# CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD



# Impact of Proactive Personality on Project Innovativeness with Mediating Role of Mindfulness and Moderating Role of Organizational Agility

by

# Ammar Hamza Iqbal

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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Dedicated to the best teacher of the world which is without any doubt Prophet

Muhammad PBUH other than that this thesis is also dedicated to my beloved

parents, respected teachers and friends



### **CERTIFICATE OF APPROVAL**

# Impact of Proactive Personality on Project Innovativeness with Mediating Role of Mindfulness and Moderating Role of Organizational Agility

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# Abstract

Hiring dull personalities or not providing training to the employees or workers for being proactive behavior is a very crucial subject for almost all organizations of the Pakistan. We know well that leaders are a key source of ethical guidance for employees. Even in the developed countries, employees and their organizations are still struggling to ensure proactive personality for their employees. Proactive personalities and project innovation are main objective of this research and to find out how a project managers and employees role is important for developing and implementing the reactiveness between employees in an organization. Proactive personality (PP) is a research model that was used to improve the Project Innovation (PI) in organizations and what role it can play in other mindfulness like creative mindset, productivity and employees project orientation. Moreover, the mediating role of Mindfulness (M) between the proactive personality and Project Innovation and moderating role of Organizational agility (OA) on Project innovations and proactive personalities. Data was collected through 304 respondents of project based organizations in Pakistan. The study concludes the positive relation between Proactive personality and Productivity of Project innovation. This study also has theoretical implications in organizational agility and employee's productivity of project innovation literature and practical implication in Pakistan's in project based organizations. This research proposes on the basis of theory for understanding of proactive personality and how it offers a concrete definition of project innovation. We investigate the practicality and productivity of project innovativeness under mindfulness and organizational agility. This research hypothesize that mindfulness plays mediating role between project innovation and proactive personality whereas organizational agility does not moderate the relationship between these variables.

Keywords: Proactive Personality, Project Innovation, Mindfulness and Organizational Agility.

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# Abbreviations

B Beta Coefficient

**LLCI** Lower Level Confidence Interval

M Mindfulness

OA Organizational Agility

P Probability Value

PI Project Innovativeness

**PP** Proactive Personality

SE Standard Error

**ULCI** Upper Level Confidence Interval

# Chapter 1

# Introduction

## 1.1 Background of the Study

There has been a lot of attention to the link between proactive personality and professional performance since observations reveal that the rise of boundary-less or protean careers necessitates proactive persons to be successful. Aggressive people allegedly choose, create, and influence workplace settings that boost the likelihood of career success (Lochab & Nath, 2020). Proactive people take an active approach, look for information, study their surroundings, and strive to foresee potential opportunities in their work environment rather than waiting to react to factors in that environment (Buil, Martínez, & Matute, 2019; Saether, Eide, & Bjørgum, 2021). People with high pro-active personality qualities are more likely to modify their circumstances on their initiative purposefully. A proactive personality relates to taking the industry, persisting in bringing about significant change, and seeing possibilities and seizing them (Seibert, Kraimer, & Crant, 2001).

According to (Prieto, 2011), a proactive personality has an impact on whether or not a social initiative is created. Others with this personality feature can actively develop their resources, change their surroundings on purpose, and become more successful than people with a less proactive disposition. The success of individuals and the competitive advantage of their businesses are now increasingly regarded to be driven by personality qualities, especially those that demonstrate a readiness to change (Seibert, Crant, & Kraimer, 1999). Due to the quick pace of change in

organizations, culture, and technology, modern workers must constantly manage change in both their surroundings and themselves (Fugate, Kinicki, & Ashforth, 2004). Proactive individuals create an environment that is stimulating in the workplace to improve performance (R. Zhang, Li, & Gong, 2021).

Due to their proactive behavior and ability to think imaginatively, proactive people can deal with uncertainty, which results in a good performance at work (F. Li, Chen, Chen, Bai, & Crant, 2020). In individual's behavior proactive personality is an important determinant as individuals with high proactive personality level are not affected by environmental factors easily (Fuller, Marler, & Hester, 2006). Mindfulness has many definitions. And the commonly used definition of mindfulness is "the awareness that arises from paying attention on purpose in the present moment and non-judgmentally" (Kabat-Zinn & Hanh, 2009).

Mindfulness is an idea derived from Buddhism and other spiritual traditions, with origins relationship again heaps of years. However, the application of mindfulness and in secular contexts has mainly succeeded over the past 30 years, with their use in place of work settings a reasonably latest phenomenon (Jamieson & Tuckey, 2017). K. W. Brown, Ryan, and Creswell (2007) identified several characteristics of mindfulness, including non-conceptual and non-discriminatory awareness, clarity of awareness, flexibility of awareness and attention, an empirical attitude towards reality to get all the facts, and continuity or stability of awareness and attention.

Jamieson and Tuckey (2017), make a distinction between trait mindfulness, which is concerned with how frequently and intensely an individual engages with states of mindfulness, and state mindfulness, which describes an individual's current level of attention and awareness to incentives happening in the present situation. According to research on the well-being advantages of mindfulness in the workplace, management development interventions are likely to enhance managers' well-being and possibly have a positive impact on their organizations. An additional justification for managers and staff to use mindfulness interventions is that they may experience advantages over those provided by other workplace stress management interventions (Chiesa & Serretti, 2009).

Employee well-being, including job happiness, project innovation, and corporate citizenship behaviors can all be improved by practicing mindfulness (Reb,

Narayanan, & Chaturvedi, 2014). It has been discovered that mindfulness is more efficient, that it helps improve emotion management, and that it can lessen anxiety and sadness (Tang, Hölzel, & Posner, 2015). Mindfulness also helps to lower stress (Nima, Rosenberg, Archer, & Garcia, 2013). Innovation serves as a symbol of organizational renewal processes and is essential to its success as well as to finding solutions to a variety of issues (McCann & Ortega-Argilés, 2013).

Innovation in governance, however, is uncertain and necessitates an institutional setting that fosters learning and information exchange (Hartley, 2005). One finding is that knowledge is produced when diverse organizations come together, form alliances, and exchange concepts. Therefore, we can see that teamwork and creative problem solving are the solutions for organizations that lack innovation as well as in the public sector (Bommert, 2010; Borins, 2014). The goal of an innovation project is to fulfil specified objectives that are prioritized highest in the framework of science and technology development. To do this, a set of technical, organizational planning, computations, and financial documents are needed (Kormishkin, Sausheva, Gorin, & Zemskova, 2016; Frank, Mashevskaya, & Ermolina, 2016).

There is some difference in the level at which agility is taken into consideration. Agility is about recognizing and adapting to change. According to (Zain, Rose, Abdullah, & Masrom, 2005), agility entails enhancing the customer experience, working with stakeholders to increase competitiveness, managing uncertainty and change and utilizing information and human resource-based resources. According to (Sørensen & Landau, 2015), a narrow definition of agility is the capacity of researchers to include the most recent IT advancements in their works. According to (H. Liang, Wang, Xue, & Ge, 2017), agility is a set of talents to recognize and react to customers and rivals. Sambamurthy, Bharadwaj, and Grover (2003) and (Overby, Bharadwaj, & Sambamurthy, 2006), organizational agility is the ability to perceive external changes and to quickly adapt by reconfiguring processes, resources, and strategies. According to research on the well-being advantages of mindfulness in the workplace, management development interventions are likely to enhance managers' well-being and possibly have a positive impact on their organizations. Following (Charbonnier-Voirin, 2011), whose work reveals a first

rate large approach, this take a look at defines organization agility as the planned response functionality that the business enterprise develops to enable effective conduct in a pretty turbulent surroundings. This definition consists of the organization's potential for motion in seizing and looking ahead to opportunities. The background research mentioned above demonstrates that behavior and how one handles. Additionally, because mindfulness improves employee wellness, initiatives will be more innovative as a result. Being proactive will therefore operate as an independent variable, and project innovation will serve as a dependent variable. Additionally, organizational agility will serve as a moderator and mindfulness will serve as a mediator.

## 1.2 Gap Analysis

There's an increasing number of proof that innovation plays a key function in an organizational success (Patterson, Kerrin, & Gatto-Roissard, 2009; Dana, Gurău, Hoy, Ramadani, & Alexander, 2021). The main factors in determining an organizational competitiveness and success are new and innovative ideas that brings meaningful change and new innovations (Thornhill, 2006; Chang & Shih, 2019). According to (Simonton, 2008) more research is required on innovation. Because organizational are working on innovations to compete with other organizations. Proactivity is defined as a person's behavior at work, their attitude toward other people and situations, their initiative in challenging circumstances (Parker, Wang, & Liao, 2019; R. Zhang et al., 2021). The advantages to organizations in terms of new innovation to fulfil aims and achieve organizational goals will increase as people's proactivity increases. Kong and Li (2018), recommended to start working on proactive personality and creative behavior that results in project innovativeness. There is virtually little study on the connection between a proactive personality and project innovativeness with mindfulness as meditating variable. To further examine the association between mindfulness and project innovativeness, moderating variable organizational agility was not before done. The current study fulfills a current demand by examining the influence of a proactive personality on project innovativeness.

#### 1.3 Problem Statement

A proactive personality is a mentality that allows people to take charge in both their professional and personal lives. Particularly, in the context of projects, proactive personality and mindfulness support project innovativeness by ensuring that certain objectives are met within the allotted time. The proactive personality provides a distinctive and valuable contribution to the literature on personality traits, and it is likely to be effective in the workplace. Organizations must adopt a proactive, change-oriented mindset in order to remain competitive. For innovations the need of individuals with proactive personalities is growing daily.

Organizations therefore seeks to choose and successfully integrated individuals with proactive personalities. Researchers and scholars have found that these will leads to project innovativeness (Fuller Jr & Marler, 2009). According to study, there is little literature addressing the professional side of proactive people, particularly in the context of IT-related software companies, project-based organizations and construction projects. Additionally, we must investigate the connection between a proactive personality and project innovativeness to determine whether or not being more proactive leads to innovativeness. Additional organizational agility can moderate this relationship or not. In this research proactive personality is studied to understand how it can contribute to project innovativeness through mediation of mindfulness and moderating role of organizational agility.

## 1.4 Research Questions

On the basis of the identified issues this study suggests answers to some questions that are given as follows:

#### Research Question 1:

What is the relationship between proactive personality and project innovativeness?

#### Research Question 2:

What is the relationship between proactive personality and mindfulness?

#### **Research Question 3:**

What is the relationship between mindfulness and project innovativeness?

#### Research Question 4:

Does mindfulness mediate the relationship between proactive personality and project innovativeness?

#### Research Question 5:

Does organization agility moderate the relationship between mindfulness and project innovativeness?

#### Research Question 6:

Is the indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility?

## 1.5 Research Objectives

The development and testing of the model to determine the association between proactive personality and project innovation is the primary goal of the current study. Additionally, this study will determine how mindfulness affects project innovation and proactive personality. It is suggested that Organizational Agility have a crucial moderating role in determining whether or not the association between Project Innovation and Mindfulness is moderated. The research model for the study illustrates the association between these variables.

The main objectives of this study are

#### Research Objectives 1

To find out the relationship between Proactive Personality and Project Innovativeness.

#### Research Objectives 2

To find out the relationship between Proactive Personality and Mindfulness.

#### Research Objectives 3

To find out the relationship between Mindfulness and Project Innovativeness.

#### Research Objectives 4

To find out the mediating role of Mindfulness between Proactive Personality and Project Innovativeness.

#### Research Objectives 5

To find out the moderating role Organizational Agility between Mindfulness and Project Innovativeness.

#### Research Objectives 6

To find out the indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility.

## 1.6 Significance of the Study

This research helps researchers to know about the basic knowledge of proactive personality especially in domain of project management, adding more value in the project management domain as it is proposed. Today, in this competitive world, projects play a wide and essential role to achieve the competitive and economic advantages because the traditional cultures of the organization change into project based organizational culture. Organizations begin to experience problems with innovativeness as a result of the change in tactics.

Since proactive personalities are necessary for organizations to innovate and handle their tasks, many projects have failed due to poor management, inappropriate guidelines, or a lack of team-building mindfulness. Despite this, researchers still place a high priority on tangible factors like cost, procurement, and schedule (Lines, Sullivan, Hurtado, & Savicky, 2015). The study also offers a mechanism for explaining how mindfulness acts as a mediator between proactive personality and project innovativeness.

Furthermore, the objective of the present study is to examine the theories and hypotheses relating traditional and project-based organizations in the context of Pakistan. These organizations offer organizations a variety of ways to improve project outcomes and results.

## 1.7 Theoretical Background

Different academics have put out a number of theoretical perspectives that are applied globally to support the studies of proactive personality and project innovation. This study incorporates the trait activation theory.

#### 1.7.1 Trait Activation Theory

According to the trait activation theory put out by (Tett, Simonet, Walser, & Brown, 2013), a person's qualities combine with a task to produce organizational benefits that result in innovations. A person's qualities evolve based on interactions with other people or the circumstances he is in. The basis for tracking the complexity of how personality manifests itself at work and for finding further applications is the trait activation hypothesis. Since the trait situation link is depicted by contending that the behavioral manifestation of a characteristic requires inspiration of those trait by trait relevant situational stimuli, the trait activation theory adequately accounts for all the factors.

The main goal of this research is to recognize the circumstances in which a personality feature should manifest itself in behavior. If a circumstance provides clues for the characteristic's expression, it is determined to be appropriate for that trait (Tett & Burnett, 2003; Tett & Guterman, 2000). "Trait and situation create two sides of the same coin that cannot be separated from each other," (Tett et al., 2013), explained the significant concept of other beliefs that persist and effect trait activation theory.

This study provides an interactionist model that illustrates the contexts in which a certain personality expression occurred. This is accomplished by demonstrating a proactive mentality that deals with adapting to change, recognizing possibilities, and getting to work on them. The current study accepts the trait activation theory put out by (Tett & Guterman, 2000), who formalize the trait-situation relationship by contending that behavioral expressions of traits desire stimulation of those traits by trait relevant situational stimuli. The objective of this study is to find out the circumstances under which a personality feature may manifest itself

in behavior. If a circumstance provides clues for the characteristic's expression, it is determined to be appropriate for that trait. Along with awareness, mindfulness is a quality that enhances the link between a pro-active personality and project innovation.

Tett and Burnett (2003), trait activation model includes a statement on how personality qualities are connected to success and how a proactive, attentive personality fosters creativity. Additionally, organizations that are agile are able to adapt to change more rapidly and provide greater results. There are two ways that traits might emerge in an organization. The first is regular everyday interaction, and the second is training. The achievement of a project depends on the motivation and intensive given to the employees, which is maintained by project managers. This idea also supports our model of research, which holds that proactive personality traits of employees with a variety of jobs result in organizational benefits, which are symbolized in our model by project innovation.

### 1.8 Structure of the Thesis

This research thesis is containing 5 chapters and every chapter is contributing in this research thesis.

As chapter 1 gives the overall sketch of the research. Chapter 1 contains the background of the study, problem statement, the research gap, research objective, significance of this study, research question, and the theoretical background of this research.

In chapter 2 there is a detailed research studies about the variables. It provides comprehensive literature of all variables included in this study. The research model is also present in this chapter.

Chapter 3 contains the methodology of the current study. It includes population, time horizon, unit of analysis, sample of study, sample characteristics, how data is collected and scale that is used for data collection and the variables measurements that are used in current study. It also contains details about the demographics and their frequencies.

In chapters 4 there is a detail of results. By help of results we are able to find out that the hypothesis statements are accepted or rejected.

Chapters 5 discuss the finding of the study base on the statistical tests that are mention in chapter 4. This chapter also includes the practical implication, limitation of the study, future direction for future study, theoretical implication and conclusion.

# Chapter 2

# Literature Review

The entire body of published literature is presented in the chapter after that as a theoretical justification for developing the study's theoretical framework. Additionally, this chapter is divided into subsections that provide details on earlier empirical studies on the relationship between the independent variable of proactive personality and the dependent variable of project innovation, as well as the mediator effects of mindfulness and organizational agility.

# 2.1 Proactive Personality and Project Innovativeness

People with highly pro-active personality qualities are more likely to purposefully modify their circumstances on their own initiative. The degree to which proactive employees "identify with and feel connected in their organizational surroundings" may be influenced by their understanding of their capacity to change their environment (Crant, 2000; Thomas, Whitman, & Viswesvaran, 2010). Stages of the innovation process are linked to creative work behavior, idea generation, concept promotion, and idea execution, according to (Janssen, 2000).

Additionally, innovation requires positive mood, a welcoming environment, and comprehensive leadership (X. Zhang & Bartol, 2010). Together with the excellent enchantment of proactive character for present day businesses due to its attention on beginning alternate, advances in empirical research through meta-analytic

studies have, indeed, supported its carried out cost by using reporting high quality and significant hyperlinks among those dispositions (Rodrigues & Rebelo, 2019).

In his discussion of the first pathway in his research, (McCowan, 2019) uses the term "proactive route," and involvement along this road illustrates the propensity for people to discover their life orientation through active examination of many possibilities. This path most likely portrays what people imagine the university experience to be like; specifically, students are supposed to take a range of classes to determine which subjects pique their interest and then go along that road to decide on their ultimate degree of study. Second, different people in life have different aspirations. The results of the trials and the poll demonstrate that proactive minds are more simply and rapidly able to identify their goals for more extraordinary accomplishments than reactive minds. The proactive mind and only the proactive mind can think about a better future, which is why. Being proactive is positive since it allows you to quickly apply new ideas for success quickly. The reactive mind can only consider the present, making it helpful in finding immediate solutions (McCowan, 2019).

Employees with proactive personalities are more invested in their work and relentless in their search for answers to problems they encounter. They must immerse themselves cognitively and emotionally in their work to pursue these goals beyond their job description's scope. We argue that proactive employees are not going to refuse attempt or display different withdrawal-associated or deviant manufacturing behaviors at work, which can save them from attaining favored results. Prior research also supports this claim, showing that proactive employees put more effort into their work. Second, proactive personality precedes proactive coping practices in workers (Greenglass & Fiksenbaum, 2009), which frequently produce favorable social reactions that are connected to good subjective experiences.

Logically, this evidence is key to setting up the implemented price of this personality construct, given the pervasive need for modren companies to build a group of workers capable of operating correctly and effectively dealing with innovative efforts. Chang and Shih (2019). From a theoretical point of view, it seems possible to confess that proactive personality can constitute one of the most a success predictors of innovativeness within individual's character. Several authors

have emphasized that a proactive personality implies a self-starting approach to making changes at work, both through behavioral and motivational mechanisms (Mubarak, Khan, Yasmin, & Osmadi, 2021; Lauring, Selmer, & Kubovcikova, 2019).

One illustration of the advantages of having a proactive mindset and proactive attitude is given by (Kashdan & McKnight, 2009). Moreover, (Urquijo, Extremera, & Azanza, 2019) also providing meta-analytical proof supporting the incremental validity of proactive character, which confirmed that the quick proactive personality trait. As it seems college college students are capable of changing their lifestyles dreams and that those modifications have implications for later persons wellbeing, (Kashdan & McKnight, 2009) explains pathways to purpose; the question for instructors, administrators, and academes is that how do we help students commit to a direction for life. Researchers have suggested three main paths that seem to predict a more prominent feeling of purpose, even if it is impossible to characterize all the ways one could find a sense (Kashdan & McKnight, 2009).

Proactive employees are, through behaviors consisting of proactive coping, in all likelihood to enjoy greater high quality emotional states because they derive energy and a sense of efficacy from overcoming obstacles and challenges. Given those wonderful affective states are counter to the bad affective states (Penney & Spector, 2005). Compared to their less proactive peers, proactive employees are more likely to produce favorable work output due to their higher levels of work engagement. Work engagement is a favorable mental state that is connected to work and is characterized by vitality, absorption and dedication, (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Numerous authors have recounted this literature void and known as for further research with samples pertaining to work settings, with a view to establish the relevance of proactive personality for predicting this criterion (Steyn, 2019; Rodrigues & Rebelo, 2019).

Organizations greatly respect proactive personnel (Crant, 2000; Fuller Jr & Marler, 2009). They are described as being unrestricted by situational constraints and inclined to look for chances to modify one's environment significantly (Bateman & Crant, 1993). A behavioral predisposition toward creating a favourable environment is known as the proactive personality trait, a distinctive dispositional

characteristic (Bateman & Crant, 1993; Crant, 2000). Aggressive personalities are linked to beneficial results at the team, individual, and organizational levels, including innovation, favourable work attitudes, perceptions and more, according to growing empirical data 20 years (Kim, Hon, & Crant, 2009).

Consequently, people with higher rankings on this trait have a tendency to set high overall performance requirements, actively are trying to find opportunities to persuade their surroundings, anticipate problems, and pick out new thoughts to enhance paintings practices and methods (Yildiz, Murtic, Klofsten, Zander, & Richtner, 2021). According to (Klehe, Fasbender, & van der Horst, 2021), presented a proactive procedure attitude and argued that proactive individuals anticipate future activities and are aware to the consequences in their movements. Preceding empirical studies, although confined, factors in this path, as some preceding research have suggested positive association among proactive personality and innovativeness (McCormick, Guay, Colbert, & Stewart, 2019).

Innovativeness not only needs the creative ideas but also the employment of these ideas and intuitions (Amabile et al., 1996). Innovativeness has more opportunities to happen in groups with innovation support, innovation efforts are compensated rather than punished (Kanter, 1983). Past evidence helps to set up the applied cost of this personality concept, given the pervasive need of present day organizations to construct a team of workers able to do word efficiently, as well as successfully driving innovative activities. As numerous authors have stressed, proactive personality includes a dispositional self-beginning approach to indorsing change at workplace, via both behavioral and motivational mechanisms (G. Chen, Farh, Campbell-Bush, Wu, & Wu, 2013; Crant, 2000; Parker, Williams, & Turner, 2006).

Therefore, those who score higher on this trait have a tendency to hold themselves to a high standard, aggressively seek out opportunities to affect their environment, foresee issues, and come up with novel ideas for bettering work practices and project innovation processes (Crant, 2000). Previous empirical study has shown that proactive personality and project innovativeness are positively correlated (G. Chen et al., 2013; M. Li, Liu, Liu, & Wang, 2017; Parker et al., 2006). We anticipated that: Taking into account these preliminary data as well as the

proactive personality's inherent relevance to engaging in innovation and change related actions. Hence we hypothesized that:

Hypothesis 1: Proactive personality is positively associated to project innovativeness.

## 2.2 Proactive Personality and Mindfulness

According to Kabat-definition Zinn's from 2003, mindfulness is "the consciousness that comes via paying attention on purpose, in the present, and without judgment to the unfolding of experience moment by moment" (p. 145). Any mindfulness technique aims to achieve a relaxed, focused state of attention by encouraging conscious awareness of one's thoughts and feelings without passing judgment on them. Mindfulness can be practiced in many different ways. This permits the mind to return to the present moment (Zylowska, 2012). Glomb define being present giving something your full attention is being mindful. It involves taking your time to understand everything you're doing. Being aware is the opposite of rushing or multitasking. Taking your time involves being mindful. Any activity can be carried out by a group or an individual.

According to (Daniel, Daniel, & Smyth, 2022) by using mindfulness techniques that improve the ability to describe, be aware of, and not respond to inner feelings, a person may be able to recognize and cope with tendencies toward anxiety, melancholy, and emotional volatility that underpin emotional instability. Therefore, having a sound mind is essential for the success of a business and the creativity of project management since it allows for less judgment and greater adoption of constructive ideas. According to a meta-analysis of the study on proactive personalities, these personalities are consistently linked to employee performance, which in turn fosters project success. The idea of mindfulness has recently gained prominence as a useful quality in the workplace (Dane & Brummel, 2014), and scholars from several fields have taken an interest in it (Dane, 2011).

Proactive personality characterizes the personality of a person who is accountable for task performance, according to prior studies. When people focus more on their effective performance and become change agents in their workplaces, they

are exhibiting great performance, which is a mirror of their own experiences. Positive correlation exists between proactive personality and company effectiveness. It has been demonstrated that proactive personalities can produce a performance that transforms working actors' attitudes toward their profession from disorganized to disciplined, diligent, and highly dedicated (Andri, Adawiyah, Purnomo, & Sholikhah, 2020). Since theories emphasizing the ongoing interaction between personality, environment, and behavior serve as the foundation for the concept of proactivity (Fuller Jr & Marler, 2009).

Being proactive is a key indicator of employees' propensity for innovative behavior (Tai & Mai, 2016). For example, earlier research shows that dispositional proactivity is favourably related to idea production. In another study, MBA applicants' proactive personalities were shown to be favourably connected to enacting positive change, according to (Tai & Mai, 2016). Proactive employee personalities were also found to be positively related to supervisor assessments of innovativeness two years later. According to another study by (Amankwaa, Susomrith, & Seet, 2022), proactive people are persistent and may be especially good at spreading their ideas and gaining widespread support, which may help them realize their ideas successfully.

Being mindful has been more and more popular in recent years, so it's now extremely simple to learn how to be mindful through a variety of courses, workshops, internet programs, apps, and one-on-one consultations (Birtwell, Williams, Van Marwijk, Armitage, & Sheffield, 2019). By Bateman and Crant, the proactive personality construct was first proposed (1993). However, nothing is known about how people begin practicing mindfulness, how often they do so, what obstacles they encounter, or how they manage their practice (Lukoff et al., 2020). Concerns exist over the importance of informal mindfulness practises as well as the amount of mindfulness practice necessary to have positive results (Birtwell et al., 2019). It is essential to understand the hurdles in order to support the long-term maintenance of mindfulness practice and to promote wellness and resilience.

Mindfulness is the capacity to devote open, relaxed attention to oneself and one's environment in the now (Stankov, Filimonau, Gretzel, & Vujičić, 2020). Mindfulness can be a fleeting condition or a moderately constant quality. More frequent

aware states may lead to trait mindfulness (Bajaba, Fuller, Marler, & Bajaba, 2021). A better developed quality, awareness is associated with many desirable qualities. Previous studies have shown that mindfulness promotes closeness, connection, and attunement in relationships (Manusov, Stofleth, Harvey, & Crowley, 2020). According to (Liu, Xin, Shen, He, & Liu, 2020), people who are mindful tend to bounce back from emotional discomfort more rapidly and have higher emotional clarity, attention to feelings, and less distraction. According to (Gibson, 2019), being alert makes it possible for people to pay more attention to how those around them are feeling, which enhances their capacity to interpret others' emotional cues.

Haldorai, Kim, Chang, and Li (2020), recently discovered that the characteristic of mindfulness was linked to higher levels of prosocial and ethical behavior as well as lower levels of workplace deviation. Researchers have looked at how performance on different tasks is positively correlated with mindfulness (Bajaba et al., 2021). According to (Johnson, Park, & Chaudhuri, 2020), mindfulness may have an impact on task performance in professional settings as well as a number of organizational and occupational contexts. Asghar, Gull, Tayyab, Zhijie, and Tao (2020), later investigated the relationship between trait awareness and performance in seven chain restaurants in the American Southwest. They used supervisors' evaluations of server performance to gauge performance, and they found evidence linking workplace mindfulness and performance.

We contribute to this research by demonstrating that the benefits of mindfulness and proactive personality across organizations measure that is generalizable, valid, reliable and takes into account a range of employee functions (Aguiar-Quintana, Nguyen, Araujo-Cabrera, & Sanabria-Díaz, 2021). The study's chosen job performance statistic permits comparisons between various jobs, businesses, and sectors. In addition, we go beyond the body of literature and predict that mindfulness will have an effect on professional happiness. Being aware may enable people to successfully avoid challenges that can limit their performance in the future and, as a result, raise their level of job pleasure. In essence, we suggest that proactive personality and mindfulness both are signs of success, with the former indicating success in current situation and the latter indicating success across entire career.

Instead, it will protect mindfulness and proactive personality from passive or inactive workers. We expand on earlier research that looked at the interactions between personality factors. For instance, studies have found that being more focused boosts performance among mindful employees while decreasing performance among less mindful employees. Similar to how mindfulness affects self-control, proactive persons with high levels of mindfulness may perform less well at work and feel less content with their careers than people who are merely proactive. The degree of self-control is closely related to mindfulness, which is tied to observing and adjusting to one's social surroundings (Song & Park, 2019).

Barrick and Mount (2005), Therefore, we notted that proactive individuals who also engage in mindfulness are more likely to start a change on their own because they place more emphasis on adapting their behavior to the current situation. As previously mentioned, trait mindfulness is also inked to many advantages, such as improved performance and satisfaction (Kaplan, Farooque, Sarewitz, & Tomblin, 2021; Mesmer-Magnus, Manapragada, Viswesvaran, & Allen, 2017), which may help to mitigate its paradox with proactivity by achieving the same favourable outcomes but through different channels. The literature thus suggests that mindfulness is a useful skill in the workplace, and earlier research explains that it extends the literature on proactive personality and mindfulness, it can increase the positive effects between them.

Proactive workplace behavior is described as a "process where employees see potential problems or opportunities in their work environment and take the initiative to make changes to improve their working conditions in the future" (S. Chen, Jiang, Zhang, & Chu, 2019). According to (Bajaba et al., 2021), characteristic mindfulness is positively connected with professional success as well as performance. Trait mindfulness shows positive association between proactive personality and performance of employees. There is a positive impacts of proactive personality in the presence of high trait mindfulness levels.

We hypothesize that mindfulness proactive personality interact in such a way that it may enhance the effect of proactive personality because proactive individuals with help of mindfulness tend to be motivated to make changes. As a result, proactive people who also practice mindfulness are more likely to initiate change

on their own since they focus more on adapting their actions to the circumstances. Therefore, we can hypothesized that:

Hypothesis 2: Proactive personality is positively associated to mindfulness.

## 2.3 Mindfulness and Project Innovativeness

According to theory, attention is the primary mechanism via which human functioning is altered by mindfulness. Three characteristics of attention stability, control, and efficiency have been linked to mindfulness. Attentional stability can be supported by mindfulness. Approximately half of our waking hours are thought to be spent daydreaming in humans (Killingsworth & Gilbert, 2010). Newness is a critical characteristic that sets an innovation apart. An open attitude is one that fosters creative activity in others. Consistently, having a mindful attitude is associated with creativity and innovation. (McCrae, 1987). Innovation is the process of coming up with brand-new goods, services, or manufacturing procedures for a company unit (Tushman & Nadler, 1986).

Although mindfulness research is becoming more widely accepted in psychology, it is still in its beginning in the field of project innovativeness. However, for a number of reasons, this is starting to change. First, there is an abundance of scientific evidence demonstrating the effectiveness of mindfulness programs and the benefits that go along with them (K. W. Brown et al., 2007; Chiesa & Serretti, 2009; Grossman, Niemann, Schmidt, & Walach, 2004). The organizational literature is slowly incorporating this study. Second, mindfulness gives a fresh viewpoint on the nature and function of attention, which has long been acknowledged as a major bottleneck in businesses (Levinthal & Rerup, 2006; Vogus & Sutcliffe, 2012).

The interest of organizational experts in using mindfulness to solve difficulties at work has been steadily increasing, which is likely the third and most significant development. The same two searches returned 12.1 million and 17.1 million results in June 2013, respectively. According to, this has even prompted some to refer to a "mindfulness revolution" in business. In contrast, other people are concerned about a new "mindfulness craze" (Carroll, Ruppert, Stefanski, & Crainiceanu,

2006; Duerr, 2004). Regardless the revolution occurs, it is certain that mindfulness is starting to spread throughout businesses.

Buddhism is an example of Eastern thinking that promotes mindful attention (Qiu & Rooney, 2019). In this approach, practicing mindfulness might help you have more stability (Bajaj, Gupta, & Sengupta, 2019). It is envisioned as a component of self-compassion, alongside self-kindness and shared humanity (Nerini, Matera, Di Gesto, Policardo, & Stefanile, 2019), and it can help to clarify how Westerners view suffering and happiness. According to this viewpoint, mindfulness is a state of awareness in which people focus on certain current or present-moment experiences, from which effective management flows. (Morris, 2020; Nerini et al., 2019) A trait a more steady level of mindfulness adapted as a natural inclination and a transient level of awareness that varies over time are both included in mindful attention (Daniel et al., 2022; Pagis, 2019).

At the team level, (Curcuruto, Parker, & Griffin, 2019) describes the definition of mindful attention as a process where team members participate in discussions, coordinate their activities with others, and create shared mental models. The main topic addressed by this theme is whether high reliability organizing evolved as a result of high risk daily operations in sectors like air traffic control, nuclear or naval aircraft carriers can also be appropriate to project contexts where market and project risks are typically construction (Kellner, Townsend, Loudoun, & Wilkinson, 2021; Daniel et al., 2022), aerospace and civil nuclear (Saunders, 2015; Saunders, Gale, & Sherry, 2016), and IT are examples of industries with significant or high costs (Scott, Howe, & Bisel, 2022).

The ideal for "error-free" organizations may also be helpful for any safety and project organization seeking high reliability from safety critical projects, according to a number of authors. Saunders (2015); Saunders et al. (2016), to contrast organizations in less dangerous contexts with stressful organizing (Enya, Pillay, & Dempsey, 2018). There is realistic support for the use of mindful organization techniques by project managers in large-scale safety-critical projects and programs (Saunders et al., 2016). (Daniel et al., 2022). Certain characteristics of project and program environments, like complex socio-technical systems (Denyer & Tranfield, 2009; Saunders et al., 2016).

According to a proposal by (Jiménez, Romero, Fernández, Espinosa, & Domínguez, 2019) high reliability organizing's applicability in the field of construction is justified to the extent that its principles aren't interpreted in a reductionist way as most effective relating to chance and safety but additionally enlarge to progressed software task coordination and higher performance reliability. Much like hazard prevention or error management techniques, mindfulness is investigated inside the context of production task protection management. The contextual measurement of a resilient safety became found to be appreciably correlated with aware organizing, as measured by using the five dimensions mentioned by (Galanti, Di Fiore, Fantinelli, & Cortini, 2021) preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, and deference to understanding. That is described as the company's capability to offer the context for responses to safety dangers detected in creation initiatives but not to the behavioral or psychological resilience.

Contrarily, it was asserted that adopting organizational mindfulness in less controlled situations are more difficult than it is possible, and that applying HRO concepts may be more successful when focusing on individual, employee-centered mindfulness (Harvey, Johnson, Roloff, & Edmondson, 2019). For instance, developing a sense of community and engaging in outreach among coworkers can help generate attentive workers, and the formation of a helpful culture among workers at constriction site demonstrates a "reconciling institutional logic" that strikes the right balance between productivity and safety (Jiang, 2017). Although it has been acknowledged that dependability seeking tactics should be integrated into project management to manage properly the unexpected, two restrictions have also been made clear. In order to preserve other effective project techniques, like learning from mistakes or the ability to innovate, a contingency approach must first be introduced (Denyer & Tranfield, 2009). Second, it is discovered that high dependability methods are brittle by nature and reliant on key persons (Saunders et al., 2016).

According to (Dana et al., 2021), an innovation project is a document defining strategies for putting innovation activity programs into practice that result in the creation of new or significantly improved products, services, and technologies.

After conducting a successful survey, (Vrchota & Řehoř, 2019) demonstrate how project innovation is used by enterprises to overcome a limiting factor related to a lack of trained workers. It suggests that the project management strategies supported by an agile software development process gave the organization the opportunity to create a "bubble" of collective focus. Within this bubble of collective mindfulness, a high level of vigilance and sensitivity to company operations and demands could be maintained, which stimulated corporate innovation and the creation of a feasible solution.

The study increases our understanding of how Information System project management could assist corporate innovation through experimental study. It is suggested to establish a thoughtful organization for projects that accepts change and fosters business innovation (Di Maio, 2020). As a result, certain industries succeed more than those that do not absorb innovations. The literature evaluation indicates that mindfulness produces novel ideas that are quickly adopted. So in the industries and organizations mindfulness is positively associated to project innovations so we are hypothesized that

Hypothesis 3: Mindfulness is positively associated to project innovativeness.

# 2.4 Mediating Role of Mindfulness between Proactive Personality and Project Innovativeness

The state of being mindful refers to when a person is more alert and aware of what is happening in the current moment. And being mindless implies not having the fortitude to confront current reality and being preoccupied with past problems or disasters that would affect them in the future (K. W. Brown et al., 2007). These people quickly recover from previous crisis situations, more goal-oriented, and more excited about their high degree personal well-being and the organizational well-being (M. I. Brown, 2020). There are various favourable results, as has been observed in earlier study.

According to (Langer, 1989), if one cultivates a sense of mindfulness, for instance, stress reduction perception is a significant outcome of mindfulness or a more controlled subconscious perspective, which automatically influences emotional behavior in the individuals and as a result makes them better equipped to face challenges. They adapt to changing environments and create new ideas that demonstrate their thriving human performances, leading to project innovation (Kabat-Zinn, 2003). Previous studies have confirmed that an employee's voice behavior and proactive personality are associated (Sheng & Zhou, 2021). According to the proactive personality theory, an employee's level of proactivity might affect how they respond to internal and external motivators during the course of their career (Jiang, 2017).

Employees with a proactive personality might provide suggestions that spot chances or make things better (Buil et al., 2019). As a result, we suggest that the relationship between employee speech behavior and flourishing at work has a boundary condition that is a proactive personality. According to earlier studies, PP is an individual propensity toward proactive action that is comparatively consistent. The concept was described as a dispositional construct by (do Paço, Shiel, & Alves, 2019) that "identifies variations between people in the extent to which they take action to change their surroundings." Results from three studies from earlier research showed the convergent, discriminant, and predictive validity of the Proactive Personality Scale (PPS), which was further refined to measure this construct (Nilsen et al., 2020; L. Choi & Hwang, 2019; I.-H. Wu & Chi, 2020).

Since then, several investigations have additionally shown the reliability of the proactive personality construct as measured by the PPS (Rodrigues & Rebelo, 2019; Naz, Li, Zaman, & Rafiq, 2020; H. Zhang et al., 2020; Srikanth, Jomon, & Thakur, 2022; Lim, 2019). Sutin, Aschwanden, Stephan, and Terracciano (2020), observed only moderate relationships with the five-factor model of personality, indicating that proactive personality is a distinct feature that is not covered by other typologies such as the five-factor model. Additionally, (Do & Minbashian, 2020) discovered that proactive personality predicted performance is better than extraversion and conscientiousness combined. Proactive personality is also distinct from need for achievement, self-consciousness, locus of control and need for dominance as demonstrated by (Bateman & Crant, 1993).

These studies collectively offer more proof of the discriminant validity of proactive personality. Noting that attributes alone cannot explain why mindfulness plays a moderating role between proactive personality and project creativity, many researchers have given up on their efforts to identify personality or other factors linked to project innovation (Sheng & Zhou, 2021). If there is ever a way to forecast project creativity at the individual level, (Bajaba et al., 2021) explains it. While we acknowledge that qualities alone are insufficient predictors, we think that traits like proactive personality, when combined with other variables like project innovativeness, might assist explain who feels motivated to become a Project innovation. In particular, not everyone see chances in the same context and even among those who do, and who do not take advantage of it. We think that people with proactive personalities are more confident to grab opportunities when they arise than people with less proactive personalities, but proactive personalities must also possess the quality of mindfulness because mindfulness acts as a bridge between project innovation and proactive personality.

A dynamic attitude toward work is necessary for proactive action (De Vos, Van der Heijden, & Akkermans, 2020; J. Zhang et al., 2019). It includes actions like taking charge and using one's own initiative (Maden-Eyiusta, 2021; Curcuruto et al., 2019), and it is related to flexible role orientations (Ma & Peng, 2019). At the individual (micro) level, its impact has been observed on a variety of factors, including job performance (Alikaj, Ning, & Wu, 2021), feedback (T.-J. Chen & Wu, 2020), careers (Barraud-Didier & Gatignon-Turnau, 2021; Morris, 2019), newcomer adaptation (Hua, Zhang, Coco, Zhao, & Hou, 2020), leadership (Yang, Chen, Zhao, & Hua, 2019; McCormick et al., 2019; Guerrero, 2021). At larger scales, proactive behavior has also been researched in relation to socialization and work teams (Luu, 2019).

One of the key success factors that contribute to corporate success and competitive advantage is WE, and this stems from the positive psychology influence on enhancing human capabilities, helping employees reach their full potential, and achieving and sustaining employee wellbeing (Ahuja et al., 2019). Engagement could be attained by investing time and effort in tasks that required active "hands, head, and heart" to do to the best of one's abilities (Shen & Jiang, 2019; Brightenburg,

Whittington, Meskelis, & Asare, 2020) Whereas Gruman defines mindfulness as "harnessing the organisation employee's selves to their job role by employing and expressing themselves physically, intellectually, and emotionally while performing work performances" (Gruman & Saks, 2020). The most widely acknowledged description, however, came from (Cortazar & Calvete, 2019), who stated that mindfulness fosters proactive personalities who are open to new ideas and chances. The employees' proactive attitudes and awareness have a favourable impact on their ability to maintain good health and perform well at work (Bajaba et al., 2021; Bakker & de Vries, 2021).

Al-Omari, Alomari, and Aljawarneh (2020), described innovation as the intentional development, dissemination, and new ideas within an employee role, internally within groups, or across the entire organization, with the goal of enhancing the performance of the employee role, the group, or the organization. Time constraints encourage employees to create more effective solutions with better implementation, which inspires them to apply creativity and a mindful attitude, which is the primary motivator of innovative work behavior. Thus, mindfulness training encourages employees to innovate by using their imagination (Wei, Zhu, & Chen, 2020; Chang & Shih, 2019).

The ability to retain mindfulness is essential for an organization's active operation and long-term existence (Rahmani, 2020; Badham & King, 2021). Consider mindfulness as complicated behavior which include of three different behavioral responsibilities concept promotion idea generation, and idea realization (Gibson, 2019). A proactive personality is aware of and takes into account each person's contribution to the development of organizational innovativeness. According to psychological models of innovation, there are two stages: the first includes identification of problem and generation of idea, and the second one involves imposing and supporting those ideas (Rodrigues & Rebelo, 2019; Wang, Li, & Tu, 2019).

When employees have a proactive attitude, their actions are largely motivated internally and are not as sensitive to outside influences. The external motivator, on the other hand, is thriving at work, which is driven by environmental variables. Less reliable and influential are the learning and vitality aspects. The influence of learning factors on voice is currently less striking. Additionally, vocal conduct is

used more frequently by workers that have a higher level of proactive personality (Sheng & Zhou, 2021). Therefore, it has been demonstrated by the literature review that mindfulness has a mediating effect between proactive personality and project innovativeness.

Hypothesis 4: Mindfulness will mediates the relationship between proactive personality and Project innovativeness.

# 2.5 Moderating Role of Organizational Agility between Mindfulness and Project Innovativeness

According to (Tallon, Queiroz, Coltman, & Sharma, 2019), agility is a combination of operational, partnering, and customer agility. Three factors are used to describe agility: responsiveness to customers, operational flexibility, and strategic flexibility. It's critical that we comprehend the mindfulness notion from both the human and organizational perspectives because it serves as a theoretical framework for comprehending how organizations can acquire flexibility and dependability in the execution of organizational routines. Organizations today must quickly alter their actions and plans in response to changes in their environments. Organizational agility has emerged as a crucial company competency in today's hypercompetitive climate, with the potential to significantly improve performance and spark creative thought. Empirical studies indicate that firms that can react rapidly and creatively to changes in their organizations are more likely to succeed (Ferrier, 2001).

According to the literature review, innovation requires business owners to be accessible to outside markets, hence having proactive traits alone is insufficient. For business owners with limited resources, creativity becomes a crucial component of being able to meet market demands. Creative people contextually demonstrated cognitive capacity to solve business difficulties along with their proactive personalities. An organization should provide a strong incentive to foster innovation and

creativity at work. To meet the challenges that businesses will confront in the future, working actors need to be imaginative and creative (Andri et al., 2020).

Recognizing that crucial variables can suggest various things to various human beings is one of the difficulties in synthesizing consequences from a body of work. There is some range of levels to examine the agility at business unit, corporate, work group or processes, as well as the composition of construct, even though scientists may all agree that agility is about perceiving and responding to change. For instance, (Tallon et al., 2019), define agility as "a firm's competencies relating to interactions with consumers, orchestration of internal processes, and usage of its ecosystem of external 5 business partners" at the process-level.

Similar to this, (Tallon et al., 2019) define agility as maximizing human and information-based resources, enhancing customer experience, and collaborating with stakeholders to increase competitiveness. This process view differs from (Mandal & Dubey, 2020) view of agility as the rate of IT adoption, (Walter, 2021), view of agility as a different combination of information agility access to and use of IT, system agility IT development, implementation, change, and maintenance, strategic agility capability to take benefit of IT capabilities. (Sampath, Bhattacharyya, & Krishnamoorthy, 2021) view of agility as a combination of respond and sense abilities round customers, economic factors and competitors. (C. Li et al., 2020) define agility as a combination of market capitalizing agility and operational adjustment agility and changing services and products to the consumer needs that how internal business tactics can manage the change in demand.

Agility, according to (Moi & Cabiddu, 2022), is a combination of proactive personality agility (the ability to anticipate and mindfully take advantage of market openings that allow a corporation to adjust "its positioning and strategy and establish new business ways to obtain better benefits in changing environment) and organizational agility as well as Adaptive agility (an extra protecting view of agility if companies are searching to protect themselves or recover from a market disruption in place of searching for a first-mover benefit). A firm's products or markets might not evolve on the identical charge or occupy the equal point at the product lifecycle curve, so agility can therefore be offensive, defensive, or both.

Despite this, a recurring theme running via those conceptualizations is the benefit and speed of responding and sensing to change.

Project innovation and organizational agility interact moderately because only proactive people who exhibit attentive behavior and agility can move quickly and pro-actively to improve the future and embrace agility for the success of the organization (Lee & Chen, 2019). The secret to organisational agility is to strengthen relationships between managers and subordinates and to give them a setting that encourages cooperation, creativity, and growth conversational made possible by technology (Busse & Weidner, 2020). The agility literature shows that agility can itself be the intention of a first order effect at the process level and a way to the end of a second order effect for the better outcome in the form of performance, same arguments for business value. Literature on the fact that businesses can create first order and the second order effects and that these effects materialize at firm and process level, respectively (Tallon et al., 2019).

For instance, (Zaheer & Zaheer, 1997) investigate the impact of global foreign exchange dealers' vigilance and responsiveness on market affect a first order effect signifying the variety of incoming telephone calls to a foreign exchange desk in a 24-hour duration. Also agility is viewed as a goal in and of itself by (Denning, 2020; Werder et al., 2021; Kristensen & Shafiee, 2019). While this is the case, agility is viewed as a first order effect while strong performance is viewed as a second order effect by (Clauss, Abebe, Tangpong, & Hock, 2019; Alikaj et al., 2021; C. Li et al., 2020; G. Chen et al., 2013). We observe that Roberts and Grover (2012) assess agility in terms of good activity in addition to the financial success measures present in the project based organizational research. This is in line with the theoretical work by (Sambamurthy et al., 2003), who believe that agility influences the quantity and diversity of competitive activities (the scope and size of competitive activity, respectively) taken by a firm in response to a change that is environment change. Without organizational agility, project innovativeness cannot be adopted (Bazzoli, Curcuruto, Morgan, Brondino, & Pasini, 2020). As, the literature sees agility as both a goal in and of itself. Accordingly, study will be beneficial regardless of whether agility is viewed as a first order process-level or second order firm effect. As a result, the organization balances

project innovativeness and mindfulness. The research review illustrates how organizational agility moderates the relationship between mindfulness and project innovativeness. Therefore, we hypothesized that organizational agility moderates the relationship between mindfulness and project innovativeness.

Hypothesis 5: Organizational agility will moderates the relationship between mindfulness and project innovativeness.

# 2.6 Proactive Personality, Mindfulness, Project Innovativeness and Organizational Agility

Proactive personality is directly linked with project innovativeness and the mediator variable mindfulness is acting as a bridge between proactive personality and project innovativeness. Identifiable, responsible, and persistent change makers are proactive employees. Projects using information technology demand innovativeness due to the constant advancement of technology. The study supports the idea that innovative work practices contribute to project success. Additionally, inclusive mindfulness fosters innovation among staff members (G. Chen et al., 2013).

Therefore, it is important to emphasize the mindfulness functions in project based organizations as an initiative. It focuses on whether proactive personality is valid. We discovered that, when evaluated through supervisor ratings, this particular disposition is a valid and significant predictor of individual creative performance in a project based organizations (Heimann, Ingold, Debus, & Kleinmann, 2021). Numerous researchers have recently expressed a great deal of interest in the idea of "agility" (Sambamurthy et al., 2003; Overby et al., 2006; Tallon et al., 2019; Lu & Ramamurthy, 2011; G. Chen et al., 2013) For instance organizational agility, according to (S. Chen et al., 2019), is the capability with which a corporation responds with market uncertainties through creative and quick solutions that turn these market changes into opportunities.

Therefore, agility's two key characteristics are rapidity and innovation, where rapidity refers to quick realization and accurate response. Proactive personality, an

independent variable and project innovativeness, a dependent variable, are significantly related. Additionally, mindfulness serves as a bridge between a project's innovativeness and proactive personality. We must also examine the moderation between mindfulness and project innovation. In reality, mediated moderation is the indirect effect of organizational agility being moderates the relationship. We have to check that at higher level of organizational agility the indirect effect increases or decreases or by lowering the organizational agility the conditional indirect effect increase or decrease. The agility literature shows that agility can itself be the intention of a first order effect at the process level and a way to the end of a second order effect for the better outcome in the form of performance, same arguments for business value. In mediation, a systematic, interactive process, an objective third party assists opposing parties in resolving disputes via the use of skilled communication and negotiation skills. Every mediator participant is urged to participate actively. When the outcome and mediator both are continuous, the three methods for calculating the mediated proportion that produces the same results as the product of coefficients and their difference calculating techniques for the indirect effect (Rijnhart, Twisk, Eekhout, & Heymans, 2019).

#### 2.7 Research Model

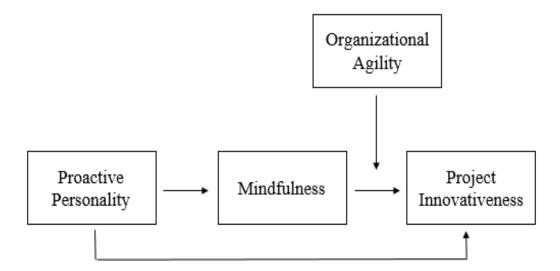


Figure 2.1: Research Model of Impact of Proactive Personality on Project Innovativeness with Mediating Role of Mindfulness and Moderating Role of Organizational Agility

## 2.8 Hypothesis of the Study

**H1:** Proactive personality is positively associated to project innovativeness.

**H2:** Proactive personality is positively associated to mindfulness.

**H3:** Mindfulness is positively associated to project innovativeness.

**H4:** Mindfulness will mediates the relationship between proactive personality and Project innovativeness.

**H5:** Organizational agility will moderates the relationship between mindfulness and project innovativeness.

**H6:** The indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility.

# Chapter 3

# Research Methodology

The approach for determining the association between proactive personality and project innovativeness is discussed, along with the mediation role of mindfulness and moderation role of organizational agility. The chapter on methodology discusses data collection methods (population and sample). Also emphasizes investigation of measurement and instrument reliability analysis.

#### 3.1 Time Horizon

The data will be collected in one and a half month, in nature cross sectional and collected at one time for this study.

## 3.2 Unit of Analysis

The object or person whose personality and characteristics are being studied can serve as the unit analysis. Project managers and staff members in project based organizations in Pakistan's twin cities are the study unit of analysis.

## 3.3 Population

Population is a collection of individuals, events and objects related to the research topic (Sekaran, 2001). Employees of project-based organizations in Rawalpindi and

Islamabad make up the study's current population. As project-based organizations are Pakistan's primary source of competitive advantage, this industry is playing a significant role in attracting foreign investors to invest in country Pakistan, which in turn enhances Pakistan's reputation as a new rising economy.

## 3.4 Sample of Study

The method of taking a sample is frequently used to gather data and determine population characteristics. The sample for the current research study have drawn from project managers and employees at various project based organizations. Convenience sampling will be used in this investigation. Because convenience sampling is used to collect data at random from several organizations, it is the good method for gathering data. For data collection the questionnaires are distributed among 400 respondents in order to obtain the best possible sample size and out of 400, 304 valid responses have received.

## 3.5 How Sample Size was Calculated

As the population of project based organization is unknown, for unknown population we use g power analysis. Applying g power analysis sample size was calculated. For calculating sample size G power 3.1.9.4 version was used. The minimum sample size for our study was 119. This is minimum sample size according to g power for our study but actual sample size 304. So we meet our minimum sample size for our study.

## 3.6 Sample Characteristics

In this study, the staff of project-based organizations was taken into account. It is important to note the characteristics of the respondents, including the ratio of male to female respondents and other gender information as gender and other demographics like, age, qualification and work experience. Sample characteristics detail is given below:

#### 3.6.1 Gender

It is because gender has a substantial impact on the differences between men and women in a given population sample, it is also seen as a vital demographic element that must be preserved in order to maintain gender equality. Even after taking into account the benefits of gender equality, it was discovered that there are significantly more male employees than female employees in this study.

The proportion of male, female, and other responders is shown in Table 3.1. As we can see, men made up the majority of respondents, accounting for 58.2% of all male respondents, 40.5% of all female respondents, and 1.3% of respondents who would rather remain anonymous.

Gender Frequency Percent Valid Percent Cumulative Percent Male 177 58.2 58.2 58.2 Female 123 40.540.598.7Prefer 100 not 1.3 1.3 to say 304 100 Total 100

Table 3.1: Gender Distribution

#### 3.6.2 Age

Age is one of the important demographics, but often respondents are reluctant to share it in public. For simplicity, a range of ages rather than the respondents actual ages was chosen. Table 3.2 shows that majority of respondents, 37.2% were between the ages of 20 and 25. Of the total respondents, 10.5% were between the ages of 26 and 30, 13.8% were between the ages of 31 and 35. While 24.7% of respondents were between the ages of 35 and 40. Although 13.8% of respondents were beyond the age of 41. The contribution of the younger generation is creative component in projects is also concluded.

Table 3.2: Age Distribution

Age	Frequency	Percent	Valid Percent	Cumulative
				percent
20-25	113	37.2	37.2	37.2
26-30	32	10.5	10.5	47.7
31-35	42	13.8	13.8	61.5
35-40	75	24.7	24.7	86.2
41 &	42	13.8	13.8	100
above				
Total	304	100	100	

#### 3.6.3 Education

Education is crucial to the success of the entire nation and is today necessary in order to compete worldwide. As a result, qualification/education is the demographics second most important factor after gender. Education gives human a variety of novel and unusual options so they can compete with students from around the world. Schooling most certainly has a big impact on demonstrating originality and invention in project assignments by promoting effective knowledge management.

Table 3.3: Education Distribution

Education	Frequency	Percent	Valid Percent	Cumulative Percent
Matric	39	12.8	12.8	12.8
Intermediate	66	21.7	21.7	34.5
Bachelor	92	30.3	30.3	64.8
MS/MPhil	84	27.6	27.6	92.4
PhD	23	7.6	7.6	100
Total	304	100	100	

The majority of the respondents that are 30.3% of the total respondents chosen as the representative sample of the entire population, have bachelor's degrees,

as indicated in Table 3.3. 27.6% of respondents had an MS/M.Phil qualification. Among the 304 responders, 21.7% had an intermediate degree and 12.8 have matric degree, while 7.6% had a PhD degree.

#### 3.6.4 Work Experience

In order to collect data based on the respondent's job experience, several ranges of work experience time periods were provided, allowing each respondent to easily choose the particular time period of their work experience. According to Table 3.4, which shows 77.3% of the respondent's data, the majority of respondents had experience between 1 and 5 years. 14.5% of respondents reported having experience in the range of 6 to 10 years, 4.9% in the range of 11 to 15 years, 1.3% in the range of 16 to 20 years, and 2% in the range of 21 years and above.

Table 3.4: Work Experience Distribution

Work Experience	Frequency	Percent	Valid Percent	Cumulative
				Percent
01-05	225	77.3	77.3	77.5
06-10	44	14.5	14.5	91.8
11-15	15	4.9	4.9	96.7
16 20	4	1.3	1.3	98
21 & above	6	2	2	100
Total	304	100	100	

#### 3.7 Instrumentation

On a five point Likert scale ranging from "Strongly Agree to Strongly Disagree," close ended questionnaires are used to measure four variables. Whereas 1 denotes strongly agreed, 2 represents agreed, 3 neutrality, 4 disagreed, and 5 strongly disagreed. Four demographic characteristics are included in the questionnaire, including the respondent's gender, age, educational background, and work experience.

#### 3.7.1 Proactive Personality

We have used (Claes, Beheydt, & Lemmens, 2005) to measure proactive personality. Originally created by (Bateman & Crant, 1993), the six-item scale. It is a 5-point Likert scale, with 1 denoting strongly agreed and 5 denoting strongly disagreed. Wang et al. (2019) and (Bertolino, Truxillo, & Fraccaroli, 2011) both used this 6-item version (2011). A sample of items "If I see something I don't like, I fix it".

#### 3.7.2 Project Innovativeness

In this study, the dependent variable is project innovation. There are a total of 5 items on the scale that will describe how innovativeness of the project. (Salomo, Weise, & Gemünden, 2007) created the questionnaires used for the project's innovativeness. One question is as "The novelty of the originally anticipated project results was very high compared to other projects". A five point Likert scale was used; it has a range of 1 to 5, with 1 for strongly agreed and 5 denoting strongly disagreed.

#### 3.7.3 Mindfulness

Zivnuska, Kacmar, Ferguson, and Carlson (2016), devolved mindfulness scale. The 5-item Mindfulness scale has been scored on a 5-point Likert scale, with 1 being the strongly agreed and 5 being the strongly disagreed. Through it, it is attempted to measure how much a person is aware of and continues to pay attention to their current circumstances. "When interrupted from a task I am engaged in at work, I am able to clear my mind and dive back into the task" is a sample question to explain the mindfulness.

## 3.7.4 Organizational Agility

The ability of a company to adapt quickly and creatively to changes in the business environment is referred to as organizational agility. The instruments used in this study to measure organizational agility were developed from (Lu & Ramamurthy, 2011) research. Six items scale, with a starting point of 1 denoting strongly agreed and 5 denoting strongly disagreed. One of them one question is "We have the ability to rapidly respond to customer's needs".

# Chapter 4

# Results and Analysis

The findings of the analysis are presented in this chapter in both narrative and tabular form. It is possible to identify descriptive statistics, correlations, reliability analysis, and the outcomes of mediated and moderated regression analysis. The study results were taken into account in the next part in light of several tests to confirm the significance and association of the chosen variables using software named SPSS.

## 4.1 Descriptive Statistics

According to (Choi, Tagore, Siddiq, Park, & Ewing, 2020), descriptive statistics, which are condensed informative coefficients, can be used to summarize a particular data collection, which may be a sample of a population or a whole representation of the entire population. Descriptive statistics include measures of central tendency and measures of variability. The three main types of descriptive statistics are frequencies, measures of variability and measures of central tendency commonly called means, and. Only the occurrences of each variable, such as proactive personality, project innovativeness, mindfulness, and organizational agility in the sample are counted in descriptive statistics.

A frequency distribution in statistics is a graphic that displays the number of observations made over a specific time period. It might be graphical or tabular to make a frequency distribution representation easier to understand. A two-column

or table that includes all possible outcomes along with the related means and standard deviation as seen in a sample constitutes a descriptive statistics table. The frequencies for descriptive statistics are shown in **Table 4.1**. The descriptive statistics are calculated using four variables. The results showing in table 4.1 at the conclusion and are calculated using the Likert scale.

Based on their age, education level, employment experience, and gender, different members of the population completed the questionnaire. Close ended questionnaires are used to test four traits on a five point Likert scale from "Strongly Agree to Strongly Disagree." 1 is for strongly agree, 2 is for agree, 3 is for neutrality, 4 is for disagree, and 5 is for strongly disagree. The maximum value for descriptive statistics is 5.00, and the minimum value is 1.00. On the other hand, the means for proactive personality and project innovativeness are 2.33 and 2.74, respectively, demonstrating that the majority of people concur that proactive personality plays an innovative role for successful organizations and that there is a positive relationship between proactive personality and mindfulness. The results show that the responders are in agreement.

Table 4.1: Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std.
				Dev.
Proactive Personality	1	5	2.33	0.81
Project Innovativeness	1	4.8	2.74	0.96
Mindfulness	1	5	2.79	1.08
Organizational Agility	1	5	2.68	1.21

#### 4.2 Correlation Analysis

A statistical technique called correlation analysis is used to determine that there the relationship between two variables exists or not and how strong that relationship may be. The strength of a relationship between two variables is evaluated via correlation analysis. The correlation coefficient, which illustrates how much one variable changes when another one does, can be discovered using correlation

analysis. It is possible to utilize correlation analysis to determine the linear relationship between two variables. Values for correlations vary from -1 to +1. A negative sign signifies that the variables are adversely connected with one another and are progressing in the opposite direction. Positive indicators indicate that the variables are moving in same direction. There is no correlation between the two variables, as indicated by the 0 value.

Sr. No	Variable	1	2	3	4
1	Proactive Personality	1			
2	Project Innovativeness	0.257**	1		
3	Mindfulness	0.250**	0.603**	1	
4	Organizational Agility	0.233**	0.184**	0.147*	1

Table 4.2: Correlation

The values of correlation of mindfulness and organizational agility (r= 0.147\*, p<0.05), there is a positive correlation between mindfulness and organizational agility. The values of project innovativeness and organizational agility (r=0.184\*\*, p<0.01) that shows positive correlation between project innovativeness and organizational agility as shown in **Table 4.2**.

#### 4.3 Reliability Analysis

To verify the reliability of the scales we utilized in our research, reliability tests are widely used in research. Internal validity scales, also referred to as Cronbach Alpha. All values of Cronbach's alpha are more than 0.7, which indicates that the data is reliable for further analysis. Cronbach's alpha values show significant reliability for all variables. If the results differ from what was expected, the reliability analysis was not done properly. Through the application of Cronbach Alpha, we determined the connection between internal variables in the study. The minimum

<sup>\*</sup> Correlation is significant at 0.05 level (2-tailed). \*\* Correlation is significant at 0.01 level (2-tailed).

5

6

Chronbach Alpha value, which is 0.7, is regarded as a reliable value. Values below 0.7 are regarded as having low dependability for the scales we utilized.

VariablesCronbach AlphaItemsProactive personality0.726Project innovativeness0.725

0.84

0.90

Table 4.3: Reliability Analysis

#### 4.4 Hypothesis Testing

Organizational Agility

Mindfulness

Although we have utilized correlation analysis to evaluate the relationship between the study's variables, this method alone cannot be relied upon because it only indicates the existence of a relationship between variables and not their direct or indirect relationships. Regression analysis must therefore be carried out in order to gather reliable proof of the variables' interdependence. In essence, regression analysis reveals the maximum extent to which one variable is dependent upon another. I used Preacher and Hayes (2004)'s regression analysis in this investigation.

#### 4.4.1 Test of Hypothesis 1

H1: Proactive personality is positively associated to project innovativeness.

The path tested in this study was from Proactive personality to project innovativeness, which showed that Proactive personality is significantly and positive related to the project innovativeness. Project innovativeness is dependent on proactive personality. In table 4.4 beta value of H1 path is 0.13.



FIGURE 4.1: Relationship of Hypothesis 1

It means that a 1 unit change in Proactive personality brings a 13.2 unit change in project Innovativeness. And p value is < 0.05.

Table 4.4: Standardized Coefficients of Structural Path

Structural Path	В	SE	Т	P- value
PP>PI	0.13	0.05	2.39	0.01

 $\beta$  is standardized regression coefficient, S E is standard error, p < 0.05

Hence, results of hypothesis 1 shows that proactive personality is positively impacted on the innovativeness of a project. So hypothesis 1 is supported.

#### 4.4.2 Test Hypothesis 2

H2: Proactive personality is positively associated to mindfulness.



FIGURE 4.2: Relationship of Hypothesis 2

The path tested in this study is from proactive personality to mindfulness. To be mindful is to give something your full attention. It means taking the time to fully absorb what you are doing. Rushing or multitasking is the reverse of being mindful. Being aware means taking your time. You're concentrating in a relaxed manner. Table 4.5 shows that B value is 0.33 that means 1 unit change in proactive personality brings 33.2 unit change in mindfulness and p value is 0.00 that is less than 0.01.

Table 4.5: Standardized Coefficients of Structural Path

Structural Path	В	SE	${f T}$	P- value
PP>M	0.33	0.07	4.49	0.00

 $\beta$  is standardized regression coefficient, S E is standard error, p < 0.01

The second path tested in this study was from proactive personality to mindfulness and the results of the analysis show that that proactive personality has great positive impact on mindfulness. So the hypothesis 2 is accepted.

#### 4.4.3 Test Hypothesis 3

H3: Mindfulness is positively associated to project innovativeness.

The path tested in this study is from mindfulness to project innovativeness. In table 4.6 the p value is less than 0.01 that show positive relationship between mindfulness and project innovativeness. And b value is 0.57 that means 1 unit change in mindfulness brings 57.8 unit change in project innovativeness.

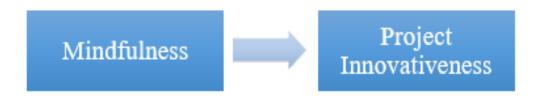


FIGURE 4.3: Relationship of Hypothesis 3

 Structural Path
 B
 SE
 T
 P- value

 M>PI
 0.57
 0.09
 6.17
 0.00

Table 4.6: Standardized Coefficients of Structural Path

 $\beta$  is standardized regression coefficient, S E is standard error, p < 0.01

As above results shows that mindfulness has strong positive effect on project innovativeness so hypothesis 3 is supported.

#### 4.4.4 Test Hypothesis 4

**H4:** Mindfulness will mediates the relationship between proactive personality and project innovativeness.

To check the relationship between the proactive personality and project innovativeness, a mediation analysis is conducted. Model 4 has been applied for mediation analysis in the SPSS Process macro. The positive association between project innovativeness and mindfulness is represented by the value of mediation of direct effect and indirect effect.

#### 4.4.4.1 Direct Effect

Table 4.7: Direct Effect of Mediation

Predictors	В	SE	T	P-Value	LLCI	ULCI
PP>M	0.33	0.07	4.49	0.00	0.18	0.47
M>PI	0.51	0.04	12.32	0.00	0.42	0.59

Beta is standardized regression coefficient, S E is standard error, p < 0.01, CL=Confidence Interval, UL=Upper Limit, LL= Lower Limit.

In table 4.7 there are two paths for direct effect of medication one is from independent variable that is proactive personality to mediator (mindfulness) and second path is from mediator to dependent variable that is project innovativeness. LLCI and ULCI both are positive that show relationship is significant. We have to check p value that is less than 0.005 so direct relationship shows that these variable for mediation are positively associated with each other's.



FIGURE 4.4: Direct Effect of Mediation of Path 1



FIGURE 4.5: Direct Effect of Mediation of Path 2

#### 4.4.4.2 Indirect Effect

The indirect effect of proactive personality on project innovativeness through mind fullness also known as path "c" is significant as bootstrapping values (i.e., BOOT

LLCI = 0.32 and BOOTULCI=0.24) of indirect effect doesn't have a zero between them.

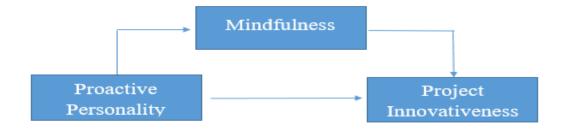


FIGURE 4.6: In-Direct Relationship of Hypothesis 4

Accordingly, both values are positive which confirm that there is a mediation in model. In table 4.8 the value of coefficient B=0.16 of indirect effect is positive which means that with the presence of mediator the values of total effect will increase.

Table 4.8: In-Direct Effect of Mediation

	В	Boot SE	Boot LLCI	Boot ULCI
Mindfulness	0.16	0.04	0.08	0.25

CL= Confidence Interval, UL= Upper Limit, LL= Lower Limit.

Hence the results show that the mindfulness has great positive mediating impact between proactive personality and project innovativeness. So hypothesis 4 is supported.

#### 4.4.5 Test Hypothesis 5

**H5:** Organizational agility will moderates the relationship between mindfulness and project innovativeness.

I have used model 1 in process macro as a moderator to assess organizational agility. The values of LLCI and ULCI are (-0.09) and (0.03), respectively, and there is zero between these two values.

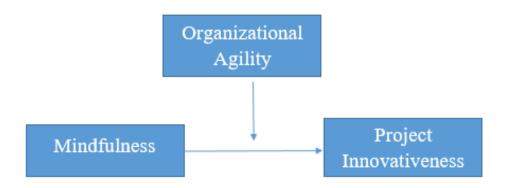


FIGURE 4.7: Moderation Path

According to **Table 4.9**, which is shown below. The p value in my case is 0.30, which is greater than 0.05, indicating that my fifth hypothesis that organizational agility will moderate the relationship between proactive personality and project innovativeness is not supported. This p value also demonstrates that the moderator is not significant.

 Structural
 B
 SE
 T
 P-value
 LLCI
 ULCI

 Path
 Int-term
 -0.33
 0.03
 -1.02
 0.30
 -0.09
 0.03

Table 4.9: Moderation Analysis

CL= Confidence Interval, UL= Upper Limit, LL= Lower Limit.

Table 4.9 that is given below, we will come to know that the values of LLCI and ULCI are (-0.09) and (0.03) respectively that there is zero exists between these two values. Along with that p value show that moderator is not significance because in my case the p value is 0.30 that is greater than 0.05.

#### 4.4.6 Test hypothesis 6

H6: The indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility.

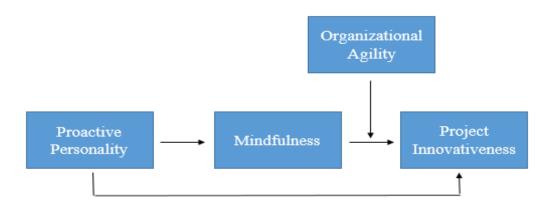


Figure 4.8: Moderated Mediation Path

Table 4.10: Index of Moderated Mediation

	Index	Boot SE	$egin{array}{c} \operatorname{Boot} \\ \operatorname{LLCI} \end{array}$	Boot ULCI
Organizational Agility	-0.009	0.01	-0.03	0.01

CL= Confidence Interval, UL= Upper Limit, LL= Lower Limit.

In table 4.10 Boot LLCI and Boot ULCI are also in differ signs which means that my sixth hypothesis that The indirect of proactive personality through mindfulness on project innovativeness is expected to be significance for those with high organizational agility and non-significance for those with low organizational agility is rejected.

#### 4.4.7 Summary of Hypothesis

Data has been analyzed using SPSS software to evaluate the hypotheses. The current study model has 6 hypotheses that predict how proactive personality and project innovativeness relate to each other and how mindfulness functions as a mediator between the two. The analysis of this findings shows that three hypotheses of the current investigation are not supported. H1 proactive personality is positively associated with project innovativeness. H2: The relationship between proactive personality and mindfulness is positively associated is supported. H3 is supported because mindfulness is strongly correlated with project innovativeness. H4: Mindfulness will mediate the relationship between proactive personality and project innovativeness is supported. H5: Organizational agility will moderate the

relationship between mindfulness and project innovativeness is not supported. H6: The indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility is also not supported.

Table 4.11: Summary of Hypothesis

Hypothesis	Statement	Status
H1	Proactive personality is positively associated to project innovativeness.	Supported
H2	Proactive personality is positively associated to mindfulness.	Supported
H3	Mindfulness is positively associated to project innovativeness.	Supported
H4	Mindfulness will mediate the relationship between proactive personality and Project innovativeness.	Supported
H5	Organizational agility will moderate the relationship between mindfulness and Project innovativeness.	Not supported
Н6	The indirect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility	Not supported

# Chapter 5

## Discussion and Conclusion

#### 5.1 Discussion

This chapter is divided into three main sections. The key topic in this regard was the discussion of the ambiguous area between proactive personality and project innovation, which needs further study and investigation in the field of project management. In addition mindfulness acting as mediators and moderator is organizational agility in this study, the proactive personality, mindfulness, and project innovativeness are the main subjects of interest. The conclusions supported the hypothesis, which held that there is a high correlation between proactive personality and project innovativeness.

With an increase in proactive personality in project-based organizations, the possibility of projects innovativeness rises. People with proactive personalities typically work toward a certain goal. They frequently succeed in steering events and people in the desired direction and brings change. Project managers in project-based organizations ought to have provided their employees suggestions on how to become more proactive. They should also encourage teams from different departments to collaborate in order to innovate as a group and generate fresh information.

The findings of this study demonstrate that proactive personality and mindfulness can improve project innovativeness. Particularly for Pakistani project-based organizations, this paradigm was taken into consideration. In terms of effectiveness and success, the project's leader is the most recognized representation of an

organization. The leader must have the appropriate skills and attitudes to steer a project's execution in the right direction. The study's findings agreed with the suggested paradigm. As a result, it was found that a proactive personality and mindfulness are highly and favourably related to the project innovativeness.

The study's findings were in line with the proposed paradigm, as was to be expected. Additionally, a high correlation between the independent and dependent variables was seen. This study's main objective was to ascertain the relationship between proactive personality and project innovativeness, with mindfulness serving as a mediator and organizational agility as a moderating component. Let's examine each theory in greater detail. The intuition is thoroughly explained as follows:

#### 5.2 Mediation

In mediation, a systematic, interactive process, an objective third party assists opposing parties in resolving disputes via the use of skilled communication and negotiation skills. Every mediator participant is urged to participate actively. When the outcome and mediator are both are continuous, the three methods for calculating the mediated proportion, in general, produce the same results as the product-of-coefficients and difference-between-coefficients techniques for calculating the indirect effect (Rijnhart et al., 2019). However, past simulation experiments demonstrated that when the outcome is dichotomous, the various estimates of the indirect effect and fraction mediated will no longer overlap. To forecast the routes, logistic regression analysis is used.

Using the product of coefficients technique, the indirect effect in simple mediation models can be calculated by dividing the indirect effect 'a' 'b' by the direct effect 'c', the indirect effect 'a' 'b' by the total effect c, or the total effect divided by the direct effect c' (Rijnhart et al., 2019), Both structural equation modelling (SEM) and multiple regression analysis can be used to calculate the routes. (Burgos Ochoa et al., 2020), earlier simulation experiments, however, confirmed that the various estimates of the indirect effect and mediated proportion will not match while the final results are dichotomous and logistic regression analysis is used to determine

the pathway (Gaynor, Schwartz, & Lin, 2019). The mediation thus play a very essential part in the linkages between two personalities or factors, according to the earlier studies (C. Li et al., 2020).

#### 5.3 Moderation

Moderating variables are used when there is an unexpectedly weak or erratic association between an antecedent (an independent variable) and an outcome across trials. This relates to the earlier conversation about how to find potential moderators (Memon et al., 2019; Iftikhar, Purvis, & Giannoccaro, 2021). Typically, a moderator is either an antecedent (an independent variable) that has been studied in previous research or a contextual element that has been found to be relevant across numerous academic disciplines.

Typically, a moderator is either an antecedent (an independent variable) that has been studied in previous research or a contextual element that has been found to be relevant across numerous academic disciplines (So, Li, & Kim, 2020). An outstanding illustration of this approach can be seen in Froese et al. (2019), where the authors evaluate the moderating effects of employee demographic variables on merit-based awards and work satisfaction using earlier, inconclusive findings as the foundation.

Additionally, moderating variables might be investigated in order to gain fresh theoretical understanding (Leisterer & Jekauc, 2019). For instance, (Bettencourt Calheiros e Meneses, 2022). Investigation of how national culture modifies the impact of various job qualities on job satisfaction filled a study vacuum. In each scenario, there must be a solid theoretical foundation to warrant the addition of a moderating variable in an exploratory or existent mode. In regression analysis and statistics, moderation occurs when a moderator variable affects the relationship between two variables and in results the values of LLCI and ULCI will be in same signs both will be in positive signs or both are in negative signs.

In this study the fourth variable is the moderator, (Muslichah, Abdullah, & Razak, 2019). Use caution when determining if the fourth variable has an impact on the

strength or direction of the relationship between mediator and dependent variable, suggests the statistical solution. An effective way to remember this is to keep in mind that the moderator variable may change the strength of a link from strong to moderate or even to zero. A previously observed statistical correlation might no longer hold true as the moderator's values are changed, almost like turning a dial on a relationship. For instance, if you believed that the amount of time spent studying connected with calculus test results, you would probably be right. Let's assume that the quantity of study time has a big impact on grades.

# 5.4 Proactive Personality and Project Innovativeness

H1: Proactive personality is positively associated to project innovativeness.

The results of this study shows a strong correlation between proactive personality and the effectiveness of project innovativeness. Team members will be better equipped to think collaboratively and participate in decision-making to deliver successful performance when proactive individuals share their abilities with their subordinates. Despite the fact that many studies have demonstrated how projects innovate, they have also documented investigating the causes, effects, and underlying processes of project innovation and organizational success (Sarwat & Abbas, 2020; Shafique, Ahmad, & Kalyar, 2019; Shafique et al., 2019; T.-P. Liang, Wu, & Huang, 2019). The tendency of adopting a proactive style has evolved over the past 20 years, improving team members' performance. Different team members are proactive throughout the various stages of a project's life cycle and collaborate with one another under supervision (Hoang, Luu, Le, & Tran, 2022). They also emphasized how proactive personality approaches benefit international organizations that were previously dependent on leader-centric approaches by enhancing proactive personality and encouraging project innovation among expert team members. Since it is challenging for top management to have a thorough understanding of talents, abilities, and expertise to lead all facets of work, proactive personalities are advantageous for project innovation (De Vos et al., 2020).

According to (Dane, 2011), proactive personalities boost a team's social capital by enabling greater use of the necessary tools, knowledge, and leadership of various team members, which supports project creativity as a form of team performance. A proactive personality can encourage public insertion and contribute to consistency in the team, which can successively supply the team effectiveness. Project innovation also nurtures a shared individuality among team members and increases the level of commitment and involvement with the group. Results shows positive relation between proactive personality and project innovativeness

## 5.5 Proactive Personality and Mindfulness

H2: Proactive personality is positively associated to mindfulness.

We not only identify the mindfulness theoretical frameworks that are frequently used in project management research, but we also analyses the motivations behind mindfulness applications in an effort to better understand how mindfulness may contribute to project management research. Six research areas were determined, including: The benefits of routine based as compare to mindfulness based behaviors are discussed. Mindfulness as a support for high reliability, mindfulness as a support for innovation and change, mindfulness as a support for flexibility and agility, mindfulness as a support for individual or team self-regulation. Not only are researchers adapting mindfulness based programs, but also teachers, supervisors, and developers employed by many types of organizations.

This Loucks et al. (2022), diagram highlights the significance of mindfulness. Not only is mindfulness crucial for a positive outcome, but it is also excellent for your health. Additionally, mindfulness helps sustain cultural norms and communication styles for demographic groups that are being addressed. Additionally, it works well in a delivery environment at any job. These examples demonstrate the advantages of mindfulness (Lochab & Nath, 2020).

Multiples analysis reveals that mindfulness was high as a proactive regression when harm/care were low. According to the findings, mindfulness is only associated with bad behavior when there is no harm or caring involved. Because only proactive people exhibit attentive conduct, it is proposed that mindfulness can

be positively correlated with proactive personality (Kaufman, Yaden, Hyde, & Tsukayama, 2019). The association between proactive personality and mindful conduct is partially moderated by workplace behavior, according to a moderated mediation model (Cui & Li, 2021).

The findings indicate that mindfulness is a key element in any organization's success. There is a positive relationship of mindfulness with proactive personality. Therefore, based on the findings, hypothesis 2 is accepted because mindfulness positively linked with proactive personality that results in organization's success. According to the study's findings, analysis is carried out to determine whether the independent variable (proactive personality) and mediator (mindfulness) has positive effect or not and in results the p value is less than 0.05 which illustrates the positive effect between proactive personality and mindfulness.

## 5.6 Mindfulness and Project Innovativeness

H3: Mindfulness is positively associated to project innovativeness.

Using a creative, resilient mentality increases the likelihood of successful project outcomes. Team learning behavior, team psychological safety, complexity leadership and team voice are the four components of mindful infrastructure that assist lessen risk aversion and organizational defensiveness. (Holden & Card, 2019). Any policy, action or practice that shields members of a group from humiliation or threat while also shielding them from learning what caused the threat or embarrassment is known as defensive behavior or organizational defensive routines (Frandsen & Morsing, 2021). Because of mentality's inherent psychological safety, team members are allowed to explore and make mistakes (Harvey et al., 2019).

Another name for participatory decision making, captures organizational dynamics and encourages team members to assume accountability for issues (Meredith, 2020). It encourages productive communication with a variety of stakeholder interests and emphasizes the value of project team members taking part in decision-making (Moosavi & Browne, 2021). Complexity leadership requires deftly negotiating situations that foster competing ideologies and conflicts (Crowell & Boynton,

2020). The absence of these four elements can either lead to defensive behavior or invoke the IRB (Institutional Review Board), which is made up of the five HRO (high reliability organization) principles adjusted for the innovation management.

IRB's five guiding principles respect for knowledge, reluctance to simplify, commitment to resilience, sensitivity to operations and concern with failure will help it create a better HRO (Bradshaw & Keyser, 2021). Teams perform better during the innovation process because they make less mistakes, are better equipped to handle and prevent mistakes, and keep a stronger focus on the end goal. The IRB, according to Jensen (2020), promotes controlled risk-taking, the capacity to learn from mistakes, room for experimentation, and efficient channels for teamwork and communication. This will enhance innovation methods, outcomes of project, particularly "reported project success" and "perceived project progress" (Radhakrishnan, Zaveri, David, & Davis, 2021; Alotaibi, 2019).

Innovation resilience behavior raises the likelihood of better project outcomes (Sabahi & Parast, 2020). Defense behavior or organizational defensive routines are any policy, action, or practice that protects members of an organization from embarrassment or threat while also protecting them from discovering what produced the embarrassment or threat (Buchanan & Badham, 2020). Team psychological safety allows members to experiment and take risks while feeling comfortable with making mistakes (Harvey et al., 2019). According to (Wilkinson, Sun, & K Mowbray, 2020), team voice or participatory decision-making, which encourages problem ownership among team members, can capture organizational politics.

It encourages productive communication with a variety of stakeholder interests and emphasizes the value of mindfulness in project team members taking part in decision-making (Kaplan et al., 2021; McComas, Arvai, & Besley, 2020). The complexity of achievement and creativity necessitates deftly navigating situations that promote competing messages and challenges (Gao, Mun, & Kim, 2021) If any of these four factors are present, IRB, which is made up of the five HRO principles adjusted for the context of innovation management, may be provoked. This could result in defensive behaviour (Argyris, 1990). Since teams are more capable of handling and preventing errors and have a stronger focus on results, IRB will aid in the improvement of the innovation process. It is possible to promote controlled

risk-taking, space for experimentation, and efficient channels of communication and collaboration by connecting the IRB and HRO tenets (Lim, 2019). This will benefit "project results," "perceived project success" (Khan, Jaafar, Javed, Mubarak, & Saudagar, 2020) and "perceived project progress" (Hughes, Rana, & Dwivedi, 2020; Tam, da Costa Moura, Oliveira, & Varajão, 2020).

Being mindful is a skill that most proactive people possess (Saleem, Isha, Mohd Yusop, Awan, & Naji, 2021). Proactive people can make innovative changes for any organization's success (McCormick et al., 2019). (Ji, Liu, Li, Yang, & Li, 2019) claim that success is the primary objective of any industry when proactive personalities with mindful behaviors are used in organizations. According to prior research, innovative persons can contribute to a company project. Mindfulness and project innovation are so tightly intertwined. After conducting all necessary research and our results shows positive relation between mindfulness and project innovativeness.

# 5.7 Mediating Relationship between Proactive Personality and Project Innovativeness

H4: Mindfulness will mediates the relationship between proactive personality and project innovativeness.

According to (Toniolo-Barrios & Pitt, 2021), mindfulness is the act of paying attention in the present moment with a specific intention. As a result, one must have metacognitive awareness (Abdelrahman, 2020), which is defined as "one's explicit understanding of the current contents of thought" (Köksal, Sodian, & Legare, 2021). Emotional intelligence and mindfulness have previously been linked in studies. Understanding complexity, managing pressure, and (Lim, 2019), B(Brito, Joseph, & Sellman, 2021). Self-awareness, which fosters clarity, must be consistently and intentionally increased in order to live thoughtfully (Brassey & Kruyt, 2020). For IT endeavors, precise task definitions.

Information technology activities are broken down into smaller, more manageable chunks, therefore having a mindful mentality will help achieve goals by focusing on the project's tasks and being present. The mindful person is conscious (Bunjak, Hafenbrack, Černe, & Arendt, 2022). Therefore, carrying out difficult technological tasks requires a concentrated and attentive mind. Because it allows people to understand their environment, underlying the nature of the mind, psychological processes and, mindfulness is a helpful mental state at trying times (Gruman & Saks, 2020). (Bin Saeed, Afsar, Shahjeha, & Imad Shah, 2019) Active engagement encourages innovative work behavior, and mindfulness increases engagement (Pattnaik & Jena, 2020).

Mindfulness will result in project success since creativity is essential for organizational projects to be successful (Khan et al., 2020). Mindfulness has a direct correlation to the production of new ideas that are beneficial (Kalyar, Ali, & Shafique, 2021). (Ali, Zhang, Shah, Khan, & Shah, 2020) claim that it has been proven that utilizing staff members' innovative and useful project ideas would aid the organization in achieving its goals (i.e., project success). Additionally, mindfulness empowers people to ignore the negative impacts of an event because it motivates workers and relaxes their counter productiveness and ruminative attention (Williams, 2021). People who are positive at work are unburdened by tension and pessimistic thoughts, both internal and external. They frequently adopt innovative working methods as a result, focusing on creating concepts and solutions that forward the project's goals (project success). Innovation is required because to the organization's constantly changing needs and the very unpredictable nature of the business environment (Kohli & Melville, 2019). Project team members should strive to improve their proficiency, adaptability, and alertness. These all are enhanced by mindfulness. Innovations in technology and organizational structure are crucial for sustained growth, international competitiveness, and commercial success. The first step towards innovative work behavior is recognizing a problem (Azeem, Ahmed, Haider, & Sajjad, 2021). This is only possible if the employee is concentrating to recognize the problem. Thus, mindfulness will encourage employees to engage in creative work practices, sustaining and enhancing corporate performance. Therefore, being alert will result in better outcomes and better market performance.

Innovation is necessary for sustained organizational productivity (J. Zhang et al.,

2019). The degree of mindfulness that each employee possesses influences this behavior. According to numerous studies, people's potential for invention differs depending on theme review (Raddats, Kowalkowski, Benedettini, Burton, & Gebauer, 2019). In this case depending on their mindfulness traits, they act differently in different circumstances such as tackling the project's complexity (Nachbagauer & Schirl-Boeck, 2019). According to earlier studies, individual personality traits like openness mindfulness and conscientiousness are significant predictors of innovative job behavior (Hao, Yang, & Shi, 2019). These characteristics might help a project succeed. Employees that practice mindfulness are diligent (Bajaba et al., 2021), and they exhibit innovative work methods that support project achievement. As literature and results both shows that fourth hypothesis of mediation is supported.

# 5.8 Moderation between Mindfulness and Project Innovativeness

H5: Organizational agility will moderate the relationship between mindfulness and Project innovativeness.

The capacity of a company to see chances for innovation and seize those chances by swiftly and unpredictably assembling the necessary knowledge, resources, and connections (Qosasi, Permana, Muftiadi, Purnomo, & Maulina, 2019). It requires a cutting-edge strategy for conducting business in a complicated setting marked by change and unpredictability. Organizational agility is centered on the need for firms to be sensitive to incoming signals from both their external and internal environments. The ability of the organization to develop sets of internal processes that allow an organization to recognize external changes and then respond swiftly & efficiently accounts for this level of attentiveness (Katzan Jr, 2021). In a cutthroat market, agility is the capacity to react fast, use initiative, look for, and take chances. Over the past 10 years, the business environment has been unstable, and adapting organizationally has become a technique for dealing with rapidly changing conditions (Nwankpa & Merhout, 2020). An organization's endeavor to foster an agility mentality is an effort to provide employees the flexibility to respond to

quickly changing business conditions while still being productive, (Attar & Abdul-Kareem, 2020). Organizational agility is a trait that assesses a company's ability to recognize and seize chances for competitive advantage fast (Meredith, 2020).

The ability of an organization to recognize and seize opportunities for competitive act with digital technologies through the services, digital transformation of organizational products and business models that results in new competitive benefits is what is meant by organizational agility, according to this viewpoint. One of the problems in synthesizing data from a corpus of studies is recognizing that significant factors can mean many things to many people (Tallon et al., 2019). There are disparities in the level corporate, process, business unit, or work group and structure of the group at which agility is taken into account, even if academics agree that agility is about recognizing and adjusting to change. For instance, (Panda & Rath, 2021) define agility as a process level construct that "represents a firm's skills relating to contacts with consumers, orchestration of internal activities, and utilization of its ecosystem of external 5 business partners."

Similar to this, (Y. Wu, 2019) identifies competitive methods as employing human and information-based resources, collaborating with stakeholders to boost competitiveness, utilizing agility to better serve clients, and managing change and uncertainty. This process viewpoint is different from those of (Walter, 2021), who defines agility as the rate at which IT is adopted; (Tallon et al., 2019), who combine information agility to get use of IT gadget agility IT development, implementation, change and renovation and strategic agility capacity to take benefit of IT capabilities, (Hajli, Tajvidi, Gbadamosi, & Nadeem, 2020), who define agility as a change of sense and responding to the capabilities around customers, competitive threats, and opportunities.

According to (C. Li et al., 2020), agility is a combination of market capitalizing agility that is changing and services and products to meet customer demand and operational adjustment agility that how internal business processes can manage the changes in demand. Last but not least, (Clauss et al., 2021) a company can "organize new business approaches to gain early advantages in changing conditions" and "revise its positioning and strategies" by fusing entrepreneurial agility the capacity to recognize market opportunities with adaptive agility. Agility can

therefore be offensive, defensive, or both because a firm's products or markets could not develop at the same rate or occupy the same location on the product lifecycle curve. Despite this, the simplicity and speed with which change can be sensed and responded to is a common motif in these conceptualizations.

Agility is a composite characteristic that combines adaptability, high quality, quick delivery, modification and adaption to change, and cost effectiveness to gain a competitive edge (Shahzad, Qu, Zafar, Rehman, & Islam, 2020; Sheel & Nath, 2019). A lot of definitions state that technology, encompassing software and hardware, knowledgeable information and human resources, can meet needs that change quickly (Gekara, Snell, Molla, Karanasios, & Thomas, 2019). Agility is the capacity of an organization to respond to a changing environment and thrive by grasping opportunities (Attar & Abdul-Kareem, 2020), It provides a business with a higher order dynamic capability that enables it to adjust and seize opportunities while focusing on market irregularities, that will leads to project innovativeness (Singh, Charan, & Chattopadhyay, 2022; Lee & Chen, 2019).

The speed at which innovations are developed has always had a significant impact on the process of developing new items. The development and innovation processes of an organization, however, need for exceptional adaptability, as noted by (Grass, Backmann, & Hoegl, 2020) In today's creative age, agility depends on intellect, and knowledge-based flexibility is essential for daily success. By being quick to acquire new knowledge and develop innovative products, a company can quickly provide a wide variety of new products to the market. The prosperity of both stockholders and employees over the long run depends on such innovative products (Shahzad et al., 2020). Realizing that OA (Organizational Agility) is a leader in its ability to mirror the issues that companies encounter, the ability to address issues, organizational learning, and the management innovation that depends on continuing development inside the organization (Shahzad et al., 2020; H. Zhang et al., 2020). For its analysis of how agility affects the KMP (Knowledge Management Process), which believes enables firms to produce cutting-edge green goods and has an effect on their performance and sustainability, this study has gained a significant amount of scholarly interest. This study illustrates that organizational agility will not moderate the relationship between mindfulness and project innovativeness.

As seen in the above discussion, organizational resources can accept original and creative ideas when there is organizational agility. In this sense, agility refers to a manner of thinking and bringing the change. Since organizational agility will not moderate the relationship between mindfulness and project innovativeness, hypothesis 5 according to which organizational agility is a moderator between mindfulness and project innovativeness is rejected due to the results of LLCI and ULCI that have opposite signs.

# 5.9 Proactive Personality, Mindfulness,Project Innovativeness and OrganizationalAgility

H6: The indirect effect of proactive personality through mindfulness on project innovativeness is expected to be significant for those with high organizational agility and non-significant for those with low organizational agility.

Proactive personality is directly linked with project innovativeness and the mediator variable mindfulness is acting as a bridge between proactive personality and mindfulness (Winfield, 2021). Identifiable, responsible, and persistent change makers are proactive employees (Miscenko, Guenter, & Day, 2017). Projects using information technology demand innovation due to the constant advancement of technology. The study supports the idea that innovative work practices contribute to project success. Additionally, inclusive mindfulness fosters innovation among staff members.

Proactive personality, an independent variable and project innovativeness, a dependent variable, are significantly related. Additionally, mindfulness serves as a bridge between a project's innovativeness and proactive personality. We must also examine the moderation between mindfulness and project innovativeness. In reality, mediated moderation is the indirect effect of organizational agility being moderates the relationship. We have to check that at higher level of organizational agility the indirect effect increases or decreases or by lowering the organizational

agility the conditional indirect effect increase or decrease. As our results shows that mediated moderation rejected due to different signs of LLCI and ULCI values.

#### 5.10 Conclusion

In this study, four variables were carefully examined to determine their importance in project innovation: mindfulness as mediator; proactive personality as an independent variable; project innovation as a dependent variable; and organizational as a moderator. The findings of the hypothesis demonstrate that project innovativeness is favorably and strongly connected to proactive personality and mindfulness practice. In accordance with the findings of a study of mindfulness mediates the relationship between a proactive personality and project innovativeness.

The hypothesis 5 of this thesis argues that organizational agility plays a moderator role between mindfulness and project innovativeness but in light of the results hypothesis 5 is rejected. To make quick decisions and accept innovative ideas for the benefit of the organization, the proactive personality plays vital role so hypothesis 1 is also accepted. Mindfulness was found to operate as a mediator between proactive personality and project innovativeness.

Based on the findings discussed above, this study came to the conclusion that proactive personalities should be encouraged within organizations because their shared ideas can give team members the freedom to carry out their tasks and give them the option to choose the methods that will work best for them. Additionally, when team members are creative and share their ideas with mindfulness, they will work harder to accomplish their intended goals, as evidenced by their improved performance. Additionally, based on the findings, it might be inferred that teams can work more effectively with proactive personality and mindfulness so with less ambiguity the project will goes to success with innovations.

Between a proactive personality and project innovativeness, mindfulness acts as a mediator. On the other side, proactive personality and project innovativeness are also positively associated. Only proactive personalities are capable of making prompt and successful decisions with mindfulness, and results shows that organizational agility will not moderate the relationship between mindfulness and project innovativeness.

#### 5.11 Practical and Theoretical Implication

In the prior literature, this study has contributed to a new area where the relationship between proactive personality and other factors, such as project innovativeness, is evaluated and studied. Mindfulness is also favorably related to proactive personality. Therefore, project innovativeness is favorably correlated with mindfulness. The study also covered how mindfulness can help projects innovativeness and have a proactive attitude. In the same way that mindfulness plays a mediating function between proactive personality and project innovativeness. By examining its impact with project innovativeness and mindfulness, this study has added highly crucial parts of proactive personality and project innovativeness to the previous work.

This study has illustrated a novel concept of resolving internal problems of any organization for the success of proactive measures in the project with mindfulness and innovations, as mindfulness is the most important demand for the proactive personality because only proactive personality have the ability of mindfulness. In this study, new relationships that are crucial for gaining a competitive edge in the dynamic and inventive environment of growing firms have been examined.

By clarifying the role of mindfulness as a mediator between the proactive personality and project innovativeness as well as the role of organizational agility with project innovativeness and mindfulness, this study has meaningfully contributed to the literature. Because proactive personality is one of the most important and distinctive variables, studying this variable stands out as a unique study that has made a substantial contribution to the literature for subsequent findings. This research is crucial for managers, subordinates, supervisors, and employees, as well as for entire organizations, because Pakistan is struggling with many issues that are related to the success of organizations. In order to overcome these issues, new

research is needed that will help to illustrate concepts like proactive personality, mindfulness, organizational agility and project innovativeness.

#### 5.12 Limitations

The same constraints apply to all research methods, including systematic literature reviews (Denyer & Tranfield, 2009). By creating a new conceptual model, this study attempted to incorporate proactive personality into the project management area. Future researchers ought to be aware of such restrictions. First off, because of time restrictions, the data were only gathered once. Future researchers can collect data via time lag. Second, this study has a tiny sample size because information was only gathered from two cities in Pakistan. It's possible that the 304 participants are not an accurate reflection of the data. The fact that this study was restricted to Pakistan raises questions about how culture can have an impact. Therefore, future studies in cultures or nations with a large sample size can examine these relationships.

#### 5.13 Future Directions

There are always some gaps because, in a world where competition is fierce, work is never something that is completed and leaves us with a clear path for the future. The objective of the current study was to examine the impact of mindfulness as a mediator to strengthen the relationships between proactive personality and on project innovativeness. Future directions for this investigation are also covered in this article. With 304 participants, this study only has a small sample size. Therefore, to determine the efficacy of all factors and hypotheses, future studies need have a high sample size. Data for this study was gathered from employees, project managers in various project-based organizations. So in future studies it may also collected from IT companies as well. Future study should focus on many types of organizations, including schools, colleges, diverse industrial areas, organizations with different specialties, and organizations from various geographical

locations. Because research on proactive personality is extremely rare in a variety of fields and because proactive personality has a significant impact on organizational agility. Future research on proactive personality should use a variety of mediators and moderators. The cross-sectional research design was adopted in the current investigation. Future research could be undertaken using alternative research methodologies, such as longitude.

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# Appendix-A

## Questionnaire

#### Dear Respondent

I am student of MS Project Management and currently doing research on "Impact of Proactive Personality on Project Innovation with Mediating Role of mindfulness and Moderating Role of Organizational Agility". You are my one of my potential respondent and hence you are requested to answer these questions from your busy schedule and help me in completion of my research work. I assure you to keep your data confidential and only be used for educational purposes.

Sincerely,

Ammar Hamza Iqbal,

MS Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

## Section 1: Demographics

Please provide the information about yourself.

Gender	1- Male 2- Female 3- Prefer not to say
Age(years)	1 (20-25), 2 (26-30), 3 (31-35), 4 (36-40), 5 (41-
	above)
Qualification	1 (Matric), 2 (Inter), 3 (Bachelor), 4
	(MS/M.Phil.), 5 (PhD), 6 (PostDoc)
Work Experience(years)	1 (1-5), 2 (6-10), 3 (11-15), 4 (16-20), 5 (21-
	above)

## Section 2: Proactive Personality

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

Sr. No	Questions					
1	If I see something I don't like, I fix it.	1	2	3	4	5
2	No matter what the odds, if I believe in some-	1	2	3	4	5
	thing I will make it happen.					
3	I love being a champion for my ideas, even	1	2	3	4	5
	against others opposition.					
4	I am always looking for better ways to do things.	1	2	3	4	5
5	If I believe in an idea, no obstacle will prevent	1	2	3	4	5
	me from making it happen.					
6	I excel at identifying opportunities.	1	2	3	4	5

## Section 3: Project Innovativeness

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

Sr. No	Questions						
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1	The novelty of the originally anticipated project	1	2	3	4	5
	results was very high compared to other projects					
2	The originally anticipated project results ad-	1	2	3	4	5
	dressed new user / customer needs that we have					
	not addressed before					
3	At the beginning of the project we did not yet	1	2	3	4	5
	have the necessary technical knowledge					
4	At the beginning of the project we had little	1	2	3	4	5
	practical experience in the application of the re-					
	quired technology					
5	In our project we could only partially rely on the	1	2	3	4	5
	existing technological competence of the Com-					
	pany					

## Section 4: Mindfulness

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

Sr. No	Questions					
1	When my attention get sidetracked at work, I	1	2	3	4	5
	make a disciplined choice to refocus					
2	When interrupted from a task I am engaged in	1	2	3	4	5
	at work, I am able to clear my mind and dive					
	back into the task					
3	When I get preoccupied with distracting	1	2	3	4	5
	thoughts at work, I recognize it and then inten-					
	tionally redirect my attention back to my work					
4	When at work, I am able to purposefully focus	1	2	3	4	5
	on task and refocus when presented with an in-					
	terruption or distraction					

5	When I distracted at work, I recognized it and	1	2	3	4	5
	then purposefully turn back to the task at hand					

# Section 5: Organizational Agility

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

Sr. No	Questions					
1	We have the ability to rapidly respond to cus-	1	2	3	4	5
	tomers' needs					
2	We have the ability to rapidly adapt production	1	2	3	4	5
	to demand fluctuations					
3	We have the ability to rapidly cope with prob-	1	2	3	4	5
	lems from suppliers					
4	We rapidly implement decisions to face market	1	2	3	4	5
	changes					
5	We continuously search for forms to reinvent or	1	2	3	4	5
	redesign our organization					
6	We see market changes as opportunities for rapid	1	2	3	4	5
	capitalization					