinates for discussion of their creative ideas and constrains and this could only be possible if the leader develops such culture in which subordinates are able to work under the leadership at great level of openness (Hollander, 2012).

Subordinates working under the inclusive leadership are able to communicate the problems that they faced and their opinions, views and creative ideas to accomplish the task which increase the project innovation and creativity. Project innovation and creativity plays an essential role in improving project performance as well as organizational performance (Oeij, Gaspersz, van Vuuren, & Dhondt, 2017). Based on the fact that positive and quality relationship among the inclusive leader and follower enhances the outcomes of innovative projects (Graen, Novak, & Sommerkamp, 1982; Ilies, Nahrgang, & Morgeson, 2007; Volmer, Spurk, & Niessen, 2012). Team experience and enjoy multiple beneficial resources like task related in a quality relationship and this availability of resources will motivate the employees to work more effectively which further contributes in project innovation dependent variable (de Jong & Den Hartog, 2007) .

Inclusive leadership is one of the few ways in which project managers can contribute to project innovation. The term "inclusive leadership" was coined by Nembhard and Edmondson (2006). The practice and concept in inclusive leadership new in literature, with only limited researche assessing their impact on project innovation. A recent study emphasized the essential importance of inclusive leadership and the impact it has on employees (Zhu, Xu, & Zhang, 2020). Nembhard and Edmondson (2006) Conducted study and establish a link between inclusive

leadership and psychology safety's mediation role. More recently the studies of Javed, Naqvi, Khan, Arjoon, and Tayyeb (2017) found that inclusive leadership and project innovation has a direct positive relationship through psychological safety. They learned and discover that inclusive leadership enhance and effect the psychology safety of employee in health care teams. Carmeli et al. (2010) determine and examine the impact of inclusive leadership on creative or innovation, with a particular emphasis on the role of psychological safety as a connecting factor. The direct and indirect effects of inclusive leadership on innovative ventures (Yin, 2013). There indirect effect due to leader membership exchange theory and psychology safety.

## 1.2 Research Gap

While inclusive leadership and project innovation are intrinsically related, the practice of inclusive leadership in project innovation comprises a number of critical variables. As a result, it is crucial to investigate the methodologies and critical factors that contribute to inclusive leadership and project innovation. Recently Javed et al. (2017) and Choi, Tran and Park (2015) emphasized that mediated mechanisms must be inspected which are related to inclusive leadership and ultimately effect positively the project innovation. Thus, needed more efforts understand those effects the project innovation through different medium is effected by inclusive leadership.

ASLAN, Huseyin et al. (2021) Employees require psychological safety in order to avoid and control bad emotions and those factors those effect the psychology safety and project innovation this gap is still exist in recent studies. It is also initiate that previous studies shows limited attention in to the influence procedure that show the view of inclusive leadership with mediating role of psychology safety on project innovation. There is limited and few studies regarding inclusive leadership that effect project innovation as day by day new projects are initiated in Pakistan. This study will contribute to the project based organizations to initiate new innovative and successful projects especially in Pakistani context like other developed nations of the world.

### 1.3 Problem Statement

Inclusive leadership acts like a bridge to fill this gap. It is the quality of inclusive leaders that they bring the best out of the people. This quality is very helpful for an organization in the complex and current divers environment (Carmeli, Reiter,Palmon, & Ziv, 2010). Inclusive leaders who accept full responsibility for their employees' psychological well-being and care for them while also facilitating a healthy work environment are significantly more effective and popular (Hirak, Peng, Carmeli & Schaubroeck, 2012).

Inclusive leadership with multiple characteristics like availability, accessibility and openness motivate and encourage the employee to perform effectively in project innovation (Shore et al., 2011), and leaders having these attributes develop a compassionate and supportive societal environment which helps in successfully initiating innovative projects. Numerous academics hypothesized a relationship between inclusive leadership and project innovation using the Social Exchange idea to mediate and modulate the mechanism, either directly or indirectly (Niashii & Mayer, 2009; Choi et al., 2016; Javed et al., 2017). According to research, social exchange theory is used to characterize the relation among inclusive leadership and project innovation, both of which act as a moderator of psychological safety both directly and indirectly.

### 1.4 Research Questions

Based on above stated problems these questions come into mind and study will revolve around these questions.

**Research Question 1:**

What is the impact of inclusive leadership on project innovation?

**Research Question 2:**

Does psychology safety mediate in between inclusive leadership and in project innovation?

**Research Question 3:**

Does organizational culture play the role of moderator on the relationship between

psychological safety and project innovation?

## 1.5 Objectives of Study

1. In this study examine the relationship between independent variable inclusive leadership and dependent variable project innovation.
2. To investigate the function of psychological safety in moderating the relationship between inclusive leadership and project innovation.
3. To discover and explore the moderating the role of organizational culture between psychology safety and project innovation.

## 1.6 Significance of the Study

Now a days in this competitive world project perform wide and essential role to achieve the competitive and economic advantages because the traditional cultures of the organization change into project based organizational culture. Due to the change in the approaches organizations start facing a problem in innovation. Therefore, organizations innovation need a leadership skills to improve their work team skills to innovate and deal with their tasks, but studies shows no results, a lots of projects failed because of wrong and mismanagement abilities, wrong guideline or due to lack of team building skills and development of team but still researchers priority is tangible items like cost, procurement and schedule (Lines, Sullivan, Hurtado, & Savicky, 2015; Yun, Choi, Oliveira & Mulva, 2016).

The investigate and highlight the studies on project innovation and their achievement, is to fine and discover the main element which effect and enhance the venture fulfillment (De Bakker, Boonstra & Wortmann, 2010). Similarly, the make every effort to examine the present study of success factors of management that assist the project via inclusive leadership for undertaking fulfillment. Consequently, this study take and get the opportunity to take the achievement to the inclusive leadership. Moreover, the current to take look of the mechanism that mediate psychology safety of employees and man or woman job and working environment match within

the inclusive leadership and project innovation. Additionally the theoretical contribution of mediating factor, the main look to examine the individual psychology safety with project innovation. Thus, theoretically, the present study to take look to try to fulfill the gap those are appear in management literature.

In the current examination to test the theories and hypothesis relation between the challenge or traditional and project based organizations in Pakistan context those provide the endless approaches to the organization to get and collect the ultimate project innovation and creativity. In Pakistani culture due to lack of electricity and basic necessity distance culture project leaders are more oriented towards the oppressive flair (Paracha, Qamar, Mirza, Hassan, & Waqas, 2012). On the other hand, one of the most critical aspects affecting an employee's productivity in this type of culture is their personal demonstration of commitment to their leader and their team performance (Li, Xu, Tu & Lu, 2013). Therefore, if leaders are show backing, and support towards their team in inclusive leadership style, project team show extra creativity, loyalty, and better work performance, therefore, the enhancement in innovation via inclusive leadership style.

## 1.7 Supporting theory

### Leader-Member Exchange Theory

In this leader-member exchange theory LMX is dedicated to the interaction between leaders and their teams, more precisely to how they communicate and collaborate to foster a productive, innovative, and effective work environment. In the late 1970's, George B. Graen and Mary Uhl-Bien pioneered this concept. The main focus of this theory to focus on two main opposite borders or side of relationship between the two parties leader and its team how they deal, communicate with each other's and how they can help, motivate or encourage their team members. However the inclusive leadership with different attributes and factors those are openness, availability, and accessibility that encourage and motivate the employees to achieve targeted results (Shore et al., 2011).

The study examine the people within the organization and having leadership positions within the company should communicate and encourage the employee and team to get the best targeted result. It's also describe how the team is treated in the organization or within team and it is effect their performance and innovation on their given tasks. Various researchers used the LMX theory helps to find out between inclusive leadership (independent variable) and project innovation (dependent variable) the mediator and moderator both directly or indirectly effect the relationship (Niashii & Mayer, 2009; Choi et al., 2016; Javed et al., 2017). With these examinations LMX theory and hypothesis explain the mediator psychology safety of employee and moderator organizational culture of company that direct or indirect effect the relationship between the inclusive leadership and project innovation.

An in-group is a group of people who identify with each other based on a variety of factors including gender, race, religion, or geography. Our tendency to distinguish between in-group and out-group members has moral implications. People make different judgment based on in and out group divisions. When someone in our in-group misbehaves, our natural instinct is to disregard the misbehavior as insignificant. When someone in our out-group performs the same thing, however, we tend to criticize the action considerably harsher. The fundamental distinction between these techniques is that in SIT, in-groups form around shared traits, whereas in LMX, in-groups form around the quality of relationships. A leader can be a representative or prototype of an in-group while also favorably treating both the in-group and the outgroup (e.g., Duck & Fielding, 2003).

## 1.8 Organization of the Study

The following study consisting of five major chapters which are one of them is introduction of factors, literature review, collective data and methodology that we apply, results and discussions about results and last conclusion of research. The introduction chapter is divided into eight subsections: the study's context or setting, the study's research gap and issue statement, the study's research questions and objectives, the study's importance and supporting theory, and the study's

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organization. The other section of the study in order to establish a theoretical review conducts a literature review, relationship between inclusive leadership and the project innovation, as well as their role of mediator in mediating between the two variables. Additionally, chapter two references published sources to demonstrate the moderating effect of organizational culture on the mediator-project innovation connection. After explaining the literature review the next chapter which is the third chapter of the study provides information related to the data used in the study along with the empirical methodology employed for the estimation of the impact of independent variable inclusive leadership and dependent variable that is project innovation and the mediator is psychology safety of the employee. Additionally, the following chapter provides sections on results and discussion that summarize the study's empirical findings. Additionally, this chapter contains descriptive statistics on the data, a matrix of correlations, and empirical findings. The conclusion and recommendation are contained in the fifth chapter of the study. This chapter discusses the studies the empirical and theoretical contribution, as well as future recommendations and study limits.

# Chapter 2

## Literature Review

The following chapter consists of all published literature in order to provide a theoretical argument for designing the theoretical framework of the study. This chapter is also divided into subsections that contain information related to the previous empirical studies on the relation of independent variable inclusive leadership towards dependent variable project innovation, independent variable that is inclusive leadership and mediator is psychology safety of employee moderating impact of organizational culture with inclusive or other leadership styles. After explaining the established extensive literature theoretical framework is designed based on the hypothesized relationship between variables and presented.

### **2.1 Inclusive Leadership and Project Innovation**

In present era the staff management supreme and lengthy task (Espinoza & Ukleja, 2016). Although there are unlimited resources in the project-based organizations but it is harder to perform the tasks because these organizations have temporary or contract based nature of employment. Therefore, it is essential for employees to be fully motivated in order to maintain the organizational quality (Dwivedula, Bredillet & Muller, 2016). To initiate an innovative project, it is essential for leader to foster an environment and culture helps inclusiveness and push their employees to achieve task and reach their highest potential. Yulk (2012) suggested that the leader must use his power efficiently while interacting with the members of team,



thus it enhances trust. Inclusive leaders must also provide training and work on the actions of the team members to get the desirable result through creativity and innovation of tasks and goals (Redick et al., 2014).

Janssen (2000) identifies three separate stages of the innovation process as being connected with inventive work behavior: idea development, concept promotion, and idea execution. Moreover, innovation involves Positive emotion, supportive atmosphere and comprehensive leadership (Zhang and Bartol 2010). Innovation not only need the creative ideas but also the employment of these ideas and intuitions (Amabile et al., 1996). Innovation has more opportunities to happen in groups with innovation support, innovation efforts are compensated rather than punished (Amabile, 1983; Kanter, 1983).

This just not only effect or enhance the diversity between the project team members but also increase and boost the performance on innovative projects (Soares, Marquis and Lee, 2011). Innovation in project is the capacity for delivering the value by the creation and implementation of new ideas (Bureau of European Policy Advisor, 2011). Therefore, inclusive leadership in the project-based organizations matters a lot (O'Reilly et al., 2010). Anvari (2014) highlighted that inclusive leadership is essential to initiate new innovative quality work and to meet the requirements of team members at very levels of the organization. Inclusive leadership guarantees the various suitable kind of management styles (Kezar and Lester, 2010) that provides valuable information that's works the societal integrity. There are several limitations they are making tough the concept of inclusive leadership (Ryan, 2007).

Enhanced innovation is ensured by inclusive leadership (Carmeli, Palmon & Ziv, 2010) and inclusive leadership also helps to retain team members or employees with innovate and creativity abilities (Hunt, Layton, Prince, 2015) when a comprehensive and divers culture is introduced (Mujtaba, 2013). Innovation is related to creativity define "new ideas" and those are helpful in production of small group individuals and organizations those are doing work together (Amabile, 1996). Innovation is define as the intentional introduction and applications with in small group and organization of idea process, procedures and new relevant group of acceptance, designed to significantly benefit for the individuals groups and for

society (West & Farr, 1990).

Amabile, Conti, Coon, Lazenby, & Herron (1996) have highlight the notion about project innovation is define by the characteristics such as cautious and deliberate effort by tem member and implementation factors, those are distinguish it from skilled individuals' ad hoc inventiveness. Inclusive leaders are an influential role model for bringing the innovations in the inclusive behavior of employees. In addition, sort out the views from the diversity of people, then take action for these views without bias during the process of decision making in order to support the innovative project, and cooperates with the subordinates by appreciating their vision and ideas (Groysberg & Slind, 2012).

### **2.1.1 Project Innovation**

Innovation is process and outcome both and share the idea that innovation indicates the adoption of new idea and behavior. Specifically the behavior of leaders towards their employees connect to their innovation and support the whole organization recognize their employees they will be more supportive More precisely, authorizing behaviors from the supervisor of team those have been connected to their team recognizing the whole organization as being more supportive an courageous to project innovation (Scott & Bruce, 1994). Inclusive leadership create more creative and diverse workplace environment where employees feel supportive, comfortable and connected with each other's (Javed, Naqvi, Khan, Arjoon & Tayyeb, 2017).

Employee creativity is the organization's foundation, and employee incentive for innovative behavior is mainly determined by the manager's leadership style. The old traditional style of leadership not according or fitted towards the psychology qualities of individual person that apply modern concepts, methods, and social standards as society develops economically (hereafter, new generation employees). At this time, there are number of studies that associate between the traditional approach of leadership and styles and the impact on employees innovative behavior towards the organization, which need to be explore and fine more about it (Fang et al., 2019; Scott & Bruce, 1994; Günzel-Jensen, Hansen, Jakobsen, & Wulff, 2018).

The study employs modern approach of new generation workers are sample and psychology safety as a facilitator, I will investigate the influence and effect of autonomous independent variable inclusive leadership on to the innovative work habits of modern employee's generation. They discovered that inclusive leadership is statistically significant and positive in relationship to innovative behavior of new generation workers(Fang et al., 2019). Further, Ye et al. (2019) studied the team innovation and inclusive leadership role. According to the findings and expectations, the study discovered that variable psychology safety of the employees and team mediates the relationship between independent variable inclusive leadership independent behavior and project innovation dependent variable, and organizational culture also mediates the relationship between psychology safety and innovation, as well as the impact between independent and dependent variables, inclusive leadership and project innovation.

Javed, Khan, and Quratulain (2018) Conducted a study to find out the connection between theory that is leader member exchange theory, LMX and project innovation working on different project oriented organizations. The study proposed, LMX partially act as mediator between independent and dependent variable. To answer the questions of the study, data has been taken from 223 supervisor-subordinate dyads. To improve their innovativeness, the study opted small capitalized businesses since they are more creative and change-oriented. Furthermore, small businesses profit from a lack of awareness, and administration and low hesitance towards the change. As a result, project teams are able to create better and deep relationship with entrepreneurial leaders who are open, facilitating the innovation process. In accordance with these findings, the study also show that inclusive leadership is positively and significantly associated to innovation, with LMX serving as a partial mediator (Javed et al., 2018).

The team members may have different values knowledge and having different terms. The project team leader must be influence their team and control their behavior control the conflicts and difference between their teams and groups and carefully try to increase the working performance of team and get the better out of them. Inclusive leadership may arrange the set of prior task and variety and values by appreciating and promoting the management of different diversified groups



those are face struggles in work for project innovation, with these arguments, we hypothesized a given relationship between independent and dependent variable.

*H1: impact of inclusive leadership on project innovation.*

## 2.2 Inclusive Leadership Impact on Psychology Safety

Psychological safety denotes to individuals' on the basis of perception of significances of take interactive risk in their working atmosphere, environment and work place (Edmondson, 1999; 2004; Kahn, 1990).

As such description of awareness that's "community are comfortable being themselves" (Edmondson, 1999) and "employees feels able to express one's self lacking the awareness of things and they feel fear and panic towards objectionable circumstances or results of self-portrait, and status, slandered or career" (Kahn, 1990,). Though, Edmondson (2004) recommended that the mediator psychology safety is part of our faith or trust. Psychology safety put efforts though concentration on others sides and faith on its self. Additional dissimilarity is that psychology safety affects the individual slight and in little time frame, while trust includes a wide progressive range (Edmondson, 2004). Researchers intend that the organizer, manager or project leader behavior effects the state of mind of psychological safety of team member (Edmondson, 1996; Nembhard & Edmondson, 2006).

### 2.2.1 Fundamental Role of Inclusive leaders

Edmondson (2004) examine that when inclusive leader show convenience, honesty,

availability, openness and convenience, they smooth the growth, progress and development of psychological safety between the works during the work. Inclusive leaders must take the step to encourage the individual or groups members to take risk, try to fetch new creative ideas in projects by brainstorming and communicate with each other's that is fundamental role of leader's shows and pledge the team from negative effects that's will not consequences of such negative behavior. Leaders must be available, accessible and accessible to communicate with team of followers and team members. When the leaders are open and easily accessible and willing to listen them the team and employees must listen to him and gives new ideas to the leader and discuss new things and feel free to tell the leader about change and innovation, and willing to talk about new innovative ideas to achieve goals and pay concentration on the new availability of opportunities, employees are feel safe and secure with the new ideas and they encourage themselves to take risk that basically define the norms.

Employees who are unsafe about their work cannot fully participate in the work because leaders are concerned about the results of their work. Rather than that, people will experience more worry, wrath, or irritation (Kiefer, 2005), with a corresponding decrease in positive influence (Wiesenfeld, Brockner, Petzall, Wolf, & Bailey, 2001). Probst et al. (2007) collected not only survey but experimental research as well to analyze how psychologically upsets creativity of employees. Many studies have argued that in management of project it is vital to manage the people associated with that project especially the behavior of the project manager who supervise the project plays a key role (Fisher, 2011).

In study shows that when the leader is easily available to their tea, they send and get the clear messages that is safe and leader is approachable, when the leader is available employees and team easily address the issues creatively and innovatively Edmondson (2004). Edmondson's (2004) idea regarding accessibility, openness, and availability is based on other research that indicates that behaviors demonstrating leader magnanimity, kindness, passion (e.g., real love and concern for the follower) and supportive leadership boost team member trust (Burke, Sims, Lazzara, & Sales, 2007). Additionally, significant relationships between interpersonal relationships have been demonstrated to support their development and the

establishment of psychological safety skills (Carmeli, Brueller, & Dutton, 2009; Carmeli & Gittel, 2009). Additionally, when team members discovered and felt that their leaders solicited and valued their ideas and efforts, they acquired a sense of psychological safety; they felt comfortable speaking up about issues and that their voices were acknowledged (Edmondson, 2006).

Khan et al. (2020) examine the relationship between inclusive leadership and project innovation, with mediation factor psychology safety. Study employed SEM (structural equation model) on a data set of 328 employees of project based organizations from IT sector by using AMOS. The confirmatory factor analysis resulting from the SEM technique has verify the distinctness of the variables used to find the answer of objectives. After findings results are shows, through the mediating functions of psychological safety and empowerment, inclusive leadership enhanced project innovation both directly and indirectly.

Younas, Wang, Javed, and Konte (2020) examine and investigate the role of psychology safety that is mediator between inclusive leadership and project innovation. In the study analyzes data from 296 supervisor-subordinate dyads working in 78 work teams in Pakistan's small and medium-sized businesses (SMEs). According to the findings, there is a positive and statistically significant association between inclusive leadership and organizational citizenship behavior. Additionally, the study's findings suggest that psychological safety may have mediator role between inclusive leadership and project innovation.

Marri, Azeem, and Nadeem (2021) Define the importance of leadership in project innovation is well acknowledged; yet, the ideal leadership style is still up for discussion. Among the many leadership styles, the function of inclusive leadership in engaging and motivating project members and achieving project innovation has received less emphasis. As a result of investigating the direct influence of inclusive leadership on project innovation, this research further evaluated the role of psychological safety and job meaning as mediators in the relationship between inclusive leadership and project innovation. Sample of 337 people from various construction companies in Pakistan were polled for information and analyzed. While structural equation modeling (SEM) revealed that the independent variable inclusive leadership has a statistically favorable and significant effect on the project innovation,

organizational culture appear to function as moderators of these associations.

Using self-determination and social information processing theories, Zeng, Zhao, and Zhao (2020) investigated the mediating roles of psychological safety and thriving at work in the relationship between inclusive leadership. The study analyzed data from 205 pairs of employees and supervisors at 17 enterprises around China. The findings indicated that inclusive leadership encouraged workers to take responsibility for their jobs first through psychological safety and then through workplace flourishing. Additionally, this provides a more detailed explanation of the process through which taking-charge behavior develops. Additionally, the study's findings contributed to current understanding of the relationship between inclusive leadership and employee behavior (Zeng et al., 2020).

Thus, we suggest the following hypothesis:



*H2: inclusive leadership effects positively to psychology safety.*

### **2.3 Impact of Inclusive Leadership on Project Innovation with the Mediating Role of Psychological Safety**

Psychological safety was employed as a forecaster variable, with independent variable that is inclusive leadership and project innovation as dependent factors. According to Kahn (1990, p.708), psychological safety is "the situation of being able to express and employ oneself without fear of adverse effects to one's self-image, position, or work." Additionally, he considered that psychological safety in the

workplace is synonymous with self-expression, role clarity, and self-management. Edmondson (1999) explained the psychology safety dependent variable used as shared belief between team members and leaders so that they successfully and safely engaged in their matters of relational risk taking. It is description of the team member's perception of ultimate results of interpersonal risks in their work environment (Kark and Carmeli, 2009).

### **2.3.1 Inclusive Leadership Promote Innovation**

Existing observations and study shown that inclusive leadership is promoting innovation is the projects through different factors and mechanisms like by intrinsically motivating the employees (Tu and Lu 2013; Feng et al.2016). Chen and Thou (2016) allow the team to share their diverse knowledge without any fear as they are from different knowledge backgrounds (Ma et al.2013). There are various risks and uncertainties related with innovation (Madjaret al.2011), safety environment at workplace that reduces risks among the team members seems to be feasible intervening mechanism. It is proposed that inclusive leadership among the team members reduces the uncertainty by providing psychological safety and encourages them to initiate innovative projects.

Psychology safety needs are changed for individuals Edmondson (1999). Most of the authors considers the psychology safety concept is relatable with secure base, which encourage the individuals to learn and explore new things from outside the world and create innovative things (Bowlby, 1988).An organization's have ability to innovate – whether to implement new strategies, implement new technologies and new product development, is to acute success in a changing environment and world. In combination of activities that support execution, activities supporting innovation those involve risk, failure and uncertainty come along in the way of success. Mostly Team members are hesitant and unwilling to offer new ideas and having fear to of being wrong (Edmondson, 1999), or having fear of creating obstruction and slow team development (Ford & Sullivan, forthcoming).

One of the basic challenge of creating and innovation, therefore, is copying with the ideas augmented risk of failing that innovative and creative process that required.



Previous research has identify and shows a logical characterized by psychology safety at encouraging to interpersonal risk taking and then the result would be creativity and innovation in team (Edmondson, 2002; West, 1990), still we know less about those factors that gives growth and encourage to psychology safety. This research covers earlier must do work on team learning, skills and innovation by systematically coinciding the background of dependent variable psychology safety in project innovation (Edmondson, 2002). The results increase our understanding about factors those are enable people or tam members to experiences a sense of psychology safety at working environment and thereby also spread light on background of project innovation (Detert and Burris 2007).

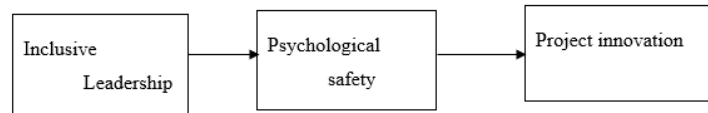
In the highly psychological safe environment, team members express their innovative or half-baked ideas freely because they are enlightened from interpersonal risks and other potential harms (Kahn 1990; Liang et al., 2012). The members of friendly and nonthreatning team freely express their innovative ideas without any fear of criticism and failure (Detert and Burris 2007; Leana and van Buren 1999). Team members feel confident in the psychological safe environment because they know that they will not be punished or embarrassed for expressing their novel ideas (Zhang et al., 2010). Psychological safety allows team members to discover new opportunities for innovation and focus on work by minimizing the interpersonal risks (Edmondson 1999).

It is researched that in past few years that taeam mebers achieve in innovation to creat new ideas to use meaningfull and usefull information in their working environment (Carmeli, Dutton & Hardin, 2015). There are obtaining and contained by employees psychology safety dependent variable. Research and dtudies are specially conducted to observe the tam leader baviour towards their team, like ethical (Hassan & Ahmed, 2011), transformational (Ghadi, Fernando, & Caputi, 2013), and authentic (Hartog & Belschak, 2012), on employee towards project innovation. They must be connected with their employees positivey in project innovation. Leadership must shows ease of access, convenience, openness, sincerity and availability to their employees. Carmeli et al. (2010) The goal of this study was to ascertain the extent to which inclusive leadership facilitates workplace innovation. The study examined the association between inclusive leadership (as

defined at Time 1), psychological safety, and employee participation in creative work activities using a sample of 150 employees (measured at Time 2). Inclusive leadership is statistically significant and positively associated with psychological safety, which stimulates people to engage in creative work, according to structural equation modeling research.

It motivates and encourages employees to perform their given jobs to the fullest extent possible and to devote their emotional, physical, and mental resources, as well as their physical resources, to the project and firm. Leader must encourage and support their team members to reach their organization level and standard at higher level. Therefore, via their presence, convenience, openness, honesty, and availability to their employees, leaders must foster an ethical work environment that increases employee happiness and has a beneficial effect on employee psychology and safety. Team member's feels safe and secure when they are sure then they will not feel suffered and push by representing their true selves at work or in organization by representing true selves at work. The importance of interpersonal, mutual trust and psychological safety among the team members has long observed by researchers (Golembiewski, Mc-Conkie, 1975; Kramer, 1999). In psychologically safe environment, employees are motivated to pursue their innovative career goals and make adjustment with the randomly changing environment without threatening others (Edmondson, 1999; Edmondson, Bohmer, & Pisano, 2001). Lee, Edmondson, Thomke, and Worline (2004) highlighted that inclusive leadership supports team members to take interpersonal risks and they also underscore the working environment play important and supportive role that make and feels the people psychologically safe, thus encouraging them to engage in innovative projects. De Dreu and West (2001) interpreted in their research that psychology safety that's mediated the relationship between independent variable inclusive leadership and dependent variable project innovation.

Creasy and Carnes (2017) have discussed and suggested that studying this relationship can help to join the literature because of the lack of existing work to address psychology safety. This will allow for an open survey to explore the complexities of workplace psychological safety among team members. So, the following hypothesis is recommended:



H3: psychology safety mediates the relationship between inclusive leadership and project innovation

## 2.4 Moderating Role of Organizational Culture

Potter (2003) defined the organizational culture as a set of norms and values are shown in the behavior of team member of organization. Bower (1966) explained the organizational culture as a method of doing things within the organization. Messner (2013) suggested that organizational culture includes both things that go and involve those things that do not go. Organizational culture, values, norms rites, rituals and stories reminders and remind the members and team of organization that what organization stands for. Certain efforts are used to measure the unacceptable behavior of employee and corrective action are taken in order to maintain organizational culture (Heskett, 2011). It is defined as “Patterned way of thinking, reacting and feeling that constituting the distinctive way of life of group of people” (Kluckhohn, 1951).

An organizational culture consists of beliefs, norms, verbalized and non- verbalized values that are main factors of contribution in the psychological and social culture of organization (Haberberg & Rieple, 2008). Wallach (1983) defined organizational culture as the combination of innovative, bureaucratic and supportive categories. Organizational cultures have been obtainable to vary extremely across companies, and such attributes as deference to authority, out spookiness, honesty and contribution are inner indicators of an organization’s culture (Collins & Porras, 1994; Peters & Waterman, 1982; Deal & Kennedy, 1982; de Pree, 1987). An inclusive works on organizational culture observes how to reduce the anxiety

doubt people feel ambiguity or difficulty through norms, values, culture and beliefs those are occur in organization or work place environment (Schein, 1985). When individual or a single person from the team try to deal with the uncertainty of innovation, nervousness can arise, where organization's culture may strengthen, weaken or moderate this psychological state.

Certain, words and actions of high-level managers in an organization particularly those that point out their supportiveness, sincerity, and tolerance for error should impact others' principles about suitability of open discussion about intimidating issues (Detert, 2003). Mythical stories dominant that many organizations capture the ways in which higher management can powerfully influence views of psychological safety in the organization as a whole. In addition to senior or upper management actions, organizational structures can boost or reduce the conflicts between organizational individuals, teams and groups. When cross-functional associations among high level are encouraged and allow by the organizational norms, values and structures, this should increase the common environment of psychological safety.

In diverse viewpoint there are more experience interact with others and those who have diverse opinions and expertise and who face the different pressures among them organization members become more recognizable and comfortable with diverse attitudes and view point. This complete view of the organization's culture is probable to make it easier for association members to feel comfortable to communicate with others easily and appreciate their perspective among work, ideas and goals for seeking help. Through this way, stronger interactive ties can increase the distribution of information (Hansen, 1999) and endorse a sense of psychological safety.

In compression, when organizational "silos" present disorderly obstacles to communication, peer relationships between departments or functions are likely to be characterized by less psychological safety, weaker bonds, lower subordinate willingness to share information of innovating new ideas with each other. Were as in sum of the organizations, organizational characteristics are likely to impact the individuals' perceptions of psychological safety, leading to differences across the firms. Psychological safety will shows vital and important differences in the organizations. More particularly, when members of innovation teams recognize top

management in their association as helpful of innovation and believe that collaboration among peers supported by the organization, most of the time, they are likely to experience their work place environment as having better psychological safety.

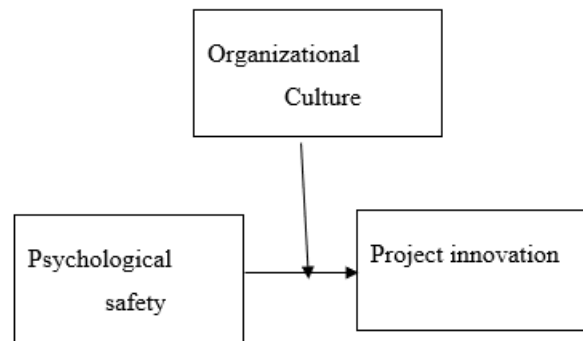
Morris et al., (1998) suggested that diverse management behaviors caused by innovative organizational cultures. Organizational culture acts as glue that indicates the inclusive leadership and shared values, beliefs and norms of employees towards bringing the innovation in the projects by binding them together (Trevin & Nelson, 1999). An efficient organizational culture is a combination of procedures, processes and rules that defines inclusive leadership and how team members should act appropriately in the organization to initiate and show valuable contribution in the innovative projects (Kennedy, 2000). In the literature, there are various proxies those are used for measurement of innovation variables

These proxies include novel suggestions for incorporating innovation into projects (Dedahanov et al., 2016). Intensity with which a particular topic of research and development is pursued (Allred and Swan, 2004), technical and scientific journal (Efrat, 2014). development of new products and services Ettlé et al., 1993; Rhyne et al., 2002; Yang and Li, 2011), innovative design, infrastructure and technology (Griffith and Rubera, 2014), rate of inventions per capita (Shane, 1992), amount of trademarks issued per capita (Shane, 1993) and the procedure of introducing and implementing ideas, plans, products and services (Kaasa and Vadi, 2010).

Schreurs et al. (2012) measure the role of supervisors, colleagues and team in supporting the relationship between psychology safety and other project innovation. The results show that supervisor support mitigates the positive impact of psychology safety and project innovation. J. Yoon et al. (2017) have also taken the organizational culture as a moderator of innovation and other related factors. Eisenberger et al. (1990), Shin and Kim (2014), and Aselage et al. (1998) have indicated that support for organizations is positively correlated with context-specific organizational forms such as project innovation.

Project innovation is a multi-step process that begins with the production of a novel concept and ends with the transformation of that novel idea into a new, valued product or service (Baregheh et al., 2009). Choi and Rainey (2010) explained

that public agencies with result oriented organizational culture have greater innovative performance. Harris (1994) suggested that organizational culture provides the guidance to inclusive leaders to search and interpret new ideas. Moynihan and Pandey (2010) find that innovation in culture is associated with leadership inclusiveness. So, it is hypothesized that:



*H4: Organizational culture moderates the relationship between psychology safety and project innovation such that it strengthens the relationship.*

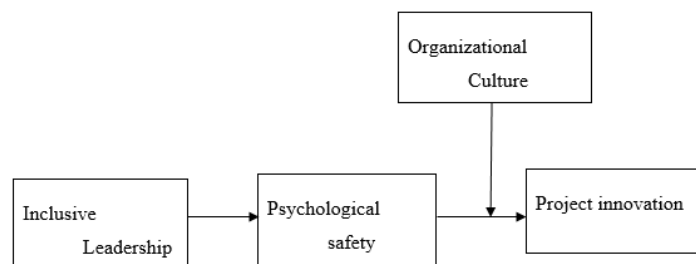


FIGURE 2.1: Research Model of Inclusive Leadership, Psychology Safety and Project Innovation, and Moderating Role of Organizational Culture

## 2.5 Research Hypothesis

*H1: Positive impact of inclusive leadership on project innovation*

*H2: Inclusive leadership effects positively to psychology safety.*

*H3: Psychological safety mediates the relationship between inclusive leadership and*

*project innovation.*

*H4: Organizational culture moderates the relationship between psychology safety and project innovation such that it strengthens the relationship.*

# Chapter 3

## Research Methodology

This 3rd chapter explain about the procedure and methods utilized to get the study's actual results. The study's design, demographic, sample methodology, sampling features, instruments, and reliability of all variable scales employed in this study were discussed in detail. This study explores the relationship between project innovation and inclusive leadership as a dependent variable, organizational culture is moderator and psychology safety is mediator.

### 3.1 Research Design

A plan of action and framework of studies is known as research design. It can be defined as research design can be an approach or method for the researcher that specifies the method for accumulating and investigate essential (Zikmund, 2003). The studies design consists of type of setting, time horizon, unite of analysis, which are discussed.

Mostly, the quantitative research is chosen thinking about its demonstrated its reliability, validity and the effeteness because it defines its natural association between them (de Vaus, 2001). Dependable and valid results can be acquired through the quantitative studies strategy (Chase, Teel, Thornton-Chase & Manfredro, 2016).

### 3.2 Types of Study



This is basic and fundamental study that design to establish that effect of independent variable inclusive leadership and dependent variable project innovation utilizing psychology safety as a moderating variable. In addition, organizational culture was measured on basis of self- reported observation. To do this, Pakistan's project-based organizations have been tasked with gathering the facts necessary to generate meaningful results. Initially 500 questionnaires had been set as a target however, 223 authentic responses were collected back.

### **3.3 Study Setting**

The present directly relates to the employees because it respondents that include different employees working on different projects and their supervisors of public and private project based organization that are supervising their employees were approached with in the working hours to make sure they were present in the organization and they filled the questionnaire without any pressure. Different variables includes in the research were neither controlled nor manipulated, and no artificial or false setting has produce for study.

### **3.4 Time Horizon**

The study was conducted cross-sectionally, which means that data were collected once, in September of 2021.

### **3.5 Unit of Analysis**

Each member working in an organization is considered as an individual unit. An individual, a distinct group, an organization, or a culture, or a mix of these, might serve as the unit of analysis. For current research unit of analysis are project leaders, subordinates and their teams who are working in project-based organization in twin's city of Pakistan Rawalpindi and Islamabad. Convenience sampling technique is selected due to Covid 19 situation in Pakistan. Further, recent evidence suggests that COVID-19 can trigger humanity salience, and that

this can, in some contexts, motivate more prosocial attitudes (Hu et al., 2020).

### **3.6 Population and Sampling**

Set of individual, group or complete team under the interest of the researcher for collection of data is known to be population of the research. Every day different project are being initiated in the Pakistan but for the present study we are just focusing on innovated projects that are initiated in Rawalpindi and Islamabad.

The aim of the data collection was to study the project innovation get impacted by inclusive leadership in the presence of mediator as psychological safety. In the Pakistan context analyzed the moderator organizational culture in between inclusive leadership and project innovation.

A practical sample technique was utilized to collect data on these 4 variables and the impact of independent variable that is inclusive leadership on dependent that project innovation, with psychology safety and organizational culture acting as a moderating component.

The sample was select from project-based companies of Rawalpindi and Islamabad. Software, hardware products and other project development companies are working in these cities. They have skills, experience, expertise and knowledge in developing of new software applications, programming of different systems, Hardware development were they use to design to different broad level designing. The purpose of selecting these companies was because of its innovative business models and project plans made by the collaboration of hardware and software sector. Questionnaires were given to those employees. Out of 500, 244 were received back. In those 244, 223 were completely filled and considered for analysis.

First section contains some general respondent's demographics questions that are gender, age, experience, qualification. The next section has items measuring the independent variable (Inclusive Leadership), mediator (Psychological safety), dependent variable (Project innovation) and moderator (Organizational culture). During meetings, I educated to the respondents that the data was only conducting for research purpose and will be kept completely confidential.

## 3.7 Sample Characteristics

Few demographics questions were asked during the data collection were they were insured that their response will be kept private and only be utilized for the analysis purpose. The demographic questions include questions about their Gender, Age, Experience and Qualification. Sample characters are mention under table.

### 3.7.1 Gender

Gender is one of the most likely asked questions in demographics as it simply divides the population in male and female. It has been experiential that the proportion of male respondents was privileged than female as in software organizations mostly business managers are male and female are very low in range and if they exist they mainly work in higher authority such as manager, senior developer and member of board of director.

TABLE 3.1: Frequency of Gender

Gender	Frequency	Percent	Valid Percentage	Cumulative Percentage
Male	136	61	61	61
Female	87	39	39	100
Total	223	100	100	

Table 3.1 show the total sample size that is 223. In those 223 male was 61 % of the total whereas the female are 39 %.136 were male as 87 were female. The cumulative percentage was calculated as 100% and mention in the table mention above

### 3.7.2 Age

Table 3.2 the age distribution of the respondents. People mainly don't like to recognize or disclose their due to some hesitation that is why age was divided in different ranges looking at the comfort ability of the respondent. Those ranges were mention on the questionnaire to gather the data about the respondent age's during the survey. Analysis show that out of 223 respondents, the respondent those were in between the age from 20 to 25 years are 32.7%, 21.5% of them was from

26-30 years, 35.9% of them ranges from 31-35 years, 7.2% of respondent having age of 36-40 years, 1.8% of them was 41-45 years and 0.9% of the respondent was 46-50 years old.

TABLE 3.2: Frequency of Age

Age (Years)	Frequency	Percentage	Valid Percent	Cumulative Percent
20-25	73	32.7	32.7	32.7
26-30	48	21.5	21.5	54.3
31-35	80	35.9	35.9	90.1
36-40	16	7.2	7.2	97.3
41-45	4	1.8	1.8	99.1
46-50	2	0.9	0.9	100
Total	223	100	100	

### 3.8 Qualification

Qualification or education is essential element of demographics like age and gender because education is imperative for success of any country. Education is another important factor that much is included in the demographic because education is the source of knowledge. Knowledge helps the particular person to perform in better way during the project. Education must be added in the demographic because I give the information about the respondent that up to which level you're respondent is qualified.

TABLE 3.3: Frequency of Qualification

Degree	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Bachelor (14 years)	5	2.2	2.2	2.2
Bachelor (16 years)	97	43.5	43.5	45.7
Masters (16 years)	40	16.6	16.6	62.3
Ms/ Mphil (18 Years)	73	32.7	32.7	95.1
Ph.D	8	4.9	4.9	100
Total	223	100	100	

For this purpose education is added in the demographic part of the questionnaire and mention in the table below. Five diverse category of degrees were mentioned

in questionnaire in order to gather data concerning education. Table 3.3 show the analysis of education distribution of respondent of behalf of their degrees. The degree distribution was bachelor (14 years), bachelor (16 years), Masters (16 years), MS/MPhil (18 years) and PhD. Analysis show that out of the total 2.2% were having bachelor of 14 years, 43.5% having bachelor of 16 years, Masters (16 years) were 16.6% were Ms/Mphil were 32.7%. Total of 4.9% of the respondents were holding the degree of PhD.

### 3.8.1 Work Experience

Work experience has a major role during the projects because experience gives enhancement in performance, Employee works in different organization and mainly keeps on changing organization after few years. The collective years that employee work in different organization is known as experience of the employee. Experience has a vital role in demographic because creativity and performance of the employee increasers and get stabilized as they get experienced. There were four ranges that was mention in questioner, these ranges were used to collect the data about the total tenure they worked in different organization., these years ranges prepared suitable for employees to decide work experience. It can give creativity in the work, make the person innovative. For the data collection purpose different time range was mention for the convenience of respondents. Those ranges are mention in the table below.

TABLE 3.4: Experience of Respondents

Experience (Years)	Frequency	Percentage	Valid Percentage	Cumulative Percentage
<1	42	18.8	18.8	18.8
1-3	102	45.7	45.7	64.6
4-6	54	24.2	24.2	88.8
7-9	21	9.4	9.4	98.2
10 and Above	4	1.8	1.8	100
Total	223	100	100	

Table 3.4 mention the experience distribution of the respondents. 223 responses were used for the analysis. Analysis show that 18.8% are new to the job and having experience of less than 1 year. 45.7% of them having experience between 1 – 3 years, 24.2 % having experience of 4-6 years, 9.4 % of them having experience

of 7-9 years. Respondents having experience of more than 10 years was only 1.8% out of 100%.

### **3.9 Measurements**

Pre developed questionnaires were adopted and utilize for gathering the data. These adopted questionnaires are recently used in high ranked and impact factor journal. Details of scale that is used in research study for the variables are Inclusive leadership, Psychological safety, Organizational culture and Project innovation are presented below.

Every questionnaires were developed on using a five points (5) range where 1 demonstrate strongly disagree, demonstrate for disagree, 3 relates to neutral, 4 relates to agree and 5 demonstrate to strongly agree.

Some of the demographics question also added in the questioners for gathering respondent information. Those demographics questions were Age of the respondents, Gender distribution, Experience of the respondents and qualification of the respondents.

#### **Inclusive Leadership**

Inclusive leadership represent as an autonomous variable in this research. Scale includes total of 9 item that will describe inclusive leadership. Questionnaires adopted for collection of data for the inclusive leadership were developed by (Carmeli, Palmon & Ziv, 2010). A Five-Point likert scale was utilized, ranges from 1 to 5 where 1 demonstrate for strongly disagree and 5 demonstrate strongly agree. This instrument has been used by Javed et al (2017), the sample items include “The manager is available for professional questions I would like to consult with them, “The manager is an ongoing ‘presence’ in this team someone who is readily available, and “The manager is ready to listen to my requests” etc. Reliability of the scale was 0.86.

#### **Project Innovation**

Project innovation represent as dependent variable in this research. Scale includes total of 8 item that will describe project innovation. Questionnaires adopted for collection of data for the project innovation were developed by (Burpitt & Bigoness (1997). The score consists of questions such as "The team seeks information about new markets, products and technologies from sources outside the organization. A five-Point Likert scale was utilized, ranges from 1 to 5 where 1 demonstrate for strongly disagree and 5 demonstrate strongly agree. Reliability of the scale was 0.815.

### **Psychological Safety**

Psychological safety represent as mediating variable in this research. Scale includes total of 7 item that will describe project innovation. Questionnaires adopted for collection of data for the project innovation were developed by (Kark & Carmeli, 2009). A Five-Point likert scale was utilized, ranges from 1 to 5 where 1 demonstrate for strongly disagree and 5 demonstrate strongly agree.

The sample items include "No one on this team would deliberately act in a way that undermines my efforts, "It is easy to ask other members of this team for help, "Working with members of this team, my unique skills and talent are valued and utilized." Working with members of this. Etc. Reliability of the scale was 0.715.

### **Organizational Culture**

Organizational culture represent as mediating variable in this research. Scale includes total of 18 item that will describe project innovation. Questionnaires adopted for collection of data for the project innovation were developed by (Denison & Neale, 1996; Denison, 2000). A Five-Point likert scale was utilized, ranges from 1 to 5 where 1 demonstrate for strongly disagree and 5 demonstrate strongly agree.

The sample items include "People here do favors for others because they like one another."; "People here try to make friends and keep their relationships strong." and "People in our department often socialize outside the office." etc. Reliability of the scale was 0.887.

TABLE 3.5: Instruments

S.NO	Variable	Source	Items
1	Inclusive Leadership	(Carmeli, Palmon&Ziv, 2010)	9
2	Psychological Safety	(Kark &Carmeli, 2009)	7
3	Organizational Culture	(Dension & Neale, 1996; Deni- son, 2000)	18
4	Project Innovation	(Burpitt & Bigoness (1997).	8

### 3.10 Pilot Testing

Initially 70 responses were analyzed that was properly filled and can we use of analysis purpose. Bernstein (1994) set the slandered for the cronbach's alpha should me 0.7 or greater than 0.7. Analysis show that all the scales having cronbach's alpha are greater than 0.7.

### 3.11 Analysis of Reliability

Under table 3.6 mention the about Cronbach's Alpha; is consistency of scale and internal reliability. This scale was developed in 1994 by Cronbach. Cronbach's Alpha also known as coefficient Alpha there is minimum value is 0.70 Cronbach's Alpha must be greater than this limit that value helps to retain the item and gives good estimates (Nunnally & Bernstein, 1994). Reliability test take towards those points where the consistency of items and stability of items are used to analyze what is expectations from measurements.

Reliability test is most common and being used frequently in the research to check and measure the validity of scales that we used in research. Scales internal validity known as Cronbach Alpha and the Reliability measurements states from value 9 to 1 and internal is Cronbach Alpha. Reliability of scale depends on Cronbach's Alpha value when the reliability of scale has lower vale the Cronbach Alpha must be lower Higher the value of Cronbach Alpha higher the reliability scale.

In the research we used to calculate the correlation between internal variables though Cronbach Alpha. Minimum value 0.7 consider good reliability value. Values are lower than 0.7is considered lower reliability of scales that we used for the



research. Under Table 3.6 shows the details about Cronbach Alpha coefficient. Coefficient Alpha of Inclusive Leadership is measured 0.866 with 09 items, Coefficient Alpha of psychology safety is measured 0.715 with 07 items, Coefficient Alpha of Organizational Culture is measured 0.881 with 18 items and coefficient Alpha of Project Innovation is measured as 0.815 with 08 item included in the scale.

TABLE 3.6: Reliability scale of Cronbach's Alpha

Variables	Items	Cronbach's alpha ( )
Inclusive Leadership	9	0.869
Psychology Safety	7	0.715
Organizational Culture	18	0.887
Project Innovation	8	0.815

### 3.12 Data Analysis Technique

After the data is composed that is appropriate to the study from 223 people who respond, the data were then analyzed on software named as SPSS. I have gone through some procedures while analyzing the data some procedures are followed.

1. First of all, only appropriately filled questionnaires were selected for further research.
2. Encode each variable of the questionnaire and use each encoding variable for data analysis.
3. The frequency table is used to explain the sample characteristics.
4. Use numerical values for descriptive statistics.
5. Check the reliability of all variables by Cronbach coefficient .
6. Perform a correlation analysis to see if there is relationship between variables that is significance that were not fully studied in this study.
7. To analyze the proposed relationship between dependent and independent variable, single liner regression will be performed.

8. Process developed by Preacher and Hayes are used for mediation and moderation to determine the existence corresponding of the role of mediator and moderator.
9. The expected hypotheses were tested by correlation and the Preacher and Hayes methods to examine rejection and acceptance of the proposed hypothesis.

### **3.13 Research Ethics**

During the data collection of this research thesis, desirable value, ethics and standards were followed and more particularly and observe keenly while collection of data. Firstly, the main target of the research was conveyed to the respondent and after that getting the concurrence of the respondent, there responses are acquired and merged for data analysis. The respondents were assure the confidentiality of the responses as the subordinates or team filled the responses incivility about the project supervisor and it might create the problems for subordinates if leader or supervisor get to know that they rate and evaluate the negatively.

Moreover, the data related to leaders, project managers were also kept secret as it contained leader's related information, personalities, traits and emotions. Furthermore, data collection is done in natural way with the setting with them and were not forced for instant replies and feedback. For the accessibility, give them a proper time was provided and were not forced to project team leaders and team members for some advisable or favorable response. Despite of the fact that the researchers faced some problems and unsuitable behavior in most situations such as some respondents did not able to return the questionnaires, few of them are lost the questionnaires, but till they all were responded with appropriate behavior without any bad words.

# Chapter 4

## Results and Discussion

### 4.1 Descriptive Statistics

Descriptive statistics table show the basic information regarding response that has been collected for analysis purpose. Descriptive statistics mainly contain the statistical measurements of the data that is analyze such as mean value, sample size, slandered deviation, minimum value and maximum value.

Descriptive technique is used for statistical summary for the all the variable in a single table. Table contains mean value, sample size, slandered deviation, minimum value and maximum value of the analyzed data. Table 4.1 contains the analyzed result of the collected data. Details of the variable are mention in the first column. Second column contain the information of sample size. Third column and forth column contain the minimum and maximum values of the data respectively. Fifth column contains the mean value of variable. Last or sixth column have the result of standard deviation of the analyzed variable collected data.

TABLE 4.1: Descriptive Statistics

<b>Variables</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>
Inclusive leadership	223	1	5	4.02	0.59628
Psychology safety	223	1	5	3.641	0.55954
Organizational culture	223	1	5	3.952	0.49835
Project innovation	223	1	5	4.061	0.58806

Table 4.1 mention the total sample size that is 223 for the dependent, independent, mediating and moderating variable. All variables (Inclusive leadership, psychology safety, and organizational culture and Project innovation) were rated on a five point Likert scale, such as 1 is used for “Strongly Disagree” and 5 show “Strongly Agree” respectively. Mean values show the average value of responses. This is respondents’ remark about a particular variable.

The mean values calculated by analysis for Inclusive leadership (IL) were 4.02 which show that respondents were agreed they have encouraging and positive leadership. The mean values of psychology safety (PS) were 3.64 which indicate that respondents were agreed that they have positive working environment. The mean value of organizational culture (OC) was 3.95 which show most of the respondents were agrees toward positive working environment. Project innovation (PI) was the mean value of 4.06 which demonstrate that respondents were contracted that they have innovative projects. Standard Deviation of Inclusive leadership is calculated by analysis were 0.596. The standard deviation for the Psychological Safety were 0.56 the standard deviation of Organizational culture and Project Innovation were calculated by analysis was 0.498 and 0.536 respectively.

## 4.2 Correlation Analysis

Correlation analysis shows the dependence of one variable on another variable. Orodho (2009) explains the correlation as correlation show the relationship or connection of two uninterrupted numeric variables. Under mention Table 4.2 elaborates the correlation of the variables with the level of significance that is presented by the positive or negative signs.

TABLE 4.2: Correlations

Variable	Inclusive Leadership	Psychology Safety	Organizational Culture	Project Innovation
Inclusive Leadership	1			
Psychology Safety	.44**	1		
Organizational Culture	.685**	.40**	1	
Project Innovation	.599**	.487**	.602**	1

\* Correlation is significant at 0.05 level (2-tailed).

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

Positive sign indicate that the both the variable are going in the same direction. It also shows that both of the variables are moving in the same positive direction. Negative sign show that both the variables are negatively associated with each other and they are moving to in opposite direction. Correlation value always lies between +1 to -1. The value 0 indicates that no relationship exists or no correlation exists between those variables.

Table 4.2 presents the direct correlation between the studied variables. Analysis show significant correlation between inclusive leadership that is independent variable and psychological safety that act as a mediating variable ( $r=.444$ ,  $p<.01$ ), organizational culture that is moderating variable ( $r=.685$ ,  $p<.01$ ), and the dependent variable that is Project innovation ( $r=.599$ ,  $p<.01$ ).

Analyzing the correlation of Psychology safety with other studied variable show significant correlation with organizational culture ( $r=.400^{**}$ ,  $p<.01$ ), project innovation ( $r=.487^{**}$ ,  $p<.01$ ). Analysis show Organizational culture significantly correlated with project innovation ( $r=.602^{**}$ ,  $p<.01$ ).

### 4.3 Regression Analysis

Regression analysis is analyze to discover the actual courting that surely exists in among the variables. Altman and Krzywinski (2015) introduce the statistical method for measuring the real relationship among the variables and declared this approach as regression. Different techniques contain for analyzing the relation among based and unbiased variable. Correlation is not sufficient for predicting the relation among the variables indicates the real dating among the variables that up to which extant one variable depends upon the opposite variable. No multi co linearity exists as shown by way of the effects of correlation evaluation that the Correlation coefficients were smaller than 1.

Table 4.3, specifies the findings. The table shows the model summary that actually provides the  $R^2$ , adjusted  $R^2$  and the change in one variable cause by other variable per unit is presented by  $\beta$ . The value of  $R^2$  indicates the change in independent variable which is caused by dependent variable. Newly modified version of  $R^2$  that is adjusted for the number of predictor in the model is known as Adjusted  $R^2$ .

TABLE 4.3: Inclusive Leadership and Project Innovation

Model	$\beta$	R Square	Adjusted R Square	F	T	P
Inclusive Leadership	.540	.359	.356	123.880	11.130	0.000

In this study,  $R = .540$  indicate the high degree of correlation between Inclusive Leadership and Project Innovation, value of  $R^2 = 0.36$  specify 36% variation can be caused by the independent variable in the dependent variable and value of Adjusted  $R^2 = 0.356$  shows 35% variance can be caused were  $t = 11.13$  and  $F = 123.88$ . Coefficient provides the important prediction about the Project Innovation from Inclusive Leadership. In above Table 4.3 significance value provides the information whether Inclusive Leadership plays its role statistically significant in the model. Value of sig that  $p = 0.000$  indicates that independent variable that is Inclusive Leadership is statistically significant related to Project Innovation and positively impact over it.

H1: Inclusive Leadership has positive and significant relationship with Project Innovation.

TABLE 4.4: Inclusive Leadership and Psychological Safety

Model	$\beta$	R Square	Adjusted R Square	F	T	Sig
Inclusive Leadership	0.417	0.197	0.194	54.273	7.367	0

Conferring to outcome of this regression analysis, Inclusive leadership show significant and positive relationship with Psychology Safety ( $B = .42$ ,  $t = 7.37$ ,  $p = .00$ ), accepting the hypothesis. H2: Inclusive Leadership and Psychology Safety are positively associated with each other.

#### 4.4 Mediating Role of Psychology Safety

Mediating variable define the relationship between independent and dependent variable. In this study we are using a single mediator which creates the logical

relationship. In this study Psychological Safety will act as a mediating variable between Inclusive Leadership and Project innovation.

TABLE 4.5: Mediation Analysis

	$\beta$	SE	T	P
Inclusive Leadership $\rightarrow$ Project Innovation	0.54	0.05	11.1	0.00
Inclusive Leadership $\rightarrow$ Psychology Safety	0.42	0.06	7.37	0.00
Psychological Safety $\rightarrow$ Project Innovation	0.47	0.06	8.29	0.00

*Note.* Un-standardized regression coefficient reported. Bootstrap sample size 5000. LL =lower-limit; CI = confidence interval; UL = upper limit. N=223.

Inclusive leadership and Project Innovation is Psychology Safety. PROCESS V3.3 macro tool were utilized for the mediation test develop by Andrew F. Hayes. We are using Psychology Safety as a mediator so model 14 were used according to the model templates for PROCESS that is provided by Andrew F. Hayes (Hayes, 2013). Variable used in the model analysis were X = Inclusive Leadership (IL) Y = Project Innovation (PI) and M1 = Psychology Safety (PS) and W= Organizational Culture (OC). Sample size was 223.

Above table mention the model analysis. The above table 4.5 mention positive effect of Inclusive leadership on Psychology Safety with  $\beta = .417$  the significance value of P = 0.00. Relation between Inclusive Leadership and Psychological Safety. The Table 4.5, mentions the impact of mediating variable (Psychology Safety) on dependent variable (Project Innovation). Psychology Safety has a positive effect of 0.467 on Project Innovation with the Significance of 0.00. Values mention in the table also justifies the second hypothesis.

(H2). There is positive association between Psychology Safety and Project Innovation. Relation between Psychology Safety and Project Innovation.

The above Table 4.5, mentions the impact of Inclusive Leadership on Project Innovation. Inclusive Leadership has a positive effect of 0.54 on Project Innovation with the significance of 0.00. Vales mention in the table also justifies the First Hypothesis.

(H1). Inclusive Leadership and project Innovation are positively associated with each other. Relation between Inclusive Leadership and Psychological Safety.

TABLE 4.6: Direct and Indirect effect of Inclusive Leadership on Project Innovation

	<b>Effect</b>	<b>SE</b>	<b>T</b>	<b>P</b>	<b>LLCI</b>	<b>ULCI</b>
	Direct effect of X on Y					
	0.54	0.048	11.13	0	0.327	0.531
	Indirect Effect of X on Y					
PI	0.11	0.03	-	-	0.057	0.18

Note: \* values represent the Boosted LLCI and Boosted ULCI Values

### Direct Effect

Total effect expresses the effect of Independent variable that is Inclusive Leadership and Dependent variable Project Innovation. The direct effect of Inclusive Leadership on Project Innovation is .54 with the significance of  $p = 0.00$ . It indicates that more or less 54% variance occurs in project Innovation due to Inclusive Leadership. The lower limit is 0.327 while the upper limit is 0.531, without having any zero between both limits.

### Indirect Effect

Indirect effect identifies Independent variable that is Inclusive Leadership and Dependent Variable Project Innovation in presence of mediator Psychology Safety. In the presence of mediator the indirect effect is .11. It demonstrates that Inclusive Leadership has 11% variation in Project Innovation in the presence of mediator that is Psychology Safety. The lower limit of bootstrap (Boot LLCI) is 0.057 while the upper limit (Boot ULCI) is 0.186, without having any zero between both limits, which clarifies that the results are significant.

The above Tables 4.6, authenticate the hypothesis. (H4) Psychology Safety plays the mediating role between Inclusive Leadership and Project Innovation. Figure 4.1 below show that all the paths (a, b, c) are significant and effect each other. The path a, b and c are significance with 0.00, 0.00 and 0.00 respectively. The tables also show that no zero lying in between path a, b and c. So those measured values through analysis also practically justify the 3rd hypotheses about the mediation.



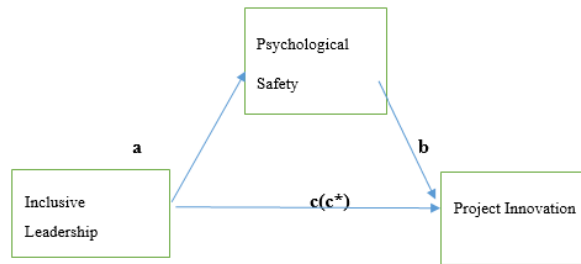


FIGURE 4.1: Mediation Analysis

## Total Effect

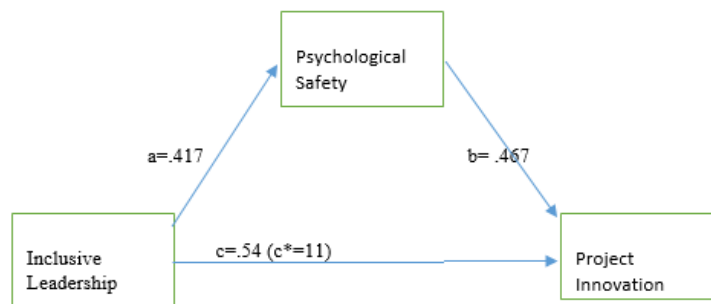


FIGURE 4.2: Mediation Analysis with Coefficients

Total effect is equal to Direct and Indirect effect. Total effect produced by the model indirect and direct effect. It is sum of indirect effect ( $a*b$ ) and direct effect ( $c$ ). That the total effect was .264, thus indicating a statistically significant effect ( $p < .05$ ).

TABLE 4.7: Total effect of Inclusive Leadership on Project Innovation mediator Psychology Safety

	Effect	SE (Boot)	Boot LLCI	Boot ULCI
Total Effect	0.264	0.055	0.148	0.39

## 4.5 Moderation Role of Organizational Culture

Moderating variable act as a catalyst in research model. Moderator variable strengthen or weaken the relationship between creation variable and predictor variable. H4 that is Organizational Culture positively moderates the relationship between Psychology Safety and Project Innovation. Table 4.2 show significant values between Psychology Safety and Organizational Culture also between the Organizational culture and Project Innovation. The relationship between Organizational Culture and Project Innovation is also significant. Interaction term (PS x OC) also show insignificant relation where  $P = .10$ . 95% confidence level between the upper and lower limits of  $-.1838$  and  $.0401$  of the interaction term. Nonexistence of zero between the LLCI and ULCI indicates that moderation did exist and the assumed hypothesis that is Organizational Culture moderates the relationship between Psychology Safety and Project Innovation is accepted. H4 is accepted due its high significant value  $p < 0.05$  and zero lying between LLCI and HLCI.

TABLE 4.8: Moderation Analysis

	<b>Coeff</b>	<b>Se</b>	<b>T</b>	<b>P</b>	<b>LLCI</b>	<b>ULCI</b>
Constant	-2.0418	0.7997	-2.5532	0.0114	-3.6178	-0.4657
Psychology Safety	1.138	0.2589	4.395	0	0.6277	1.6484
Organizational Culture	1.2281	0.21	5.8481	0	0.8142	1.642
Int_1	-0.1996	0.066	-3.0252	0.0028	-0.3296	-0.0696

Note: \* values represent the Boosted LLCI and Boosted ULCI Values

## 4.6 Hypothesis Summary

TABLE 4.9: Hypothesis Summary

<b>Hypothesis</b>	<b>Statement</b>	<b>Results</b>
H1:	Inclusive leadership has positive impact on project innovation.	Accepted
H2:	Inclusive leadership will positively related to psychological safety.	Accepted
H3:	Psychological safety mediates the relationship between inclusive leadership and project innovation	Accepted
H4:	Organizational culture moderates the relationship between psychology safety and project innovation such that it strengthens the relationship.	Accepted

# Chapter 5

## Discussion and Conclusion

### 5.1 Introduction

The following chapter is divided into subsections which provides information related to the hypothesized relationship, and their acceptance and rejection based on the empirical results, theoretical and empirical justification of the acceptance and rejection of the hypothesis of the study, theoretical and practical contribution, limitation of the study and future recommendation for the academic researcher and scholar.

### 5.2 Discussion

The under-arching theory of the study is Leader-member-exchange theory for the proposed model of the study in order to establish the relationship between exogenous and endogenous variables. In this backdrop, the purpose of the study is to examine the impact of inclusive leadership on project innovation with mediating role of the psychological safety and moderating role of the organizational culture. However, the proposed model is specifically designed and estimated for the project-based organization of Pakistan. In an organization leader is an integral part of the organizational system. Because a leader is the one who manages the whole workforce in order to accomplish the projects according to the vision and mission of the organization. Therefore, a leader must have the required set of

competencies that will lead towards project innovation. The empirical findings of the study are aligned with the hypothesized model and in the hypothesized model, a positive direct relationship exists between inclusive leadership and project innovation. Psychological safety mediated the relationship between inclusive leadership and project innovation. Moreover, organizational culture moderates the indirect relation between inclusive leadership and project innovation. Hence, a comprehensive discussion of each hypothesis is given below.

### 5.2.1 Inclusive leadership and Project Innovation

*H1: Inclusive leadership has a positive impact on project innovation.*

After discussing the results in the previous chapter which provide information that there exists a significant positive relationship between inclusive leadership and project innovation which will lead towards the acceptance of the H1 hypothesis and rejection of the null hypothesis. Because when the leader follows the inclusive leadership styles then he encourages his subordinates to discuss their ideas, opinions, views to perform the task creatively which increases the initiatives of performing the task and resolving the problems in an innovative manner (Bowers, Robertson, & Parchman, 2012). An inclusive leader encourages employees to take the defined risk which will lead towards an increase in the competitiveness of the organization.

The empirical findings of the study are aligned with the (Bowers, Robertson & Parchman, 2012) which conclude that inclusive leader allows every subordinate to share their ideas, belief, and opinions are important because collective efforts increase the project innovation. Inclusive leadership style increases the employee's creativity at the workplace by providing them the confidence to share their methodologies to perform the task and for solving complex problems creatively (Carmeli et al., 2010). Another study concluded that the overall performance of the team and inclusive leadership is positively related to each other (Morgeson, DeRue, & Karam, 2010). Moreover, (Dorenbosch, Engen, & Verhagen, 2005) finds that when employees are enabled to discuss their ideas and empowered to perform the assigned task in their own decided methodology without considering to follow

the predefined conventional policies and procedures this enhances their creativity and innovation.

This sense of independence in employees can only be delivered by the leader and through the norms set by the leader. Inclusive leadership style enhances the employee's performance, creativity, and innovation by inculcating the sense of independence and by allowing them to perform the task creatively by not only confirming the conventional way of performing the task. On the basis of the above discussion, it is concluded that inclusive leadership increases project innovation by providing the employees the sense of independence, freedom to share their ideas, methodologies to perform the task and to come with an innovative solution.

Therefore, inclusive leadership is the most influential leadership style for managing the workforce and enhancing project creativity and innovation. Due to the significant impact of inclusive leadership on the employee's related variables and on organizational innovation the company should recruit such employees who exhibit the characteristics of inclusiveness that enables top management to construct such a workforce to promote project innovation.

### **5.2.2 Inclusive leadership and Psychological Safety**

*H2: Inclusive leadership will be positively related to psychological safety.*

The empirical findings of the study found that the existence of a significant positive relationship between inclusive leadership and psychological safety enables to accept the H2 and rejection of the H0 which states that inclusive leadership is not positively related to psychological safety. An inclusive leader provides employees an environment that provides safety, openness, and support. Due to this scale developed by Hollander (2012) to measure the impact of inclusive leadership contains "support-recognition," "communication-action-fairness," and "self-interest-disrespect" after conducting the detailed and in-depth interview.

Therefore, inclusive leadership is divided into major dimensions which are leadership's "invitation" and "appreciation" of the team members which provide psychological safety to the employees which enhance their work performance (Nembhard & Edmondson, 2006). The empirical findings of the study are aligned with the

empirical findings of the previous study which concludes that inclusive leadership and psychological safety are positively related (Ahmed, Zhao, Faraz, & Qin, 2021; Fang et al., 2019). Inclusive leadership establishes mutual trust between leader and subordinates which further creates respect and psychological safety. Moreover, inclusive leadership provides employees psychological safety which enables them to work in a positive and healthy environment. Besides this inclusive leadership is significantly negatively related to psychological distress which also confirms that inclusive leadership creates and increases psychological safety among employees (Ahmed et al., 2021).

Because psychological safety is related to the individual perception regarding taking the interpersonal risk in the organization or at work environment (A. Edmondson, 1999; A. C. Edmondson, Kramer, & Cook, 2004; Kahn, 1990). And the behavior of the leader further impact the feeling of psychological safety among employees (Mikyoungh & Moon, 2019). Based on the above discussion it is concluded that inclusive leadership promotes psychological safety among employees by developing mutual trust among leaders and subordinates. Besides this mutual trust further impacts multiple employees-related variables such as performance, confidence, organization, commitment, and satisfaction (Javed et al., 2017). Therefore, a leader must contain the inclusive characteristic to manage the workforce and enhance the psychological for efficiently and effectively execution of the projects.

### **5.2.3 Psychological Safety and Project innovation**

*H3: Psychological safety mediates the relationship between inclusive leadership and project innovation.*

The results of the study provide insight into the statistically significant mediating impact of the psychological safety between the relationship of inclusive leadership and project innovation. Therefore, on the basis of estimated results, the null hypothesis is rejected which hypothesized that psychological safety does not mediate the relationship between inclusive leadership and project innovation because the p-value is less than 0.05. The empirical findings of the study are according to the proposed model that psychological safety mediates the relationship between

inclusive leadership and project innovation. Inclusive leadership is positively related to project innovation due to the influential attributes of the inclusive leader. Because inclusive leader provides support to the subordinates and openness in which they are able to share their ideas. Moreover, inclusive leadership also provides psychological safety to the employees by giving them a sense of independence, appreciation, and confidence (Hirak, Peng, Carmeli, & Schaubroeck, 2012). Hirak et al. (2012) Noted that inclusive leadership is statistically related to psychological safety/security. An inclusive leader encourages employees to come up with new creative ideas to accomplish the desired goal of the project in an effective and efficient manner without considering to follow the traditional methodologies to perform the task Choi, Tran, and Kang (2017) which increases the feeling of psychological safety among employees that further increases the employee innovation.

Hence, fundamentally inclusive leadership is also defined as a group of positive leadership behaviors which help members of the team to maintain their novelty in the team along with increasing their sense of belongingness with the team. This sense of belongingness and maintaining the uniqueness in the team increases the feeling of psychological safety and team members will be able to contribute towards solving the problems creatively and increases project innovation. Therefore, inclusive leadership increases the project's success directly and indirectly through psychological safety and psychological empowerment as mediators (Baofeng, 2015; Fang et al., 2019).

Because inclusive leader shows more positive expectation and tolerance for their subordinates in the team or in a project that increases support provided by the leader to the subordinates which increase the creativity and generation of novel ideas. On the basis of the above discussion, it is concluded that psychology positively mediates the relationship between inclusive leadership and project innovation. So, corporate management should promote an inclusive leadership style in their organization because inclusive leadership style not only increases the project innovation but it also increases the psychological safety among the employees which further positively contributes towards the enhancement of project innovation.

## 5.2.4 Organizational Culture and Project Innovation

*H4: Organizational culture moderates the relationship between psychological safety and project innovation such that it strengthens the relationship.*

On the basis of the proposed model psychological safety mediates the relationship between inclusive leadership and project innovation and organization culture moderates the relationship between psychological safety and project innovation. Results of the study accept the hypothesis (H4) and reject the corresponding null hypothesis. The estimated results show that organizational culture strengthens the relationship between psychological safety and project innovation. Organizational culture considers as the shared assumptions, values, and norms (Schein, 1985) and the role of organizational culture for increasing innovation is significant and positive in nature (Hartmann, 2006).

Because through organizational culture feeling of psychological safety of the employees increases which will further lead towards an increase in project innovation. Therefore, inclusive leadership inculcates the inclusiveness among team members. Due to this reason, when it comes to inclusiveness, researchers emphasis on the role of leadership (Cottrill, Denise Lopez, & C. Hoffman, 2014; Jin, Lee, & Lee, 2017; Qi, Liu, Wei, & Hu, 2019; Randel et al., 2018). These managers play a critical role in development of organizational environment to deal with the unprecedented change. Also They may have a significant influence on employee experiences, especially when the workforce is diverse (Kirton & Greene, 2015; Pless & Maak, 2004; Shore et al., 2011).

Managers' primary responsibility is to mold the organization, to establish a vision that motivates groups and people, and to create circumstances that allow that vision to become a reality. Instead of being a solo position, inclusive leadership is a dynamic and proactive activity that aims to engage everyone in the organization, so they can engage their employees and motivate them in response to emerging economics situations (Choi, Tran, & Kang, 2017; Pless & Maak, 2004). This define the definition of inclusive leadership refers to the ability of a manager that motivates others to perform and contribute in a specific task(Carmeli, Reiter-Palmon, & Ziv, 2010; Workman-Stark, 2017).



### **5.3 Practical and Theoretical Implications**

In order to create a sustainable competitive advantage in uncertain and turbulent business environments, senior management should consider the significant role and importance of project innovation while designing the strategies for multiple projects because it contributes towards the performance and strong competitive edge in the market. Besides this, the output of the study contributes to the literature by providing the impact of inclusive leadership on project innovation also along with the mediating impact of psychological safety. If organizations want to survive in a rapidly changing and unpredictable competition in the market where customers' behavior changes daily, then the organization must focus on developing creative solutions by involving in multiple innovative projects.

Based on the findings of the study, the survival of the organization is only achievable through inclusive leadership. This research has added to the existing literature in a new domain. The empirical findings of the study contribute to the literature by providing the impact of inclusive leadership on project innovation directly and indirectly through psychological safety which further uses by the organizational management while recruiting the employees which possess the characteristic of inclusiveness so that in the future they deliver value addition in the organization. The outcome of the study can also be practically implemented by the top management for the creation of an inclusive organizational culture that enables the inclusive leader to provide a sense of independence to the employees and increases psychology safety, employees' creativity, innovation, satisfaction, and decrease organizational turnover.

### **5.4 Limitations and Ruture Recommendation**

The objective of the study is majorly designed in order to measure the impact of inclusive leadership on project innovation in the presence of psychological safety and how this indirect relationship is strengthened by the organizational culture. Therefore, a comprehensive empirical methodology is employed in order to estimate the results which is presented in Table 4.4,4.5,4.6 and 4.7. However, the

following study also has some limitation which is related to multiple dimension such design and sample of the study. Because due to time constraints the cross-sectional is collected at a single point but for in-depth analysis of the indirect impact of psychological safety between inclusive leadership project innovation longitudinal design of the study is more appropriate. So, based on this limitation it is recommended that future academic researchers should use the longitudinal design of the study for data collection.

Another major limitation of the study is the sample of the study which only consists of the project-based corporation of Pakistan. Therefore, is recommended to the future academic researcher that they should extend the sample size by adding the project-based corporation of different developed and emerging countries in order to generalize the results across the globe. In order to determine and measure the impact of inclusive leadership on project innovation directly and indirectly through psychological safety, it is recommended that academic researchers should construct the sample for data collection based on the financial and non-financial project-based corporation in order to provide an innovative solution to foster the project innovation based on the in-depth research by assimilating current trend of the market.

## **5.5 Conclusion**

Due to the complex and uncertain market situation in the 21st century now the organization is shifting towards project-based organization and preferably perform their task in projects to achieve the desired goal. Therefore, due to diversity in the workforce, it becomes essential to identify which leadership style contributes more towards project innovation by utilizing the organizational resources effectively and efficiently. Because various leadership styles effectively work according to the situation due to the reason that now organization prefers to perform their processes and activities in the team for innovation. Therefore, the complex nature of today's business world requires team innovation which is becoming increasingly important to an organization's survival and success. However the literature emphasizes the significance of leadership in team creativity, past research has mostly focused on

transformational leadership, with mixed findings (Ye, Wang, & Guo, 2019).

So, organizations prefer to supervise the team through an inclusive leadership style because an inclusive leader encourages team members that how they can identify a new innovative solution and creatively perform tasks. Besides this inclusive leadership also increases psychological safety among employees by giving them a sense of independence and mutual trust through organizational culture. In this backdrop, this research is design in order to get and measure the positive or negative impact on project innovation directly and indirectly through psychological safety and organizational culture to strengthen the indirect relationship between inclusive leadership and Project University. The empirical methodology used to measure the impact is mediation and moderation of Preacher and Hayes on the data which is collected from Pakistani project-based organizations on 223 respondents. On the basis of empirical results, it is concluded that inclusive leadership directly and indirectly through psychological safety is positively associated with project innovation and organizational culture strengthens the relationship between psychological safety and project innovation.

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# Appendix A

## SECTION-ONE; PREAMBLE

Dear Participant,

We are carrying out a survey on looking into Impact of Inclusive Leadership on Project Innovation: Mediating Role of Psychology Safety and Moderating Role of Organization Culture. We would appreciate your kind participation by answering all questions related to this research. This question and answer section shall not take more than 5 minutes of your time. Your participation in this survey is completely voluntary, and you may discontinue the survey at any time. All the information provided by you shall be kept confidential, and will be used for academic purposes only.

**Iqra Bukhari; Ms. Maria Mashkoor**

Please tick one column per statement, to indicate your response towards the statements below. The response scale is based on seven options including; strongly agree (1), agree (2), mildly agree (3), neutral (4), disagree (5), mildly disagree (6), and strongly disagree (7).

## **Inclusive LeadershipS**

S.No	Questions	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	The Manager is open to hearing new ideas (openness)					
2	The manager is attentive to new opportunities to improve work processes (openness)					
3	The manager is open to discuss the desired goals and new ways to achieve them (openness)					
4	The manager is available for consultation on problems (availability)					
5	The manager is an ongoing 'presence' in this team—someone who is readily available (availability)					
6	The manager is available for professional questions I would like to consult with him/her (availability)					
7	The manager is ready to listen to my requests (availability)					
8	The manager encourages me to access him/her on emerging issues (accessibility)					
9	The manager is accessible for discussing emerging problems (accessibility)					

## Project innovation

Serial no.	Questions	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	Using skills they already possess, this team learn new ways to apply those skills to develop new products that can help attract and serve new markets.					
2	This team seeks out information about new markets, products, and technologies from source outside the organization.					
3	This team identifies and develops skills that can improve their ability to serve existing business needs.					
4	This team identifies and develops skills that can help attract and serve new business needs					
5	This team learns new ways to apply their knowledge of familiar products and techniques to develop new and unusual solutions to familiar, routine problems.					
6	This team seeks out information on products and techniques that are new to the operation and learns how to apply them to develop new solutions to routine problems					
7	This team identifies and learns skills and technologies that may be useful in developing multiple solutions to problems.					
8	This team seeks out and acquires knowledge that may be useful in satisfying needs unforeseen by the clients.					

## Psychology safety

Serial no.	Questions	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	If you make mistakes on this team, it is not really held against you.					
2	Member of this team are able to bring up problems and tough issues.					
3	People on this team never reject others for being different					
4	It is safe to take a risk on this team.					
5	It is easy to ask other members of this team for help.					
6	No one on this team would deliberately act in a way that undermines my efforts.					
7	Working with members of this team, my unique skills and talent are valued and utilized.					

## Organizational Culture

Serial no.	Questions	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1	The concern of the department is to get the job accomplished.					
2	The department is governed by bureaucratic rules.					
3	Organization understand and share the same business objectives.					
4	The organization is a formalized and structured place.					
5	The organization is personalized.					
6	The organization is product oriented.					
7	The organization is extended family.					
8	The organization staff shares much about themselves.					
9	The staff are involved personally.					
10	The organization is risk taker.					
11	People here try to make friends and keep their relationships strong.					
12	People here get along very well					
13	People in our department often socialize outside the office.					
14	People here do favors for others because they like one another.					
15	Works get done effectively and productively.					
16	Organization share the same strategic goal.					
17	Department takes strong action to address poor performance.					
18	We know who the competition is.					