

CAPITAL UNIVERSITY OF SCIENCE AND
TECHNOLOGY, ISLAMABAD



**Impact of Entrepreneurial
Leadership on Project Success:
Mediating Role of Innovative
Work Behavior and Moderating
Role of Openness to Experience**

by

Tehreem Shafqat

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 my parents who dedicated their life to teach me how to step
forward...!*



CERTIFICATE OF APPROVAL

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“Then which of the Blessings of your Lord will you deny.”

(Surah Ar-Rehman)

First and foremost, to my creator, my life coach, the most gracious, the most beneficent, **ALLAH S.W.T**, I owe it all to you, Thank you.

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Abstract

The current study aimed to find out how does entrepreneurial leadership affect project success; through the mechanism of Innovative work behavior. Furthermore, the study investigated whether openness to experience moderated the positive relationship between entrepreneurial leadership and innovative work behavior. Data were collected from 284 individuals working in project-based organizations in Rawalpindi Islamabad vicinity. Data were analyzed by using correlation and regression analysis through SPSS. The findings suggested that entrepreneurial leadership was positively associated with project success. Furthermore, innovative work behavior partially mediated the positive relationship between entrepreneurial leadership and project success. Moreover, the results did not support the claim that openness to experience strengthens the relationship between entrepreneurial leadership and innovative work behavior. The thesis is concluded by discussing the practical and theoretical implications along with the limitations.

Keywords: Entrepreneurial Leadership; Innovative Work Behavior; Project Success; Openness to Experience.

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Abbreviations

DV	Dependent Variable
EL	Entrepreneurial Leadership
H	Hypothesis
IV	Independent Variable
IWB	Innovative Work Behavior
OTE	Openness to Experience
PS	Project Success

Chapter 1

Introduction

1.1 Background of the Study

Entrepreneurial leadership (EL) defines as a combination of entrepreneur and leadership, giving a competitive advantage to the organization when applied perfectly. Renko et al. (2015) emphasized that EL encompasses encouraging and managing the conduct of the employees to the accomplishment of managerial objectives through appreciation and manipulation of innovative prospects. Bagheri and Pihie (2010) have endeavored to designate entrepreneurial knowledge practices that donate to the seeking and improvement of entrepreneurial leadership in individuals. Extent literature reveals that entrepreneurial leadership learning endorses diversity among individuals. Adding to it, socialization, consideration, and replication have occurred as processes that have considerably funded the knowledge of entrepreneurial leadership.

Yilmaz and Gormus (2012) examined the connection between strategic entrepreneurship, apparent administrative sustenance, and managerial education. Consequently, creating tactical entrepreneurship, innovative culture, entrepreneurial management, planned to control the assets extents, and entrepreneurial way of thinking is positively and strongly linked with professed administrative sustenance and organizational adaptable variables. Jagdal and Bhola (2014) studied the effect on entrepreneurial leadership and the outcome of the organizations and small-scale manufacturing industries.

The findings revealed a noteworthy association between entrepreneurial leadership and administrative enactment. Entrepreneurial leadership (EL) has been summed into two groups; one group features the challenging, energetic, innovative, and sharing nature of the leader. While other group features the organization's initiator achievement. Entrepreneurial leaders oversee or manage the individual personality and activities. These contain forecasts, results, and emergency settling (Fernald, Solomon, and Tarabishy, 2005). The space of entrepreneurial leadership is at an underlying period of progress, the collected work has principally coordinated on investigating the event and formation of enterprising administration (McCarthy, Puffer, & Darda, 2010) and its vision and assurance (Bagheri & Pihie, 2011). One of the principles and significant elements of the leader is to spur their workers for the finish of their undertakings (Lai, Hsu, and Li, 2018).

Entrepreneurial leaders influence their followers to take engagements and work over the common goals, byways of working together with a powerful vision of entrepreneurship that leans towards encouraging the group to build an evaluation for the risk. These leaders normally place shaping the association in front of their circumstances and are continually looking for better approaches for working and recognizing outcomes to upset the norm. As discussed by Derue, Nahrgang, Wellman, and Humphrey (2011) leader efficiency denote the extent of encouragement a leader has on individual or group performance, supporters' satisfaction, and whole effectiveness. Therefore, entrepreneurial leadership is regarded more as an amalgamation of peculiar qualities and charisma. Entrepreneurial leadership was deliberated by McGrath and Macmillan (2000) who paralleled leader and leadership with a new confronted and globalized organization's situation.

Entrepreneurial leadership is a managing style that is tremendously important for today's corporate atmosphere, where nothing significant can be accomplished without risk-taking (Winkler, URen & Abraham, 2018). In any organization, EL has perfectly applied to influences employee creativity. Innovative people play a striking role in every organization. Hughes (1998) states that creativity is distressed with the development of technology, organized actions, informative methods, requirements, and ideas. Innovativeness is communicating a new way of life to an organization by amending the ongoing work activities of an organization.

The role of entrepreneurial leadership has been anticipated as a basic component in which entrepreneurs can sustain their effectiveness when faced with vigorous and changing environments (Fernald et al., 2005). Substantiation has advised that entrepreneurial leadership is confidently associated to project execution through stressing innovation plus development within consumer and participant orientation (Zyl & Helm, 2007). On the other hand, some studies suggested that supportive behaviors of leaders must provide creative results for a project's success. Employee creativity is sustained by the inspiring uncontrolled feedback actions, by the positive advisor, and by employee interpretations that creativity is valued (Egan, 2005).

Effectiveness of leadership relies on the capability of the leader to find arrangement of mind-boggling issues which are conceivable just when these abilities are exhibited by the leader which assists him in figuring out the circumstances and manage the issue consequently empowering the pioneers to effectively get fruitful in the authoritative ventures. In the enterprise-related texts, many research empirically studied and figured out that the association between the project leader's compassionate management techniques and the success of the project is positive.

If an individual is skillful and polished, he is sufficient enough to handle the proficiency of the work, then he must be managed over and above. Extent literature recommends that if somebody is appropriate for the profession, the worker will discern more associated with the association at the experienced level and also on the individual level. It is confirmed that encouragement increases assurance and self-worth which is unswervingly related to performance and job assurance (Airila et al., 2014). Employee creativity is linked with creative actions (Basadur, 2004). Many researchers and experts support that employee creativity accelerates to achieve project success (Unsworth & Parker, 2003). The team leader should make employees perform successfully and efficiently for the success of the project.

A leader's concern may embrace sustaining better understanding, the competencies to fascinate extraordinary, operative, and qualified groups or teams. Therefore leadership style of project leader helps to progress and encourage project success (Raymond & Bergeron, 2008). The studies also show that the leaders who are

anxious about their employees or workers are more effective and have better results (Hirak, Peng, Carmeli, & Schaubroeck, 2012).

Entrepreneurial leadership emphasizes interconnecting the visualization, pleasing groups to recognize, grow and take benefit of the prospect to increase a modest improvement. The twenty-first century has proven that management skills are necessary to increase, endure and sustain the projects.

Simultaneously, project leaders make efforts to enhance innovations, identify opportunities and take risks (Kim, Park, & Miao, 2017). Leadership has a very important connection with the performance of an organization and is a foremost aspect that impacts originality and innovation.

Entrepreneurial leadership is an innovative kind of leadership that involves the qualities of management and the essence of entrepreneurship. Furthermore, entrepreneurial leaders are generating new merchandise, new practices, and increasing chances for companies. EL is followed by the leaders who are higher risks takers, explore opportunities, and are excellent in strategic planning. An Entrepreneurial leader may efficiently undeviating the development of innovation by enabling the associates in producing and comprehending new concepts (Cai, 2019).

Leaders affect representative work activities (Yukl, Gordon, & Taber, 2002). Cunningham and Lischeron (1991) proposed EL as a mechanism of setting clear goals, assigning roles and duties, and empowering employees by the delegation of power and authority. Additionally, protecting organizational understanding, and creating human resource frameworks.

Entrepreneurial leadership offers convictions and considerations also; these are now and again connecting to entanglements that are not of the primary environment. Kelley and Kin Leong (2003) saw that vision of project leader is affected by the authority technique for the task chief; so leader's vision of undertaking a good outcome and his singularity has an immediate connection with one another, which demonstrates that pioneer's incredible suppositions on his initiative abilities play a significant part in project achievement.

Entrepreneurs leader has authority possible consolidating with innovative abilities, for instance, not just collaborate as a football player is an individual that plays in the ground with the team as chief. Apart from being executives, who select, provide instructions, and inspect their workers, nonetheless, they also should prefer to be innovative team leaders who controlled the team and presenting the way.

Entrepreneurs face the challenge and they grasp the advantage of lucky breaks, entrepreneurial leadership has been vital for the development of the corporate in the forthcoming (Phaneuf et al., 2016: 34). Accordingly, it is a significant spectacle for entrepreneurial leadership in corporate supervision. The project leader encourages employees to perform effectively and efficiently for the success of the project.

Entrepreneurial leadership is the key element affecting the performance of any organization (Weintraub & McKee, 2019). Therefore, in the present moment strong and self-motivated modest business atmosphere, leaders, specially frontrunners of moderate family corporations practice entrepreneurial leadership to gain a competitive advantage. Entrepreneurial leadership motivates its supporters to be more productive and innovative.

Then, an entrepreneurial leader leads the team with his best aptitudes to fabricate an innovation-driven inspired project. It emphasizes shared visualization and aligns employers' and employees' objectives. Employees are owned, considered the strength of any organization, thus, when EL is perfectly applied in any organization it strengthens the employees' tendency towards innovative work behavior.

Recently, Bagheri (2017) studied the connection between the innovative behavior of entrepreneurial leaders and employee appreciation of opportunities in advanced small and medium-sized enterprises (SMEs). The findings revealed a positive connection between the variables. Thus, there is a clue in the literature that EL affects creativity in projects (Aga et al., 2016) revealed a relation between Entrepreneurial leadership and project success and suggested checking the underlying mechanism for the relationship. Thus to meet all these calls current study is embracing the impact of Entrepreneurial leadership on project success with mediating effect of innovative work behavior and moderating role of openness to experience.

1.2 Research Gap

Ramsgaard and Warren (2015) suggested studying the early stage concept of how entrepreneurial leadership should be studied in a way, which gives employees autonomy, the ambiance where they think innovatively while working with an approachable team. An employee portrays an imperative part in the accomplishment of the project so we decided that Entrepreneurial leadership needs more findings (Weintraub & McKee, 2019). The organizations specifically project-based organizations apply a leadership style that provides employees independence of choice, to think innovatively and offer them a comfortable environment where employees would feel more reliable and they would be motivated enough to think innovative ways to achieve goals. In project-based organizations, the Entrepreneurial Leadership style has extended interest in performance management research due to their significance to the project-based administrations and their supervision (Abubakar et al., 2018; Mishra and Misra, 2017; Zainol et al., 2018).

Karol (2015) believed that when there is Entrepreneurial leadership and the leader encourages the team members and gives them the right to share their notions then they behave innovatively that simply specifies that innovative work behavior is the product of entrepreneurial leadership and it can be used as a mediator. Therefore the research explores the role of innovative work behavior (IWB) as an explanatory essential mediatory contrivance for the association between EL and PS. Sarabi, A., Froese, F. J., Chng, D. H., & Meyer, K. E. (2020) proposed that Entrepreneurial leadership should be studied with different personality traits so I took Openness to experience as a moderator. The study examines openness to experience as a moderator between EL and IWB. The research will target project-based organizations like IT, NGOs, and the construction companies of Pakistan.

1.3 Problem Statement

A conducive working environment is highly desirable in organizations. Entrepreneurial leadership ensures smooth working in organizations, which facilitates employees to guarantee project success. EL strengthens the opportunities for innovative work

behavior, compliments individual as well as collective achievements, consequently, this IWB leads to project success. If the employees are not provided an encouraging competitive environment, the organization can't enjoy the ascendancy of remarkable achievements. Additionally, individuals with proactive personalities and a higher tendency of taking risks, strengthen the possibility of IWB in response to EL. Limited literature available where these relationships have been studied earlier, thus the present study would make significant theoretical and contextual addition in the literature.

1.4 Research Questions

The following research questions are the target of this study are listed below:

Research Question 1

Does Entrepreneurial leadership affect project success?

Research Question 2

Does Entrepreneurial Leadership affect Innovative work behavior?

Research Question 3

Does Innovative work behavior affect project success?

Research Question 4

Does innovative work behavior mediate the relationship between entrepreneurial leadership and project success?

Research Question 5

Does openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior?

1.5 Research Objectives

Based on the specific problems, the present study is intended to find answers to these questions. It will interpret the relationship of the variables i.e. entrepreneurial leadership, innovative work behavior, and success of projects. In

addition, it will inspect how all these variables provide the desired variable i.e. project success. Also, it would highlight openness to experience as a moderator. The set objectives of this study are stated below:

Research Objective 1

To investigate the relationship between entrepreneurial leadership and project success.

Research Objective 2

To what extent entrepreneurial leadership affects innovative work behavior.

Research Objective 3

To what extent Innovative work behavior affects project success.

Research Objective 4

To examine the mediating role of innovative work behavior between entrepreneurial leadership and project success.

Research Objective 5

To examine the moderating role of openness to experience between entrepreneurial leadership and innovative work behavior.

1.6 Significance of Study

This study attempts to allow the project managers to understand the significance of entrepreneurial leadership. Nowadays, entrepreneurial leadership has a direct influence on project success but there are limited studies that investigated this relationship. Thus, the current study will fill this gap by investigating the connection between EL and project success.

The project success need inordinate dominance abilities who can control errand, objectives and through group progressions, though the writing is quiet, parcels of

undertakings flopped because of inappropriate administration abilities, and still, analysts center around substantial things like expense, acquisitions, and timetable (Lines, Sullivan, Hurtado, and Savicky, 2015; Yun, Choi, Oliveira and Mulva, 2016)

The entrepreneurial leadership approach encourages employees to take initiative and to think out of the box (innovative thinking). Leaders appreciate and value the contribution of their employees; consequently, employees' innovative output becomes double, and ultimately chances of project success increases. The present study also explores the mediatory role of IWB, thus filling another gap in extant literature.

The study will also make a theoretical addition in literature by discovering the moderating role of openness to experience between EL and IWB. In the Pakistani context, the study will come up with unique findings. Lastly in Pakistani culture, it will bring unique findings, as in Asian context employees have different work orientation than west.

1.7 Supporting Theory

Leader-member exchange (LMX) is the underpinning theory for this study. Dansereau, et al. (1975) presented this unique theory of leadership, that reveals the vertical dyadic interaction amongst frontrunners and associates. Leader-Member Exchange (LMX) is a provisional theory of leadership with the manifestation of an employee's social exchange associated with the supervisors. Literature shows that leaders enact a vigorous role in the encouragement of workforces. If a leader gives his employees autonomy, power and enhances their skills, as result, the employees show creative behavior. There is give and take in the organizations. Entrepreneurial leaders facilitate their employees, assist their employees, and give them ownership, so in return, employees participate more creatively which leads to the project's success.

Leader-member exchange theory of leadership embraces common characteristics of leaders like innovation and risk optimization that encourage and build trust in

employees to be more innovative and creative. Innovative work behavior (IWB) normally embraces observation of prospects and the creation of new concepts, but can also comprise compartments concentrating on executing variation, improving processes to enhance the project's success. Leader-member exchange theory has entrepreneurial leadership characteristics. If a leader has such power to motivate and influence employees who are open to experience, then it spontaneously strengthens innovative work behavior.

LMX has the same features as in entrepreneurial leadership like novelty, risk optimization, encouraging and motivating the employees. As a result of this motivation and encouragement the employees come up with fresh, creative, and unique ideas, they show innovative work behavior in organizations that lead to the project success. Leader-member exchange theory also supports openness in such a way that individuals who are open to the experience are more eager to embrace new ideas and novel experiences and when the leader value the thoughts and notions of his employees then they work with more interest in an organization that leads to the project success.

Chapter 2

Literature Review

2.1 Entrepreneurial Leadership

Cunningham and Lischeron (1991) started the investigation on Entrepreneurial Leadership and referred this one to as mounting unblemished objectives, producing probabilities, consenting individuals, preserving administrative understanding, and constructing a human resource frame. Entrepreneurial leadership is an innovative and up-to-date type of leadership that involves the qualities of headship and the essence of entrepreneurship. Furthermore, entrepreneurial leadership is generating fresh products, novel observes, and increasing chances in companies. EL could be used for a frontrunner who has the individualities such as risk-taking, assessing prospects, being inventive, creative, exchanging, and tactical. It is an amalgamation of both leadership and entrepreneurship.

Moreover, entrepreneurial leadership may include qualities of a leader such as taking risks, estimating prospects, being innovative, creative, exchanging, and tactical. Lately, Renko et al. (2015) posited that EL includes encouraging and guiding the conduction of group members regarding the accomplishment of administrative objectives through appreciation and manipulation of innovative prospects. Entrepreneurial leadership assembles the capacity to encounter entrepreneurial challenges.

Entrepreneurial leadership indicators include considerable subordinates that they can achieve goals, enunciating an administration's vision delightfully, encouraging

that their exertions will give noteworthy outcomes, and be capable to endure conservational variations which ultimately advance project enactment. Entrepreneurship leadership is appropriate to be realistic to numerous kinds of productions.

Entrepreneurial leadership is a management style that can entrust, form liable conduct of workforces, make and regulate resolutions, and perform spontaneously. Leaders are a particularly important basis of character demonstrating due to their position and their aptitude to exploit administrative recompenses to inaugurate what comportment is anticipated.

More precisely, by performing as entrepreneurial embodiments to their employees by recognizing and developing novel prospects at the workplace, entrepreneurial leaders focus on the significance of appealing in entrepreneurial conducts in the office. Besides role sculpting the conducts anticipated from their cliques, entrepreneurial leaders enthusiastically reassure their supporters to engross in innovative behavior and inspire the admirers to deliberate in more inventive methods.

Entrepreneurial leadership assists employees to welcome the prospect by generating confidence in the organization's vision. Entrepreneurial leadership authorizes various resources, solves encounters, critical thinking, and makes organizations achieve goals. In addition, this technique of leadership empowers leaders to accomplish organizations efficaciously and resolve issues uniquely and vigorously with innovative policies. The leader will choose the best act for the organization. There should be a confident level of aptitude and capability to lead the association to achieve the preferred objectives.

An Entrepreneurial leader can efficiently administer the process of innovation by enabling their followers in producing and comprehending new notions. Virtuous leadership is a basis to stabilize the strategy, visualization, and consequences. Leadership involves accompanying, managing, guiding, directing, navigating, finding and controlling others". The tactical goals of organizations should be identified to the administrators and their assistants. Geoghegan & Dulewicz (2008) declare that managers are the individuals who do the thing accurately but leaders are the individuals who do the accurate thing.

2.2 Entrepreneurial Leadership and Project Success

In project-based administrations, effectual leadership increases the assurance by introducing an optimistic assertiveness and values which support the attainment of project success (Aga et al., 2016). Project leaders are utilized by diverse project-based establishments in competitive compression to respond rapidly to conservational variations and accomplish organizational goals. Present literature on leadership finds different leadership styles and their confidential influence on the success of the project and managing the organization (Aga et al., 2016).

Leadership that affects and articulates the performance of employees in the direction of organizational goals that leads to project success and explores many opportunities for the employees is entitled as Entrepreneurial leadership (Renko et al., 2015). Task the executives; nonetheless, has become pervasive these days in the assistance area, just in regions like limit constructing and community service projects (Diallo and Thuillier, 2005). The board Introduce (PMI) symbolizes venture achievement as amending the competing requirements for project worth, extension, period, and budget, similarly consulting the fluctuating distresses and assumptions for the project companions (PMI, 2008, p. 9).

The leader must emphasize the entrepreneurial opportunities in building the entrepreneurial tactics that occur in a current competitive environment and wants to inspire the team members to carry out added efforts to bring entrepreneurial approaches of the leader (Gupta et al., 2004). Furthermore, Innovative leaders may distress the achievements of their team members through acting as a mentor of entrepreneurial for the members of the group to ensue by engaging in operations of tactical ourselves (Renko et al., 2015).

Entrepreneurial leadership is a fresh and emerging kind of leadership having the qualities of top leaders (Sundararajan, Sundararajan, Henderson, et al., 2012). Many scholars identified entrepreneurial leadership manner which highlight the identification of opportunity reinforce creativity, production of ideas (Surie & Ashley, 2008).

Jagdal and Bhola (2014) examined the impact on pioneering administration and hierarchical execution and limited scope designing ventures working in the Pune area in India. The information was gathered from 144 business visionaries in 13 plants. The outcomes showed the critical connection between enterprising authority and authoritative execution. Regardless, the principle undertaking of the administration framework is to guarantee a functioning effect on the oversight object to work on its presentation. The different properties and boundaries of the subject's and the administration's action frequently disagree with one another, they are in persuasive inconsistency, regarding there is the issue of characterizing a summing up a pointer that would be a proportion of authoritative execution.

Entrepreneurial leadership (EL) permits the followers to comprehend their level of quality in the organization as an indispensable power source of success and development of the organization (Renko et al., 2015). Entrepreneurial leadership reinforces employee's ideas in their entrepreneurial proficiencies and for deviation and creativity enthusiasm (Cardon, Wincent, Singh, & Drnovsek, 2009). The significance of leadership may vary based on organization relevance, the relationship between leadership and success (Anderson & Sun, 2017). The entrepreneurial leaders not only motivate and nurture the spirits of their employees towards involvement, bringing change and development in the place of work but also put themselves as a leader through taking part in innovative movements in entrepreneurship processes, there is a broader awareness of the significance of supervision. Entrepreneurial leadership is considered only of the most efficacious leadership styles. An entrepreneurial leader can anticipate the group associates with a vulnerable atmosphere that reinforce teamwork, information sharing, and one where group fellows can share the resolutions to the difficulties and this can make the project successful.

The Project Management Institute (PMI) defines project prosperity as corresponding the inspiring hassles for project eminence, period, cost, scope, assembling the varying distresses and anticipations of the project investors (PMI, 2008, p. 9). Project success focused on implementation, accomplishment, improvement in productivity, and assessing intervals in the 1970s. According to researchers one should consider the overall intentions of the project, with a noticeable variance between

the product's accomplishment and the project's consequence. "Since the project conclusion will make it probable to take exterior influences into consideration more comprehensively, for example, use of the product, consumer or customer satisfaction and compensations to customers/clients" (Yang et al., 2011). To accomplish this aim, each level of an association needs to continuously grasp new corporate prospects to clasp entrepreneurial approaches and behaviors.

Entrepreneurial leaders their selves involve in opportunity-focused accomplishments, and in doing so, they inspire their supporters, encouraging and promising them to follow entrepreneurial opportunity-focused behaviors. Leaders who are virtuous in organizing things and circumstances provisions the members of the team so that they get motivated and achieve more and more (Saafein & Shaykhian, 2014). Dishonest leadership gives rise to divergences, disorder, and lack of trust which harm the team's achievements (Van Wart, Roman, Wang, & Liu, 2017).

Leadership is an important element that set up the employee's undertakings in better creative means. Leaders build a specific type of organizational perspective that promotes employees to generate and implement creative ideas production and achievement which amends creation in the organization (Kang, Solomon, & Choi, 2015).

Leadership or entrepreneurship characters by supervisors are not adequate for the project's success. The insight of Entrepreneurial leadership (EL) came into view here because to be effective leadership and entrepreneurship both must be present in the leader. Low and MacMillan (1988) proposed that Entrepreneurship is the formation of new business.

The knowledge of project accomplishment is as essential as the concept of EL, and these two concepts are discussed in this part. Project-based organizations have their consequences thoroughly linked to the accomplishment of the projects they develop. In this regard the affirmation from the literature that EL influences different enforcement-linked results, in this case, EL is positively related with the performance of organizational (Abubakar et al., 2018; Al Mamun et al., 2018; Huang et al., 2014; Zainol et al., 2018), the enactment of group members regarding the accomplishing administrative objectives (Renko et al., 2015). Moreover,

the leadership styles like (transactional and transformational leadership) have presented their influence on project success (Aga, 2016), it can be anticipated that EL will have a substantial influence on project success. The success of any organization is arbitrated by the innovative and effective leadership technique. In the study involving frontrunners and workforces, Ahmed et al. (2014) showed that entrepreneurial personalities in project groups increase project accomplishment. An entrepreneurial leader can furnish the colleagues with an open climate that upholds cooperation, information sharing, and one where team followers can concoct answers to the issues (Renko et al., 2015). This can help in making the venture more fruitful. Therefore, the qualities of entrepreneurial leaders are valued for improving the creativity of the employees in economic conditions. The relationship between Project success and Entrepreneurial leadership is noteworthy (Esmer & Faruk, 2017). Entrepreneurial leadership (EL) plays the role of mentor to their employees by determining, employing, and developing the new potential, chances, possibilities, and different prospects of creativity in the group of worksites and also draws attention towards the value of leaders in the place of work Renko et al. (2015).

Such behavior of the leader increases the creativity and thinking of employees which influences project success. Present studies suggest that the leadership behavior of entrepreneurs is a key element in the victory, or non-fulfillment, of entrepreneurial ventures (Leitch et al., 2013), and that organizations gradually enclasp entrepreneurial behaviors which nurture invention and transformation (Renko et al., 2015). Project success is determined by genuine objective, struggle, execution, productivity, and definite goal line. Therefore, entrepreneurial leadership qualities are valued for increasing the creativity of the employees. Both Project success and Entrepreneurial leadership have a significant bond (Esmer & Faruk, 2017).

Project success is determined by struggle, honest objective, implementation, user fulfillment, efficiency, and certain goal lines Morris and Hugh (1986). Consequently, entrepreneurial leadership abilities are respected for increasing the creativity of the employees in economic conditions. Project success and Entrepreneurial leadership both have a striking connection (Esmer & Faruk, 2017). Entrepreneurial

leadership is the key component influencing the exhibition of any association. Subsequently, in the current thoughtful and vibrant cutthroat corporate climate, heads of administrations and mainly heads of limited scope personal establishments must have and utilize the individualities of innovative authority to continue with their survival, challenge their opponents, and foster themselves (Karcioglu and Yucel, 2004: 417).

Entrepreneurial leadership is reflected being stating to entrepreneurship. It is either one of the two novels and contemporary leadership styles. Entrepreneurship is around beginning an innovative corporate. On the contrary, entrepreneurial leadership is generating new merchandises, progressions, and extension prospects in the organizations, communal and political movements, working in societal establishments and moving towards subsidizing to neglected social problems, donating to the alteration of current amenities, and strategies of both governments and non-government establishments. Consequently; nowadays the necessity for entrepreneurial leaders in corporations is increasing gradually. Thus, everyday training, symposiums, sessions, meetings can be structured and ventures can be instigated in corporations to upsurge the figure of entrepreneurial leaders. Assumed the vital role played by the entrepreneur in novel occupational speculations, his involvements, opinions, sentiments, needs, and principles are likely to have a substantial effect on the way he or she guides and impacts group fellows. Entrepreneurs are frequently reliable frontrunners as apart from being only factual to themselves they also work in such a manner that admirers are also competent to achieve enlightenment and mental hardiness. The need for entrepreneurial leaders in today's establishments as well as study aspects of this phenomenon is increasing enormously. The approach to entrepreneurial leadership will be accomplished by the improvement of deliberate reserve supervision. Entrepreneurial intellectual and the capability to accomplish deliberate possessions will be competent to upsurge originality and invention which successively will have a progressive impression on the project enactment.

Entrepreneurial leaders have been found to coordinate the achievement, effectiveness, and development of enterprising endeavors through encouraging and directing advancement (Renko et al., 2015), assisting workers to control the difficulties and

dangers of taking part in inventive actions, and merchandising with the complexities and vulnerabilities of the business climate (Freeman & Siegfried, 2015; Karol, 2015). Entrepreneurial leadership has matchless and varied facets such as deliberate management, ability to resolve complications, in-time actions, risk-takers, and exchanging power (Fernald et al., 2005). Previous scholars Swiercz and Lydon (2002) recommended that leaders who apply entrepreneurial leadership and focus on individual expertise and practical expertise meet further high development in the organization.

Leader exchange member theory also gives the clue that entrepreneurial leadership characteristics can lead to project success. If a leader will give his employees power and enhance their skills then the employees in return will show creative behavior which plays a part in the progress of any organization. When a leader can motivate and influence employees then it spontaneously leads to the project's success.

Predicted from the above discussion subsequent hypothesis is being suggested;

H1: Entrepreneurial leadership has a positive effect on project success.

2.3 Entrepreneurial Leadership and Innovative Work Behavior

Innovative work behavior is interpreted by researchers as the struggles of different workers to create novel concepts and instrument these concepts in the place of work (T. Chen et al., 2016; De Jong & Den Hartog, 2010; Radaelli et al., 2014). Innovative work behavior (IWB) is a developing concept, originally defined by Janssen (2000) as individual performance that leads to the origination, presentation, and understanding of new notions, merchandises, or processes in the workplace, team, or organization. The study on EL has accredited that entrepreneurial leaders besides creating novel thoughts themselves also enable and inspire their workers to illustrate their capabilities in resolving the problem and completing difficult tasks

through inventive ways. Literature showed that in a competitive business environment EL is a contributing leading factor to encourage and advance innovative work behavior of the workers. In an inspiring corporate atmosphere, an entrepreneurial leader can efficiently manage the invention practice by assisting their associates in recognizing and generating novel concepts.

Entrepreneurial leaders also produce an encouraging climate and promising culture in which all the team fellows cogitate invention as one of their primary errands and display their determination in the face of challenges inherited in the innovation process. However, leaders must overawe numerous encounters to motivate innovative work behaviors among workers of the organization. In addition to directing and motivating employees to share creative ideas, leaders also should produce an atmosphere that reinforces the execution of such concepts in the office (De Jong & Den Hartog, 2010; Radaelli et al., 2014). IWB is emphasized “as a strong motivating force for the existence, competitiveness and constant growth of high-tech businesses” and the expansion of precisely changing economies (Bagheri, 2017, p. 160). Moreover the explanation of IWB is progressing, and researchers suggested several demarcations for the paradigm. Conferring to, IWB is about worker compartment intended at the creation, performance, or consumption of concepts, processes, products, or practices, novel to the associated division of acceptance, which gets noteworthy assistances for the applicable division of acceptance. De Spiegelaere et al. (2014) and Akram et al. (2017) have encouraged the delineation anticipated by other researchers. Scott and Bruce (1994) demarcated IWB as workers’ capability to generate and implement new and valued concepts at the workplace.

Scholars state IWB as “initiation and intentional overview (within a work role, group or organization) of innovative and useful ideas regarding products, services, and work methods, as well as set of behaviors needed to advance, launch and implement these ideas” (p. 107), that is essential for administrative invention and is deliberated as a sustained viable benefit for diverse administrations (Nagarajan et al., 2005; Montani et al., 2017; Newman et al., 2018). Janssen (2000) demarcated IWB as “the purposeful creation, introduction, and presentation of new ideas within a work role, group or organization, to value role performance, the group, or

the organization” (p. 288). Aiming at persons’ capability for invention, Newman et al. (2018) demarcated the perception as workers’ “ability to generate and implement novel and valuable ideas at work, which is critical to organizational innovation and a persistent competitive advantage” (p. 1).

Zhou and Hoever (2014) emphasized IWB be critical for the regeneration, evolution, and feasibility of a corporate. Prior literature establishes that frontrunners enact in inspiring and endowing novelty by persons and groups of workers and instituting a stimulating and compassionate atmosphere that progresses the invention procedure in the corporate (Kang et al., 2015; Weng et al., 2015). The entrepreneurial leaders restructure their followers’ observations of their proficiencies by concerning them in emerging novel and advanced concepts and structuring their assurance to apply these concepts. The efficient proficiencies of entrepreneurial leaders also enable them to deliberately instigate and standardize their associates toward modernization.

Entrepreneurial leadership has been demarcated as the competencies of a leader to create a striking revelation for the corporate and motivating and leading workers to make exertions and comprehend the revelation (Bagheri et al., 2013). Entrepreneurial leadership is a distinctive way of leadership need to survive with encounters and complications in diverse phases of administrative enlargement (Gupta et al., 2004). Entrepreneurial leadership allows leaders to efficiently synchronize their association and solve disputes by several perplexing phases of the growth and enhancement of organizations (Chen, 2007). Additionally, it has a significant impact on frontrunners’ skills to observe novel prospects for improving the performance of the association (Okudan and Rzasa, 2006; Pihie et al., 2014).

Though, there is still intense discussion on the demarcation and features of entrepreneurial leadership (Bagheri, 2017; Leitch and Volery, 2017). Numerous researches have recommended entrepreneurial leadership as constructive leadership ethics and exercises that aggravate and promote invention in the extremely stimulating, tempestuous, and ambiguous corporate atmosphere that SMEs are presently facing (Freeman and L.Siegfried, 2015; Karol, 2015).

The four proportions of innovative work behavior are idea exploration, idea generation, idea championing, and idea implementation. There is a component of chance at the start of the innovation process, finding a prospect or certain problematic ascending. The start may be a probability to expand circumstances or intimidation demanding an instant reaction. Other scholars recognized seven causes of prospects, comprising failures or events, unpredicted victories, breaches amongst ‘what is and what should be’; progression essentials in response to recognized complications or disappointment; varies in the market or industrial erections; statistics change such as labor dynamism conformation; variations in discernment; and ultimately, new information. Idea exploration is thinking of methods to advance current produces, amenities, or developments or vexing to contemplate them in substitute methods (e.g., Kanter, 1988; Basadur, 2004). Idea generation is the next anticipated component of IWB. The generation of notions may narrate to new-fangled produce, facilities, or progressions, the access into fresh marketplaces, developments in present work progressions, or a broader term, clarifications to recognized difficulties. The strategy to idea generation seems to be the amalgamation and restructuring of evidence and present notions to resolve issues or to advance enactment. Good idea originators prospective difficulties or enactment breaks from an altered approach. Kanter (1988) tells about ‘phantasmagoric thinking’ as idea generation often comprises of reorganizing previously prevailing fragments into a new entire. Idea championing turn out to be applicable once an impression has been produced. Most notions need to be encouraged as they frequently do not meet with what is previously utilized in their workgroup or association. Even if notions have acceptability or seem to infuse a performance difference, for maximum notions it is ambiguous whether their interests will surpass the charge of emerging and executing them, and conflict to modification frequently happens (Kanter, 1988). In this regard the campaigners of invention fiction emphasizes on individuals in unceremonious parts that drive imaginative thoughts further than blockades in their administrations and aids to recognize advanced notions (e.g. Shane, 1994).

Championing contains to find sustenance and structuring combinations by articulating confidence and eagerness about the accomplishment of the invention, being

insistent, and attaining the right individuals intricate. Lastly, notions need to be executed. Substantial determination and a concrete achievement approach are required to mark notions occur. Idea implementation comprises of making inventions fragment of consistent work procedures and behaviors like the development of new merchandises or task progressions, and challenging and transforming them (e.g., Kanter, 1988).

It has been debated by scholars that innovative behaviors are the source of administrative modification and crucial to administrative modernization. In the view of discoveries of preceding findings, organizations that are mutable, sympathetic to concept generation, and permit the person to contemplate issues unexpectedly, are illuminating conducts that empower invention (Jung, Chow, & Wu, 2003; Gumusluoglu & Ilsev, 2009a; Poppendick, 2009). Consequently, an additional enlargement concluded in earlier findings is that this research leads association provision for inventive conducts, which might interrelate with entrepreneurial leadership behaviors in the distressing administrative invention. The study on EL has accepted that the entrepreneurial leaders besides creating novel thoughts themselves also expedite and inspire their personnel to express their capabilities in disentangling multifarious matters and executing perplexing tasks through advanced ways (Cai, Lysova, Khapova, & Bossink, 2019). The frontrunners also advance workers' assurance and determination to influence their colleagues to produce new notions and achieve their sustenance to comprehend them (De Jong, & Den Hartog, 2010). At an administrative level, managing the invention progression is a stimulating chore for corporate frontrunners as they have to enable continuous novel idea generation and manipulation. For the conduction of the reorganization procedure, a groundbreaker has to generate an encouraging atmosphere in which all the workers can be stimulated to contribute in inventive exercises and to involve in the production and utilization of novel thoughts (Jaiswal, & Dhar, 2015).

Employees' innovative work behavior is fundamentally reliant on the manner they interrelate with others in the job atmosphere (Anderson et al., 2004). In this respect, leaders perform as an authoritative basis and a strategic element that affects IWB (Yukl, 2013). Consequently, the identity of the relations and interfaces amongst the frontrunners and the workers is associated with the initiation and

execution of new ideas. Furthermore, scholars (Hammond et al., 2011; Chen et al., 2016) established that the association among leaders and workers' innovative work behavior is not decisive.

Despite growing concern in entrepreneurial leadership as a headship way that promotes inventiveness and modernization consequences (e.g., M. H. Chen, 2007; Leitch & Volery, 2017; Renko et al., 2015), limited work has been observed on the correlation among entrepreneurial leadership and employees' innovative behaviors in organizations (Leitch et al., 2013; Newman et al., 2018a; Renko et al., 2015). Researchers have acknowledged that entrepreneurial leaders should be deliberated as performing a significant part in making their workers' credence in their entrepreneurial abilities and capabilities concerning modernism and inventiveness (Bandura 1986; Cardon et al. 2009; Zhao et al. 2005). Based on leader-member exchange theory EL creates an encouraging environment for employees and as a result, employees show innovative work behavior. Innovation work behavior is creating and implementing new ideas and can overcome challenges by presenting their thoughts and creativity and if a leader will motivate and encourage employees then they will feel free to share innovative ideas and will not hesitate to share their recommendations.

H2: Entrepreneurial leadership has a positive effect on employees' innovative work behavior.

2.4 Innovative Work Behavior and Project Success

Innovative behavior attains enactment objectives in the place of work (Yuan, 2010). Employees having innovative behaviors are persuaded to increase the consequence of exertion and develop the intellect that such performance has a constructive influence on their performance and accomplish goals (Yuan, 2010). The organization should ensure that the environment in the place of work increases the creativity of employees. Furthermore, when workers discern a smooth office

environment, the workers will be more dedicated, ensuing in project success. Additionally, Martens, Machado, Martens, and Freitas (2018) claimed that novelty supports businesspersons to attain victory in ventures.

However, there is nonconformity on project accomplishment rules of the project the administrator's inscription, the workings by Ika et al. (2012) and Khang and Moe (2008) are exhaustive as well as applicable for upgrading ventures. The rules established out by these creators incorporate pertinence, productivity, viability, effect, and supportability. Pertinence alludes to the degree to which the undertaking suits the needs of the objective gathering, the beneficiary, and the benefactor.

Nonetheless, as stated by Morales et al. (2008), the invention is important for better performance of an organization and illustrates that establishments that emphasize productive workers' novelty are more fruitful at obtaining a greater marketplace stake which can induce high revenue and effectiveness. The concept of properties and competencies also privileges that administrations need proficiencies, possessions, and equipment to contrivance a modernization policy that will be an encounter for participants to mimic, and that permits establishments to have sustainable modest benefits and for the success of the project. Novel concepts summons estimation by other administrative followers and may induce a dispute or, equal, to encounter. Therefore where catastrophe is endured and fear of acquiescing an illogical idea does not exist, innovation is stimulated.

Recently, Leone and Schiavone (2019) explored the undeviating link between innovation and the success of the project. The basis of innovation responses on the improvement and execution of original ideas increases workforces' inventiveness (VandeVen, 1986). Innovative work behavior (IWB) comprises three correlated accomplishments of idea instigation, advancement, and recognition (Janssen, 2000). Because of the accession marks associated with workers' IWB, researchers including Janssen (2000); Kang, Matusik, Kim, and Phillips (2016); and Ren and Zhang (2015) have validated growing devotion to individualities that have the competency to boost IWB. Furthermore, if employees have innovative work behavior, they will be become more dedicated, resulting in better performance that leads to project success.

Some findings have exposed that the workforces' commitment to innovation results in the success of the project (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008). The leaders and managers need to make sure that the behavior of employees within the workplace stimulates, nurtures, and boosts employee's creativity. Administrations require to upsurge their tractability, receptiveness, and effectiveness due to the unpredictable essence of the worldwide corporate atmosphere and the durable prerequisite to responding to encounters confronted by native and worldwide struggle. An organization's interest in development is the initial step to produce or embrace advancement by association. This set down an added encumbrance on administrative frontrunners to continuously be attentive for, investigate, and intend the use of new merchandise and progressions in their association.

Innovation par superiority would be accomplished through a persistently undeniable degree of business awareness of chances yet, in addition, an ability to accumulate and foster the information and data required taking advantage of those prospects. Association's interest in development is the initial step to produce or embrace advancement by association. This places extra weight on authoritative pioneers to continually be ready for, investigate, and recommend the utilization of new items and cycles in their association. Advancement second to none would be accomplished using a persistently undeniable degree of business awareness of chances yet, in addition, an ability to accumulate and foster the information and data required taking advantage of those chances.

Innovation is a multiphase process that includes acknowledgment of difficulties contributing to the formation of innovative notions. Formerly the personnel encourage and broadcast these concepts for generating provision for these ideas and a practical strategy is created to exploit the ideas to make the mission efficacious and surge the worth of the association (Howell, Shea, & Higgins, 2005).

Victory is complex and hard to evaluate. It might be restrained concerning a particular development or the complete goal or objective of the association. Scholars have stressed that novelty apart from being limited to the conception of new thoughts, also includes the institution and execution of innovative notions, and

these all are intended at improving the enactment of the association (Janssen, 2000; Moss Kanter, 1988).

Many scholars have accepted a requirement for supplementary findings concerning how specific endeavors may be orchestrated, for inducing inventiveness and enactment at administrative stages (Bilton & Cummings, 2010; Edwards, Delbridge, & Munday, 2005; Isaksen & Tidd, 2007).

Innovation is a multi-component process that comprises of acknowledgment of problems contributing to the formation of innovative concepts. Then the workforces endorse and advertise these thoughts for creating support for these ideas and an applied strategy is created to exploit the concepts to create the venture prosperous and increase the value of the association. Furthermore, if the workplace behavior is detected to be facilitative by employees, it is more possible that this will lead to better interest, employee engagement, and commitment resulting in better organizational performance. Innovation signifies overall organizational learning coordination, in which success is demarcated less by exact innovation projects and more by a general objective to produce innovative capabilities. Managerial innovativeness then is crucial to competitive advantages and strategic regeneration. Generally, it seems fundamental for organizations to inspire and encourage innovation among their employees, by generating a climate that nurtures and develops such innovation. Success is complex and hard to evaluate. It may be computed regarding a particular development or the inclusive platform or objective of the business. Davila, Epstein, and Sheldon (2006) disparate that distinguishing differences in concerning invention can help in enhanced enactment of an organization, while Rubera and Kirca, (2012) showed that workers' novelty ultimately influences administrative value through its impact on the marketplace and financial positions. Innovation is a multiphase process that involves acknowledgment of problems which leads to the establishment of innovative concepts. Then the employees endorse and expose these ideas for creating support for these ideas and a practical design is created to apply these ideas to ensure the success of the project and leads to the growth of the association. Added contemporary research by De Silva, Howells, and Meyer, (2018) validated that by understanding and persuading the evidence substructure of the invention environment, invention intercessors

create interior worth extending from monetary to non-monetary consequences, by participating in the combined novelty progression.

García-Morales, Lloréns-Montes, and Verdú- Jover, (2008) also proposed that invention is essential for improved organizational enactment. Regardless of whether an innovative recommendation or indication turns out to be an accomplishment or not based on workforces who turn up and convincingly publicize and endorse the impression and own the fortitude and willingness to emplace their status and locus at menace for confirming the accomplishment of novelty. Such concept is likewise reinforced by the model of possessions and proficiencies that proclaims that organizations need abilities, possessions, and equipment to pertain to a method of origination that would be tough for challengers to replicate and that certifies the corporations to have a defensible modest advantage along with improved administrative consequences (Bommer & Jalajas, 2004; Calantone, Cavusgil, & Zhao, 2002; Kim, Song, & Triche, 2015; Lengnick-Hall, 1992).

An interactive succession that permits personnel to deliberate in an inventive manner for the development of exertion enactment and its processes and practices is known as innovative work behavior. These interactive expressions generally encompass the recognition of job-related complications, the institution of advanced and improved ideas, and the execution of those notions, etc. Nonetheless, inventive exertion behavior is slightly divergent from worker's inventiveness engrossed in discerning and producing ideas, and inventiveness emphasizes on progressions to recruit the comparatively newest and enhanced ideas. Innovative work behavior (IWB) embraces the recognition, examination, strategy, employment, and estimation of new concepts and connection it with development in the work progression and project performance. Motivated people generally provide energy, inspiring activities, and direct conduct towards achieving needs. Some previous study has confirmed that motivated employee had a noteworthy effect on innovative work behavior. Motivation in workers makes stronger encouragement to work harder at the workplace, and motivation is very applicable to the execution of innovation because an employee's motivation displays the primacies that he is pursuing in the workplace.

Some researchers have claimed that IWB can accelerate the progression of attainment of modest improvement and can increase Project success (Hogan & Coote, 2014; Runco, 2004; Scott & Bruce, 1994). Nevertheless, their methods were insufficient concerning the ultimate theoretical frame (Shanker et al., 2017); and focus principally on investigating the association between innovative work behavior and Project success. In current studies, the association among innovation and PS is studied in good amount (Olaisen & Revang, 2017; Ommen, Blut, Backhaus, & Woisetschläger, 2016). Moreover, Martens, Machado, Martens, and de Freitas (2018) claimed that invention aids entrepreneurs to attain project accomplishment. Project success depends on innovation however at the administrative stage creativity at the discrete level leads to innovation. Therefore organization having a productive impact on novelty at discrete and administrative levels (Kang et al., 2016; Nybakk, Crespell, & Hansen, 2011; Ren & Zhang, 2015; Shanker et al., 2017). Besides, if workforces show innovative work behavior, they will be become more devoted, resulting in project success. Numerous investigation have examined that personnel's commitment to innovation results in better organizational performance that induce the success of the project (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008).

In existing studies, significant inquiry premeditated the association between innovation and Project Success (Olaisen & Revang, 2017; Ommen, Blut, Backhaus, & Woisetschläger, 2016). Additionally, Martens, Machado, Martens, and de Freitas (2018) claimed that innovation supports businesspersons to complete achievement in projects. Moreover, innovative work behavior raises the probability of success in innovation projects (Olaisen & Revang, 2017). Recently, Leone and Schiavone (2019) explored the direct relationship between innovation and PS. Though, very insignificant exploration is accessible in the present works that investigated the direct correlation between innovative work behavior and PS.

Leader-member exchange theory also supports that innovative work behavior of employees in an organization leads to project success as when the leader will motivate employees then the employees in return will show innovation in their ideas instead of only following their leader they will come up with many new and beneficial ideas which ultimately leads to the project success.

H3: Innovative work behavior has a positive effect on project success.

2.5 Mediating Role of Innovative Work Behavior between Entrepreneurial Leadership and Project Success

Entrepreneurial leadership brings confidence to employees as they are allowed to propose new and inventive corporate concepts without any hesitancy or fear. Kang et al articulated that there exists a great link between EL and an organization's innovative work behavior that has an appropriate impression on workers' conduct in offices, ropes the inventive scuffles of workers, and halts them from being responsive. Therefore, entrepreneurial leaders make such an encouraging atmosphere, which not only empowers but also motivates their supporters to be inventive, and find novel and inventive solutions to the complications faced in the place of work that leads to project success. It is contended that supporting a strategic advantage may just be acknowledged by firms who perceive that development limit is firmly identified with the way their chiefs, people, environment, culture, and designs empower advancement and imagination (France et al., 2007).

Entrepreneurial leaders play the role of advisor for their supporters and motivate them so that they can innovatively accomplish their job-related actions. They also motivate their employees/followers to imitate innovative behavior (Meijer 2014, Mughal, Ahmed, Gondal, Awan & Chaudhry 2010). Administrations require more valuable evidence and imaginative notions in their place of work to achieve success. Administrative achievement is determined by the creative and inventive assistance of its employees. Innovation is essential for an organization to achieve its goals (Yuan & Woodman,2010). The leaders' entrepreneurial-based administrations apprehend their idea through recognizing and motivating the prospective proficiencies of their team members, empowering them to generate new ideas, and restructuring their behavior, opinions, and approaches to implement new ideas. Entrepreneurial leaders also create an auspicious atmosphere and encouraging a

culture in which all of the team members consider innovation as one of their priority tasks and show their determination in the face of challenges inherited in the innovation process.

Wang and Rode (2010) showed that the intelligent impacts among groundbreaking initiatives, worker distinguishing proof with pioneer, and inventive environment were related with representative innovativeness. Notwithstanding this, Baer (2010) showed that people were most imaginative when they kept up with thought organizations of ideal size and frail strength of entertainers' thought organizations, what's more, high organization variety. Individual innovative work behavior is additionally an element of discrete individualities, ability, and the climate (Choi, 2004; Angle, 2000).

Entrepreneurial leadership will be more strongly connected to innovative behavior, as it focuses on supporting followers to recognize and exploit entrepreneurial opportunities. Innovative behavior is regularly connected with innovativeness. Nevertheless, as we have demarcated in our research, the innovation process comprises both the formation of novel thoughts and the execution of them (West, 2002).

Entrepreneurial competencies can also stimulate previous information that managers possess and thus direct the generation of ideas, entrepreneurial abilities can direct the firm to efficiently change its concepts and information into uniqueness and invention, saving themselves from the budget, period, and inapt reserve hoards, and emphasis only on the concepts and prospects that can produce value through suitable merchandise contributions.

The fruitful accomplishment and finishing of activities are some of the crucial variables that decide an association's viability. The idea of venture groups has become extremely famous in the new occasions mostly because of globalization, decrease in costs, headways in innovation, novel strategies of meeting the destinations of business, and fanning out of a portion of the overall industry. Ordinarily, a task is viewed as fruitful when the exhibition's purposes, resources, and time are effectively met (Shenhar, Dvir, Levy, and Maltz, 2001).

The association between entrepreneurial leadership and innovative behavior is more powerful than that between other leadership styles and innovative behavior. We claim that this consequences from the detail that the counsel, sustenance, and role demonstrating imparted by entrepreneurial leaders motivates more precisely on entrepreneurial behaviors than the more broad support delivered by other leaders.

Employee's innovative behaviors depend not just on the knowledgeable style, personality stimulation, and investment but also are influenced by the thrust from the exterior perspective, predominantly the management and atmosphere (Mumford, Scott, Gaddis & Strange, 2002). It is contended that innovation in an association is all together influenced by the collaboration of employees at different levels in the association and it raises the invention process (Kabasheva, Rudaleva, Bulnina & Askhatova, 2015). Both worker and group inventiveness ominously enable establishments in the direction of novelty and accomplishment; thus, administrations strive for techniques to enhance work inventiveness.

Entrepreneurial leaders institute an authorizing and compassionate climate in which all workers are stimulated to contemplate invention as one of their foremost errands and precede it in the defiance of difficulties that are essential in innovation accomplishments (Karol, 2015). In research on 34 advanced technology SMEs in Iran, Bagheri (2017) discovered that entrepreneurial leadership has an important constructive impact on motivating the Innovative work behavior of employees. Bagheri and Akbari (2018) study on another association also inveterates the noteworthy influence of entrepreneurial leadership on nurturing the IWB of employees.

Newman et al. (2018) revealed that leaders who exercise entrepreneurial leadership values in their mission enactments considerably embolden IWB amongst their workforces. A few investigations have shown that staff's commitment to development, environment for advancement, incorporation, and inspiration inside the association, brings about better hierarchical execution and business achievement. Furthermore, if employees detect a productive workplace environment, they will

become more dedicated, resulting in project success. Numerous studies have discovered that innovative work behavior results in the success of the project (Brown and Leigh, 1996; Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008).

Scholars stated that employees should be encouraged by managers so they will advance their skills and try to be more inventive and show more innovative work behavior. Regardless if an inventive recommendation or indication becomes an achievement or not depends on workforces who emerge and influentially promote and stimulate the indication and retain the fortitude and enthusiasm to put their reputation and situation at threat for confirming the attainment of novelty. Such a concept is also reinforced by the model of possessions and competencies that emphasizes that organizations require possessions, capacities, and expertise to relate a method of the invention that will be difficult for challengers to reproduce, and which enables the companies to have sustainable modest control accompanying improved administrative consequences.

IWB involves employees having a great necessity for attainment and a small prerequisite for conformity which is expedited by entrepreneurial frontrunners. Entrepreneurial leaders take possibilities to strain fresh techniques of employing, modification of present progressions and structures for long-lasting assistances, and aid supporters to meditate about manipulating prospects efficiently (Pearce and Ensley, 2004).

Entrepreneurial leaders stimulate workforces to present inventive accomplishments and upsurge their problem resolving and systematic capabilities. Entrepreneurial leaders aid supporters to endeavor for further demanding and perplexing objectives by altering supporter's predisposition for ingenious perceptions. They offer particular and also a combined assessment structure, admittance to possessions and evidence, constructive announcement, self-possession, and internal regulation. When admirers' specific necessities and opportunities are deliberated, they incline to interchange by discovering novel prospects with an improved emphasis on imperative administrative disputes and progressions. Entrepreneurial leaders aid to steadiness short-range objectives with the chance of manipulation and persuade personnel to take daring actions accompanying with exploring new procedures.

They nurture innovative work behavior by encouraging workforces to struggle for combined objectives and reassure entities' erudition and support them to meet people more to discover sustenance for the execution of their ideas.

Appropriately, innovative work exercises are dependent upon to improve working environment execution since employees with imaginative capacities better foresee and distinguish openings for advancement and make a creative answer for difficulties experienced in their positions (De Jong and Hartog, 2010; Scott and Bruce, 1994), consequently empowering the association to prevail in a unique business climate.

Sohmen (2013) Suggested that development inside gatherings ought to be empowered as it is a valuable instrument for critical thinking, particularly in a serious climate. A wide scope of workers' imaginative practices can offer more inventive arrangements and utilize innovative mastery to change over these advantages into group execution (Hughes et al., 2018).

Additionally, Martens, Machado, Martens, and de Freitas (2018) contended that innovation supports businesspersons to accomplish attainment in ventures. EL influences the workers to contribute fully in their certain responsibilities and consecrate themselves spiritually, expressively, and their corporeal possessions to the association. Leaders also boost their employees to devote themselves and donate to their administrations at an advanced level. Employees with innovative behaviors are influenced to increase the importance of work and develop the sense that such behavior has a positive impact on their performance and accomplish goals (Yuan, 2010). Therefore we can hypothesize:

H4: Innovative work behavior mediates the relationship between entrepreneurial leadership and project success.

2.6 Openness to Experience Moderates the Relationship between Entrepreneurial Leadership and Innovative Work Behavior

Openness to experience states as the extent to which an individual devotedly seeks and escalates different experiences and endures and explores novel situations. It contains a congregation of linked concepts, such as artistic experience, intellectual curiosity, and an inclination for non-traditional or original things (Costa and McCrae, 1992; Ingram et al., 2013).

Openness refers to perceptual and aesthetic engagement, which is defined by adjectives such as inventive, perceptive, poetic, and fantasy-prone. Individuals with a high level of openness to experience are involved in new things, especially new information and art and alternative ideas. They are usually considered exploratory, well-informed, imaginative, and creative. In contrast, people with a low level of openness to experience are characterized as self-constrained and adherent to developed daily routines and processes, and they have an absence of creativity. Openness to experience may not create creativity directly, but it acts as a “catalyst” for the expression and exploration of creative ideas. Several updated researches have also explored the role of openness to experience in creativity. According to Costa & McCrae (1992), individuals who mark modest on openness incline to be conservative in conduct. Creativity is related to openness to experience McCrae (1987). Openness to experience is constantly linked with all procedures of the invention (Kerr and McKay, 2013).

Entrepreneurship research investigating the ramifications of a businessperson’s disposition character goes back quite a few years. Nonetheless, the vast majority of the current writing has zeroed in on which character qualities influence a singular’s aim to dispatch another endeavor or the contrasts among businesses concerning entrepreneurs and administrators. The fewer examination has spoken what character factors add to and what factors prevent an entrepreneur’s triumph (Zhao, et al, 2010). Also, the outcomes encompassing the wide-character characteristics inside the Five-Factor Model have differed in past research. In particular, one

measurement, 'Openness to Experience', has been the focal point of clashing and conflicting outcomes (e.g., Ciaverella, Buchholtz, Riordan, Gatewood, and Stokes, 2004; Wooton and Timmerman, 1999; Zhao, et al, 2010).

The gratitude of innovation may be assisted by the capability to deliberate imaginatively. Creativity and the ability to determine advanced methods of defending the firm from opposition may be imperative aspects in the enactment of the endeavor. Entrepreneur leaders must be ready for fluctuating marketplaces, merchandises, and expertise in today's worldwide corporate climate to endure. To perceive and outfit a thought, business people should not just have an imaginative creative mind yet should likewise have a serious level of constancy. This carries us to the coarseness development, which will be inspected in this exposition as an arbitrator. Coarseness is determination and energy for long-haul objectives (Duckworth, Peterson, Mathews, and Kessler, 2007).

This suggests that a singular proceeds with what he begins. However, with regards to the current study, while business people display a proceeded with an obligation to their firm, they keep up with their level of receptiveness to new wellsprings of data, thoughts, and assets. The entrepreneur's level of coarseness might impact the firm exhibition results.

Openness to new experiences was a noteworthy distinctive of creative people in both scientific and imaginative domains. Batey et al. (2010) debated, based on their study of ideational behavior (an indicator of creativity) and Big Five personality traits that personality traits (especially openness to experience) predict creativity better than measures of cognitive ability. Openness to experience is an extensive disposition aspect that embraces features such as intellectual curiosity, vigorous resourcefulness, and freedom of decision. Moreover, the inquiry rests that rather an openness to experience is a positive or negative inconstant for the accomplishment of magnates. Known the reality that it is indistinct in the study at this time, a more comprehensive expression at openness to experience may assist us to riposte that question. Openness to experience has formerly only been inspected as a broad paradigm. Openness to experience will be the emphasis of this study because the mutual features that course through demarcations of

entrepreneurship are innovation and creativity. Among the Big Five personality aspects, inventiveness is exclusively linked to openness to experience (McCrae, 1987). Furthermore, magnates have to distinguish and feat prospects, they have to make conclusions underneath ambiguity and in atmospheres with infrequent possessions, they have to struggle harder than workforces, and they have to have an inclusive diversity of information, abilities, and capabilities (e.g., management, administration, advertising, inventing) (Sarasvathy, 2001).

The responsibility of the leader is to support and inspire the members and engage them to involve in efforts, tasks and motivate them so that they can open to new and creative ideas that lead to the achievement of the organization's objectives. Every leader does not encourage their employees to think creatively. Leaders must possess many attributes to effectively manage the increasing demands for innovation in many aspects of business organizations, specifically in influencing creativeness and innovation. Open entities are enthusiastic to distract innovative ideas, and are also probable to endure and discover the unaccustomed; consequently, will appear enhanced suitably to complete well in entrepreneurial endeavors. Throughout the entrepreneurial chore of prospect acknowledgment, victory is likely to be associated with inspiration, resourcefulness, and ingenuousness to new concepts (Ciaveralla, et al, 2004; Morrison, 1997). According to Costa & McCrae (1992), the basics of openness to experience embrace vigorous resourcefulness, appealing thoughtfulness, consideration of internal emotional state, and inclination for diversity, intelligent inquisitiveness, and liberation of decision. "Open individuals are inquisitive about both inner and outer worlds, and their lives are experientially richer. They are eager to entertain novel ideas and exceptional values, and they experience both positive and negative emotions more keenly than closed individuals" (Costa & McCrae, 1992). In an organization for the duration of the precarious entrepreneurial chore of prospect acknowledgment, project accomplishment is expected to be interrelated to resourcefulness, inventiveness, and openness to innovative concepts (Ciavarella, et al, 2004; Morrison, 2007). Entrepreneur leaders tend to depend on their inventiveness to resolve uncertain situations (Baron, 2007; Zhao & Seibert, 2006). Someone great on openness can be designated as ingenious, advanced, unconventional, insightful, and resourceful. Somebody low

on openness can be categorized as conservative, analytical, and contracted in benefits. Openness is certainly associated with intellect, particularly those facets of intellect that are linked to inventiveness (such as contradictory intellectual) (McCrae, 1987). There is also an inspirational characteristic to openness to experience. Open people are categorized by an energetic quest for innovation, and a pursuit to “clarify, strengthen, or otherwise broaden their experience” (Canaday, 1980, p. 5) (McCrae, 1994; McCrae & Costa, 1987; Costa & McCrae, 1980). It seems that any convenient and imperative method to illustrate openness is in terms of the erection of mindfulness. The open individual has access to more considerations, feelings, and instincts in awareness, and can conserve many of these concurrently.

Open-mindedness of indistinctness, demonstrative inconsistency, and sense experience all are symbols of an open person. The ability of captivation for intensely engrossed thoughtfulness may be the upshot of this configuration. For the closed distinct thoughts, approaches and observations are comparatively inaccessible and must participate for full attention.

The outcomes from Zhao and contemporaries (2010) designate that meticulousness, openness to involvement, emotive steadiness (neuroticism), extraversion, and threat inclination are each confidently linked to objectives to become an entrepreneur. The leading influence extent was found for openness. As of their conclusions, openness to experience and scrupulousness seems to be the disposition paradigms utmost powerfully and steadily connected with tactical objectives and entrepreneurial enactment. Openness to experience is the disposition element most diligently related to inventiveness and innovative work behavior.

As Openness to experience is a personality trait, it is better seen as a moderator that regulates the occurrence and degree of the relationship between Entrepreneurial leadership and Project success depending on the presence and degree of this trait. Zhao and contemporaries (2010) attentiveness, openness to experience, responsive constancy, gregariousness, and risk predisposition are each positively associated with becoming an entrepreneurial leader. They also discovered that meticulousness, openness to experience, expressive strength, and extroversion

are each confidently associated to entrepreneurial leadership. Through their conclusions, openness to experience and scrupulousness seems to be the disposition concepts most powerfully linked to the entrepreneurial behavior of leaders. If openness to experience increases it strengthens the correlation between entrepreneurial leadership and innovative work behavior vice versa.

Centered on the above discussion it is hypothesized that:

H5: Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior in such a way that it strengthens the relationship when openness to experience is high and vice versa.

2.7 Research Model

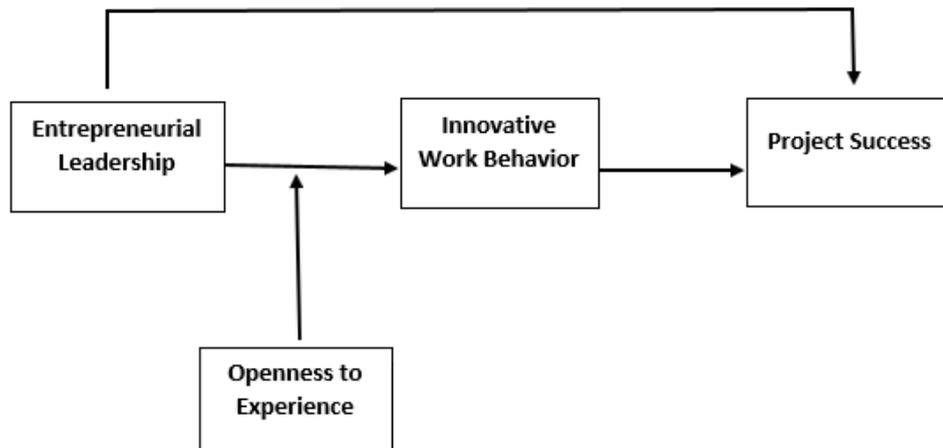


FIGURE 2.1: The impact of Entrepreneurial Leadership on Project Success: Mediating Role of Innovative Work Behavior and Moderating Role of Openness to Experience

2.8 Summary of Research Hypotheses

H₁: Entrepreneurial leadership has a positive effect on the project success.

H₂: Entrepreneurial leadership has a positive effect on the employees' innovative work behavior.

H₃: Innovative work behavior has a positive effect on the project success.

H₄: Innovative work behavior mediates the relationship between entrepreneurial leadership and project success.

H₅: Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior in such a way that it strengthens the relation when openness to experience is high and vice versa.

Chapter 3

Research Methodology

3.1 Research Design

3.1.1 Type of Study

The present research study is causal and focused to explore the influence of entrepreneurial leadership on project success through the mediating role of innovative work behavior and moderating role of openness to experience. For this purpose, the NGO's, construction, and IT sectors of Pakistan have been focused to acquire the required data significantly to get accurate results. The data were collected at one time only; hence, the study is cross-sectional. At first, 384 questionnaires were set as a target but 284 genuine responses were collected with a 73% response rate.

3.1.2 Research Philosophy and Quantitative Research

This research follows the deductive examination technique that depends on the hypothesis of determinism. Previous research and present speculations has used to show and support our theoretical assumptions which have then been tried observationally for the check of the proposed hypothesis. The quantitative methodology has been utilized and admired to hit an expansive population scale. In this way, the quantitative investigation was utilized on the information.

3.1.3 Research Design

The current research investigates the impact of entrepreneurial leadership on project success in Rawalpindi and Islamabad NGOs, IT, and construction industries. It also studies the mechanisms of innovative work behavior of employees as mediators and openness to experience as a moderator to further deepen the relationship of entrepreneurial leadership and project success.

3.1.4 Quantitative Research

The current study is quantifiable, as the analysis and conclusions are constructed on basis of data obtained by questionnaires from the respondents. Different statistical tools and techniques like SPSS 22 and Amos 22 have been used for evaluating the data.

3.1.5 Cross-Sectional Study

This study is cross-sectional. In cross-sectional research, respondent data is only gained at a single point in time and that is used for further study of the research.

3.1.6 Unit of Analysis

The emphasis of this study is to address the attitudes and behaviors of employees working at the different administrative positions in NGO's, IT, and construction industries, thus, individuals are the unit of analysis for this current research. . As our study advises that these are all people relating factors so the unit of analysis for this study is employees working in the project-based organizations.

3.1.7 Population and Sample

3.1.8 Population

The population includes project administrators and workers functioning under them in different project-based establishments in Pakistan. Data were collected via

survey method from the people who are employed in project-based organizations in Islamabad and Rawalpindi. Almost 384 questionnaires were distributed in the organizations. Respondents were ensured of the confidentiality of the information that they have provided for the research purpose. 284 responses were considered for data analysis, thus constituting a 73% response rate.

Questionnaires were circulated personally and online (both) to get an instant response. According to previous research, online is also the easiest way to collect data. Furthermore, there is not any visible influence on the quality of data irrespective of the technique of data assortment while using any one of the two techniques mentioned above (Church, Elliot, and Gable, 2001). Because of the time and resource constrictions, the aforementioned methods have been very operative for collecting data in the present study.

3.1.9 Sampling

A probability sampling technique (simple random sampling) is being used. Sampling is a common technique for collecting data. Due to time and resources constraints, it is very hard to collect data from the entire population; hence sampling is the broadly used method for data collection. A specific type of working professionals was selected for this reason that is the true depictions of the targeted population.

Thus, for this study, those organizations were approached who seemed to have an extra workload, and because of those supervisors sometimes become more challenging towards their assistants to accommodate them to meet deadlines. Consequently, the sample selected for the study contains all the fundamentals appropriate for obtaining the results needed and is a true illustration of the population needed. Since the current study is going to contribute towards novel aspects of the existence of entrepreneurial leaders in projects and impact over project success.

The sample consists of employees of the different top-ranking NGOs, construction, and IT organizations; henceforward data was collected through self-reported and online questionnaires.

3.2 Sample Characteristics

In the study, the demographics variables were age, gender, qualification, and work experience of the employee. Sample characteristic's details are the following:

3.2.1 Gender

It was attempted in this study to ensure the uprightness of gender equality, but it was still observed that the percentage of male workers is significantly higher than the ratio of female employees. **Table 3.1** represents the ratio of male and female respondents, where we observed that 58.1% of the respondents are male and 41.0% are female.

TABLE 3.1: Frequency by Gender

Gender	Frequency	Percentage
Male	165	58.1
Female	119	41.9
Total	284	100

3.2.2 Age

Age is imitated as one of the demographics, to which respondents sometimes feel excruciating to unveil amenably for the sake of accessibility of respondents, information about age, was collected in ranges. It has been shown in Table no. 2 that the most of the respondent was having ages between 31- 40, that means 79.6% of the majority of the respondents were having age between 31-40, 20.1% of respondents were having age ranging between 21-30, 0.4% respondents were having age ranging between 41-50.

TABLE 3.2: Frequency by Age

Age	Frequency	Percentage
20-30	226	20.1
31-40	57	79.6
41-50	1	0.4
Total	284	100

3.2.3 Qualification

Education is the major factor that leads to the success and growth of the whole nation, also the fundamental need for success worldwide. Qualification is an enthusiastic dimension of the demographics because education opens up several new and special pathways for success. It has been presented in Table no. 3 that most of the respondents were qualifying for MS/M.Phil. comprises 64.4% of the whole respondents designated as the true illustrative sample of the whole population. 33.1% of the respondents were qualifying for Bachelors and 2.5% of the respondents were Ph.D.

TABLE 3.3: Frequency by Qualification

Qualification	Frequency	Percentage
Bachelor	94	33.1
MS/MPhil	183	64.4
PhD	7	2.5
Total	284	100

3.2.4 Experience

To collect information about the experience of the respondents, various varieties of the experience time have been recognized so that each responder can simply find out the specific tenure of their experience in the applicable arena. It can be observed from Table no. 4 that most of the respondents were having an experience fluctuating between 2-5 years, which signifies that 73.2%, 21.5% of respondents were having experience ranging between 0-1 years, 4.9% of respondents were having experience ranging between 5-10 years, 0.4% defendants were having experience of 10 years and above.

TABLE 3.4: Experience

Experience	Frequency	Percentage
0-1	61	21.5
02-05	208	73.2
05-10	14	4.9
10 above	1	0.4
Total	284	100

3.3 Instrumentation

3.3.1 Measures

The instrument used for the current research was a structured questionnaire based on the Likert scale. All these scales were acceptable by passing them through a reliability test. A previously developed questionnaire for each variable was used. The information was attained through a selected analysis from various authorized sources by the collection of those questionnaires.

The Questionnaire includes 43 questions in total having 5 sections i.e., demographics, entrepreneurial leadership, project success, innovative work behavior, and openness to experience questionnaires. Demographic data include the variables like gender, age, qualification, and experience collected to make the results more reliable and credible by assuring that the information of the respondents is kept private. The actual number of questionnaires used for the valuation of data to show the findings was 284 with a 73% response rate.

3.3.2 Entrepreneurial Leadership

The 8 items scale was developed by Renko et al. (2015) and recently used by Bagheri, (2017) and few others (Bagheri & Akbari, 2018; Cai et al., 2018; Miao et al., 2018; Newman et al., 2018a, 2018b) to demonstrated strong validity and reliability. A sample item included “My CEO challenges and pushes me to act more innovatively”. It is a seven-point Likert scale ranges from 1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree

3.3.3 Project Success

A 14 items scale developed by Mir and Pinnington (2014) is being used to measure the project’s success. The sample item is “The project was completed on time”, “The project was completed according to the budget allocated”. It’s a 5

point Likert scale that ranges from 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree

3.3.4 Innovative Work Behavior

Innovative work behavior was measured by using the nine items from Janssen (2000). The sample item is with what frequency you engage in the behaviors listed below: “Creating new ideas for difficult issues”. These nine items measure the extent to which an employee involves in innovative work behaviors, with 5 point scale that ranges from 1 = never, 2= rarely, 3= sometimes, 4= often, 5 = always.

3.3.5 Openness to Experience

The openness to experience has been measured by using 12 items scale from the NEO Five Factor Inventory of Costa & McCrae, (1992). Sample items are “I don’t like to waste my time in daydreaming”. It’s a 5 point scale ranging from “1=not agree at all” to “5=totally agree”.

TABLE 3.5: Instruments

Variables	Scale	Items
Entrepreneurial Leadership (IV)	Renko et al. (2015) and Bagheri, 2017; Bagheri & Akbari, 2018; Cai et al., 2018; Miao et al., 2018; Newman et al., 2018a, 2018b)	8
Project Success (DV)	Mir and Pinnington, 2014	14
Innovative Work Behavior (Med)	Janssen (2000)	9
Openness to Experience (Mod)	Costa & McCrae, 1992	12

3.4 Statistical Tool

Single linear regression was carried. It is commonly used when the impact of a variable on the dependent variable under study is to be tested. Regression analysis is used to check out the influence of various elements on the dependent variable. Regression analysis will give it guarantee that the previous investigation about the factors was in any event, underwriting the acknowledgment and repudiation of the proposed hypothesis or not. Hayes & Preacher, (2014) was used for further mediation and moderation analysis. A distinct analysis was performed for the analysis of mediations and moderation.

3.5 Pilot Testing

It is a very productive and successful strategy to perform pilot testing before going on to operate on a larger scale, as it has prevented many hazards related to money and time wastage. Hence, pilot testing of approximately 50 questionnaires was performed to determine whether or not the respondents are aware and in check with the hypothesis planned. After the pilot testing, it was discovered that there was no big issue in the variables and that scales were an exact fit for further analysis.

3.5.1 Reliability Analysis of the Scales Used

Reliability is evaluated where the same item is tested to produce the same constant results or outcomes again and again. Scale reliability specifies the capacity of the scale when it is tested numerous times to produce constant results. Through Cronbach alpha, a reliability test was conducted, which exhibited the internal reliability of the variables. It showed that there exists a relation between variables. Cronbach alpha has a scale between 0 and 1. The greater is the value, the greater is the reliability of the scale to measure the strategy it is anticipated to measure. The value of Cronbach above 0.7 is considered consistent, and the calculation of the particular set of constructs below 0.7 is considered to be less reliable. Table

no. 6, shows all the scales of Cronbach alpha used in the figures collection are shown.

TABLE 3.6: Scale Reliabilities

Variables	Cronbach's Alpha	Items
Entrepreneurial Leadership (IV)	0.75	8
Project Success (DV)	0.77	14
Innovative Work Behavior (Med)	0.79	9
Openness to Experience (Mod)	0.72	12

3.5.2 Data Analysis Technique

After collecting the data, it was then examined on SPSS software version 22. While studying the data the following points were kept in consideration.

1. Firstly, only the questionnaires which were filled properly were selected for the analysis.
2. Questionnaire of each variable was implied and used for data analysis.
3. The sample characteristics were explored via frequency tables.
4. Descriptive statistics were conducted by using numerical values.
5. Reliability of all variables was tested through Cronbach alpha.
6. Correlation analysis was led to know whether a substantial positive relationship exists between the variables in this research or not.
7. To detect the recommended relationship, a single linear regression analysis of the dependent and independent variables was conducted.
8. To conclude the presence of the role of mediator and moderator between the independent and dependent variables, the Preacher and Hayes Process was used for showing mediation and moderation analysis.
9. By using regression by Preacher and Hayes method, the proposed hypotheses were tested to check the acceptance and rejection of the suggested hypothesis.

Chapter 4

Results

To examine the correlation between all variables, descriptive statistics, Pearson correlation, moderation, and mediation were performed by using software like SPSS. Moreover, for testing the model fitness, confirmatory factor analysis was conducted by using Amos software.

4.1 Descriptive Analysis

Descriptive statistics illustrate the summarized details of observation that are developed from the data by using various statistical tools. Descriptive statistics of each variable such as entrepreneurial leadership, project success. The means and the standard deviations were also calculated by the use of SPSS, see **Table 4.1** below. Higher mean values show respondents' susceptibility towards the agreement side and the lower value represents the tendency of respondents towards disagreement.

TABLE 4.1: Descriptive Analysis

Variables	Sample	Mean	Std
Entrepreneurial Leadership (IV)	284	5.932	0.466
Project Success (DV)	284	4.273	0.313
Innovative Work Behavior (Med)	284	3.744	0.31
Openness to Experience (Mod)	284	3.889	0.3

Table 4.1, shows information regarding variables. The independent variable (Entrepreneurial leadership) has a mean value of 5.932 and the standard deviation is 0.466. The mean value of the mediator (Innovative work behavior) is 3.744 with a standard deviation of 0.310. The moderator (Openness to experience) has a mean value of 3.889 and the standard deviation is 0.300. The value of the mean of the dependent variable (Project success) is 4.273 with a standard deviation of 0.313.

4.2 Validity Analysis

To validate the theoretical model, the confirmatory factor analysis was conducted.

4.2.1 Confirmatory Factor Analysis

It is to examine the measurement model, for this analysis, AMOS 22 was used. In the initial model, the value is 0.88 i.e. less than fit statistics. The covariance technique was used to improve fit statistics. In the revised model the values are as per as fit statistics so the model is fit for further analysis. The value should be close to 1. Values that are greater than 0.90 show good model fit and those that are below 0.90 indicate a poor fit model.

TABLE 4.2: Confirmatory Factor Analysis of the Measurement Model

Model	CMIN/DF	RMSEA	CFI	TLI	IFI
Initial Model	1072.651	0.03	0.889	0.883	0.892
Modified Model	1010.373	0.026	0.92	0.916	0.922

4.2.2 Measurement Model

To authenticate the proposed model, it is necessary to conduct CFA (Gerbing & Anderson, 1988). The proposed model consists of four latent variables, entrepreneurial leadership, project success, innovative work behavior, and openness to experience. The mixture of different fit indices such as model, comparative fit index (CFI), Tucker-Lewis index (TLI), incremental fit index (IFI), and the root mean square of approximation (RMSEA) shows a good fit statistics.

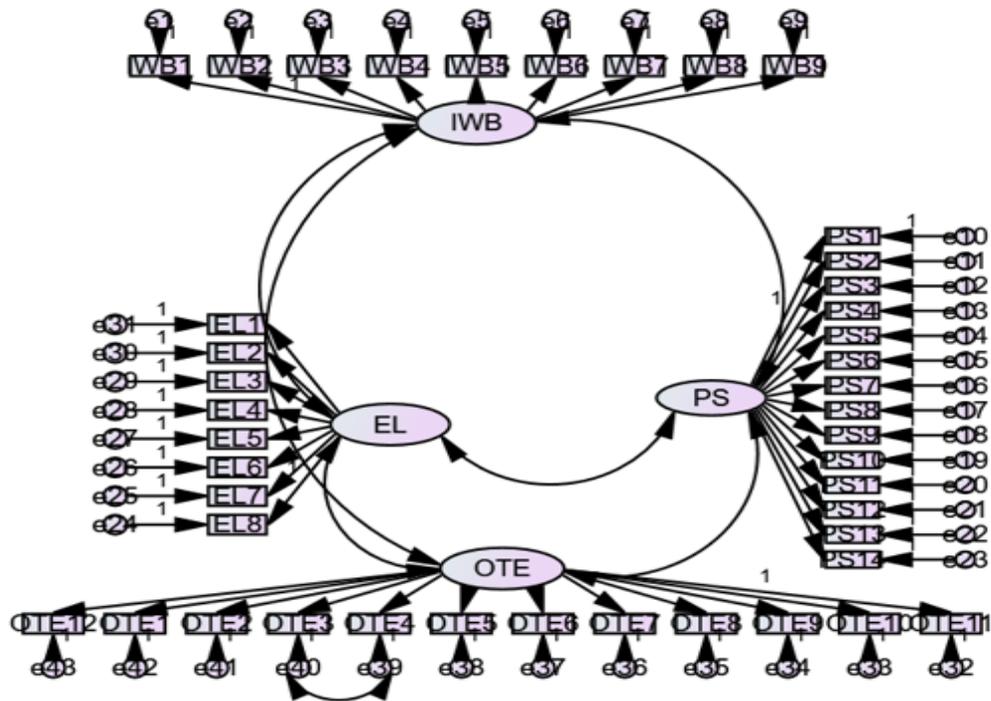


FIGURE 4.1: The impact of Entrepreneurial Leadership on Project Success: Mediating Role of Innovative Work Behavior and Moderating Role of Openness to Experience

The confirmatory factor analysis of the four-factor model signified a good fit as shown in table (4.2.2). Variations were made by using modification indices. As the original model did not meet the statistics of model fitness. Therefore, the modified model fits the data in a better way because all values are meeting the threshold. Incremental fit index (IFI) value is greater than 0.90 that was 0.922, which represents excellent fit, comparative fit index (CFI) value, should be greater than 0.90 that was 0.920, which also demonstrates good model fit, values of root mean square of approximation should be less than 0 .05 that was 0.026. Similarly, the value of the Tucker-Lewis index (TLI) should also be greater than 0.90 which was 0.916, which also represents a good model fit. Overall, the four-factor model shows a good and excellent model as the values provide evidence.

4.3 Control variables

A one-way ANOVA test was conducted in SPSS for control variables. The main purpose of running one-way ANOVA was to see whether the demographic variables

have any influence on the dependent variable, including project success. Hence, our foremost persistence is to see wholesome relations, that were projected in the model, and their impact. The analysis revealed that all demographic variables remained insignificant on the dependent variable, thus allowing to test of proposed relationships independently.

4.4 Correlation Analysis

Correlation analysis is used to determine the correlation among variables. For the current research, the perseverance of correspondence analysis is to determine the correlation between entrepreneurial leadership and project success, with the mediating functions of innovative work behavior and the moderating role of openness to experience. Pearson developed a correlation analysis to decide the strength of the relationship through a correlation range that is from -0.1 to 0.1. Positive signs show that the variables move in a similar direction and the negative variable specifies that variables move in the opposite direction. Furthermore, the value of “r” shows the power of the relationship of variables. The correlation value shows different effects like, if the value of Pearson Coefficient range between .1 to .3 it means there is weak correlation, the value range of coefficient is .3 to .5 addresses a moderate correlation, and the value larger than .5 represents a high correlation.

Analysis of correlation table 4.2 shows a significant positive relationship between Entrepreneurial leadership and openness to experience under ($r = 0.394^{**}$ at $p < 0.01$). Furthermore, entrepreneurial leadership has a consequential positive association with innovative work behavior where ($r = 0.400^{**}$ at $p < 0.01$). Likewise entrepreneurial leadership holds substantial positive association with project success under ($r = 0.508^{**}$ at $p < 0.01$). Also, innovative work behavior holds a substantial positive association with openness to experience under ($r = 0.598^{**}$ at $p < 0.01$). There is a significant relationship between innovative work behavior and project success over there ($r = 0.666^{**}$ at $p < 0.01$). Similarly, there is also a noteworthy and favorable association between project success and openness to experience under ($r = 0.678^{**}$ at $p < 0.01$).

TABLE 4.3: Correlation

Variables	1	2	3	4
Entrepreneurial Leadership (IV)	1			
Project Success (DV)	.508**	1		
Innovative Work Behavior (Med)	.400**	.666**	1	
Openness to Experience (Mod)	.394**	.678**	.598**	1

4.5 Regression Analysis

Correlation analysis is performed to find out the link between variables. Correlation analysis does not demonstrate a causal relationship between variables; it only indicates the existence between two variables. For regression analysis, various techniques and tools are utilized, the Hayes and Preacher, (2014) full scale by utilizing SPSS for examination of mediation and moderation. More in Preacher and Hayes (2013) method bootstrapping techniques is used, in which the data is distributed into small portions and bits which increase the relative accuracy of the data in the current study, innovative work behavior is the mediator among entrepreneurial leadership and project success.

TABLE 4.4: Direct and Indirect Effect

Direct Effect	β	S.E	P	LLCI	ULCI
Entrepreneurial Leadership → Project Success	0.341	0.034	0	0.273	0.409
(95\% bias Corrected Confidence Interval Method)					
Entrepreneurial leadership → Innovative work behavior	0.266	0.036	0	0.194	0.337
Innovative Work Behavior → Project Success	0.556	0.045	0	0.466	0.647
Indirect Effect (Mediator: Innovative Work Behavior)	β			LLCI	ULCI
Entrepreneurial Leadership → IWB → Project Success	0.148			0.093	0.206

$N=284$, $*p<.05$, $**p<.01$, $S.E=$ Standard Error, $LL=$ Lower Limit, $UL=$ Upper Limit.

H1: Entrepreneurial Leadership and Project Success.

Hypothesis 1 shows that there is a favorable and significant link between entrepreneurial leadership and project success. The regression coefficient (β value is 0.341) along with the p-value 0.000. The p-value of 0.000 demonstrates that the relationship is highly significant. When increasing the effect of entrepreneurial leadership then project success increases. Therefore hypothesis 1 is accepted.

H2: Entrepreneurial Leadership and Innovative Work Behavior.

Entrepreneurial leadership is also positively linked with innovative work behavior at values ($\beta=0.266$, $p=0.00$). With the increased effect of Entrepreneurial leadership employees' innovative work behavior also increases.

H3: Innovative Work Behavior and Project Success.

Innovative work behavior is positively linked with project success at values ($\beta=0.556$, $p=0.00$). When increasing the effect of innovative work behavior the project success also increases. Consequently, innovative work behavior has a positive effect on project success.

H4: Innovative Work Behavior mediates the relationship between Entrepreneurial Leadership and Project Success.

Hypothesis 2 demonstrates that innovative work behavior mediates the relationship between entrepreneurial leadership and project success. The outcomes show in **Table 4.5** show that the indirect effect of entrepreneurial leadership and project success has a LL of confidence of interval and UL of confidence of interval, 0.093, and two 0.206. Both ULCI and LLCI have the same sign that is a positive sign and there was no zero between these. Therefore, we can determine from here that mediation occurs. Hence, hypothesis 3, is also accepted, that innovative work behavior mediates the relationship between entrepreneurial leadership and project success.

TABLE 4.5: Moderation Analysis

(Moderator Variable: Openness to Experience)	β	LLCI	ULCI
	-0.131	-0.286	0.022

$N=284$, $*p<.05$, $**p<.01$, $S.E=$ Standard Error, $LL=$ Lower Limit, $UL=$ Upper Limit.

H5: Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior.

For the moderation hypothesis, hypothesis 7 results show that openness to experience does not moderate the link amongst entrepreneurial leadership and project success. **Table 4.5**, illustrates that the reason is interaction term of entrepreneurial leadership, openness to experience had LL and UL confidence intervals of -.286 and .022, and both have diverged signs which indicates the openness to experience does not moderate the relationship between entrepreneurial leadership and innovative work behavior. Hence, we conclude that hypothesis 5 is rejected.

4.6 Summary of Hypotheses

TABLE 4.6: Summary of Hypotheses

Hypothesis	Statements	Results
H1	Entrepreneurial leadership has positive effect on project success.	Accepted
H2	Entrepreneurial leadership has positive effect on the employees' innovative work behavior.	Accepted
H3	Innovative work behavior has positive effect on the project success.	Accepted
H4	Innovative work behavior mediates the relationship between entrepreneurial leadership and project success.	Accepted
H5	Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior in such a way that it strengthens the relation when openness to experience is high and vice versa.	Not Accepted

Chapter 5

Discussion and Conclusion

5.1 Discussion

This chapter comprises the discussion associated with the main outcomes in the indulgence of the proposed model of the research. To study the effect of entrepreneurial leadership on project success was the objective of the research; innovative work behavior was taken as a mediator whereas openness to experience was taken as a moderator in this relationship. For this purpose, data for the suggested hypothesis was collected from NGOs, the IT and construction sector of Rawalpindi, and Islamabad. This chapter illuminates the consequences of hypothesis analysis with the help of appropriate references of earlier studies similar to the area of study. The argument in this chapter lagged by practical and theoretical implications, research limitations, commonly provides references regarding leader traits in and recommendations and suggestions for future researches in the end. Particularly, the findings showed that entrepreneurial leadership and innovative work behavior are the antecedents of project success.

The main emphasis of the current study was to initiate the thought of association among entrepreneurial leadership on project success in project-based organizations. Moreover, this study highlighted the mediating approach of innovative work behavior among entrepreneurial leadership and project success including the moderating role of openness to experience between entrepreneurial leadership and innovative work behavior. The theoretical framework was generated based on that

we hypothesized certain associations among variables of the study. The outcomes of our research show that entrepreneurial leadership has a positive effect on project success denoting that entrepreneurial leadership performs an significant part in the accomplishment of the project. Correspondingly results also show that inventive effort conduct mediates the relationship between entrepreneurial leadership and project success. However, according to the results, openness to experience has been found to play no significant moderating role between entrepreneurial leadership and innovative work behavior. Generally, a summary of our research is discussed in this chapter.

All hypotheses are completely reviewed as under:

5.1.1 1 Hypothesis No. 1

H1: Entrepreneurial leadership has a positive relationship with project success.

Hypothesis 1 demonstrates that entrepreneurial leadership is positively connected with project success. The results of the hypothesis visualize a significant and positive association between entrepreneurial leadership and project success in provision with the hypothesis. The results provide strong cognitive for the hypothesis of H1 of the study, which shows that if there is a one-unit change in entrepreneurial leadership then there is a probability that project success would increase. There is adequate research for the above expressed embraced hypothesis of the study.

The success of an organization is affected by the innovative, viable, and successful holding of the leader. Entrepreneurial leaders may distress the achievements of their team members through acting as a mentor of entrepreneurial for the members of the group to ensue by engaging in operations of entrepreneurial ourselves (Renko et al., 2015).). Many scholars identified entrepreneurial leadership manner that highlights the identification of opportunity to reinforce creativity, production of ideas that leads to the success of an organization (Surie & Ashley, 2008). Our study has completely stressed the important and positive part of entrepreneurial leadership and its influence on project success as shown with the hypothesis under consideration. With the support of literature and subsequent approval of our

hypothesis, it is noted that entrepreneurial leadership existence in an organization and their leadership traits has a positive and encouraging influence on the project success. The study indicates there was Entrepreneurial leadership in project-based organizations that's why employees were more innovative and they were coming up with wonderful ideas. Additionally, theory indicates that if there is a positive attitude by leadership in exchange employees tend to put more effort into their work consequently coming up with innovative ideas, products, and services.

5.1.2 Hypothesis No. 2

H2: There is a positive relationship between Entrepreneurial Leadership and Innovative Work Behavior.

Hypothesis 2 displays that entrepreneurial leadership is positively linked with Innovative work behavior. The results of the hypothesis visualize an important and positive relationship between entrepreneurial leadership and innovative work behavior in support of the hypothesis. The value connected with coefficient $\beta=0.266$ shows that there is the probability that one unit change in entrepreneurial leadership would increase innovative work behavior. The study on EL has accepted that the entrepreneurial frontrunners besides creating new ideas themselves also enable and inspire their workforces to express their capabilities in disentangling complex issues and performing challenging tasks through innovative work behavior (Cai, Lysova, Khapova, & Bossink, 2019). The study shows that in project-based organizations the employees show innovative work behavior and produce creative and inventive ideas under the supervision of entrepreneurial leadership. Furthermore, theory specifies that if there is an encouraging approach by leaders in return employees exhibit more determination into their efforts subsequently emerging with innovative ideas, products, and services.

5.1.3 Hypothesis No. 3

H3: There is a positive relationship between Innovative Work Behavior and Project Success.

Hypothesis 3 displays that Innovative Work Behavior is positively and highly linked with project success. The results of the hypothesis depict a significant and positive association between Innovative work behavior and project success in support of the hypothesis. The value connected with coefficient $\beta=0.556$ presenting that one unit change in innovative work behavior would increase the project success. Recently, Leone and Schiavone (2019) explored the direct link between innovation and PS. The basis of innovation eases on the improvement and implementation of innovative ideas that increase personnel's creativity (Vande Ven, 1986). If employees show innovative work behavior, they would be more devoted, resulting in project success. Numerous studies have presented that workers' commitment to invention results in better organizational performance that leads to the success of the project (Harter, Schmidt, & Hayes, 2002; Macey & Schneider, 2008).

According to the study in the project-based organizations the employees share inventive, fresh and innovative ideas which refers their work behavior to be innovative and that leads to the accomplishment of goals and success in the project. Moreover, theory specifies that if there is an innovative work behavior of employees at the workplace that induces the attainment of objectives of organization and leads to the project success.

5.1.4 Hypothesis No. 4

H4: Innovative work behavior mediates the relationship between entrepreneurial leadership and project success.

In the present study hypothesis, 4 got accepted. The results show that innovative work behavior mediates the relationship between entrepreneurial leadership and project success. Entrepreneurial leaders institute an authorizing and compassionate climate in which all workers are stimulated to deliberate novelty as one of their foremost errands and precede it in the façade of difficulties that are essential in invention accomplishments (Karol, 2015). Entrepreneurial leadership encourages the workforces to take part entirely in their given tasks and bestow themselves spiritually, expressively, and their somatic possessions to the association. Employees

with innovative behaviors are influenced to increase the importance of work and develop the wisdom that such conduct has a positive influence on their enactment and accomplish objectives (Yuan, 2010).

Entrepreneurial leaders also produce an auspicious atmosphere and inspiring beliefs in which all of the team associates consider innovation as one of their precedence responsibilities and show their determination in the aspect of encounters innate in the innovation process. Project success depends on the innovativeness and creative ideas of the employee. Additionally, Martens, Machado, Martens, and de Freitas (2018) argued that innovation supports entrepreneurs to achieve success in projects. So we concluded that the innovative work behavior of employees mediates the relationship between entrepreneurial leadership and project success.

The study shows that in project-based organizations Entrepreneurial leadership create favorable environment and motivate the opinions of employees so the team members deliberate invention as one of their priorities and show their fortitude in the novelty. This can give rise to innovativeness in the work behavior of employees which can be the cause of success for the organization. Additionally, theory shows that with the encouraging attitude of leaders the employees demonstrate more establishments into their struggles consequently developing new and inventive ideas.

5.1.5 Hypothesis No. 5

H5: Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior.

Hypothesis 5 of our research specified that openness to experience moderates the association between entrepreneurial leadership and innovative work behavior. Despite that hypothesis 5 got rejected as the results of the current study show an insignificant relationship predicting the existence of openness to experience as non-significant between entrepreneurial leadership and innovative work behavior. The values of results were not in the support of our hypothesis. As the findings of the hypothesis appealed that, openness to experience does not have any significant impact on the relationship between entrepreneurial leadership and innovative

work behavior. Thus H5: Openness to experience moderates the relationship between entrepreneurial leadership and innovative work behavior in such a way that strengthens the correlation between entrepreneurial leadership and innovative work behavior is rejected. It is concluded that openness to experience will not affect innovative work behavior and entrepreneurial leadership.

The rejection of this hypothesis could be due to many reasons. As mostly the employees are different and different backgrounds that may also be the reason because all the employees from different backgrounds are not open-minded and they might not be creative, curious, and imaginative and openness to experience demands being open about work that helps create transparency. People with the high trait of openness to experience are more willing to embrace fresh ideas; new things and novel experiences. Openness also allows team members to be open-minded and approach new things with curiosity. So the team members could be low on this trait of personality. One reason could be employees within a group are not likely to make connections between different ideas and concepts. They do not tend to follow new experiences and creative endeavors. However, previously openness to experience was institute to be adversely linked to an organization's endurance (Ciaverella, et al, 2004). Ciavarella and contemporaries proposed that perchance openness to experience has more to do with beginning a corporate than subsistence. There may be a contradiction in entrepreneurship, that what is required to open a corporate is not always the identical as what is compulsory of personalities to endure to accomplish the organization. Consequently, the inquiry remnants that rather an openness to experience is a positive or negative inconstant for the accomplishment of industrialists. So we end up by saying that openness to experience shows insignificant relation, like openness to experience does not moderate the relationship among entrepreneurial leadership and innovative work behavior.

Based on the theory we assumed that openness to experience can act as a moderator but the study shows that in project-based organizations the employees may not be open to experience, and may not be more willing to embrace new things and fresh ideas. We observed that our society is collectivistic and we do not give margin to the individuals. We don't trust them enough that they can share their

opinions without any hesitation as there is no freedom of choice. So hypothesis made that openness to experience acts as a moderator between entrepreneurial leadership and innovative work behavior was not acceptable according to calculations.

5.2 Research Implications

5.2.1 Theoretical Implications

There are many theoretical implications of the present study, which are discussed below: Firstly, the present study investigated the link between entrepreneurial leadership and project success. Previous, limited studies are available related to entrepreneurial leadership and project success. This study subsidizes the works by discovering the process by which experiences to entrepreneurial leadership and project success. Consequently, this is a new period of study and contribution to our study.

Secondly, the role of innovative work behaviors as the mediator and entrepreneurial leadership has not been earlier studied in the Pakistani context with specific consideration of employees of NGOs, IT, and construction sector; therefore, this study has contributed as to how entrepreneurial leadership leads employees to innovative work behavior.

Thirdly, the role of openness to experience as a moderator between entrepreneurial leadership and innovative work behavior outcomes was studied, limited studies tested this relationship. So, it is also a major input to this study.

Drawing from the Leader-member exchange (LMX) is the underpinning theory for this study. Dansereau, et al. (1975) presented this exclusive theory of leadership, which imitates the vertical dyadic interaction between frontrunners and followers. The present study protracted and supported the fundamental theoretical assumptions of Leader-Member Exchange theory describing the employee's social-exchange relationship with the leader. Leader-member exchange theory (LMX) of leadership embraces common characteristics of leaders like innovation and risk

optimization that encourage and build trust in employees to be more innovative and creative.

Innovative work behavior (IWB) normally embraces observation of prospects and the production of new notions, but could also comprise conducts focused on executing change, improving processes to enhance the project's success. Leader-member exchange theory has entrepreneurial leadership characteristics. If a leader has such power to motivate and influence employees who are open to experience, then it spontaneously strengthens innovative work behavior. The findings of our study, therefore, have alliance and support to the theoretical foundations of Leader-Member Exchange (LMX) theory.

5.2.2 Practical Implications

This study also has some practical implications as well. It shows that entrepreneurial leadership leads to project success. . Consequently, it is suggested that leaders were risk-takers so they listened to the unique ideas of their team members; he encouraged his employees as a result of which they think out of the box. This leads to the project's success. In project-based organizations throughout the project growth phase, the leader accentuated such accomplishments which boost the thinking proficiencies of the team members.

The present current also proposes that leaders in the project base association were apprehending how workforces are persuaded to efficaciously subsidize to the large project enactment. Leaders did this, by making themselves involved with employees in all the activities of the projects, which gives self-assurance and a pleasant work atmosphere to the employees. Efficaciously applying entrepreneurial leadership permits the organization to meet the acquired goals of a particular project. Leaders also increase the capability of employees by preparing them to increase their expertise that will help to perform their tasks expertly, proficiently, and completely. Entrepreneurial leadership empowers his organization to be an effective innovation behavior at the workplace which in turn emboldens the team members to think innovatively and thus be the cause of success in projects.

5.3 Research Limitations

Every research has some reservations, in the present research there are also some limitations which we have confronted while conducting this certain research, apart from the fact that all applicable efforts were made within the accessible resources to reach and requisite principles of professional study.

One limitation is generally of time and resources. Due to time limits, the study has been accompanied by a cross-sectional frame of time horizon rather than a longitudinal frame, which needs more time and resources. There is enough possibility that an employee's level of knowledge and experience can have many levels depending on the time frame.

Secondly, the sample is medium-sized and might not be large sufficient because this learning merely emphasizes the project-based establishments in Pakistan. Thus, the model is only tried in Pakistani organizations. There would have been different findings if some other context was involved too. A huge sample size increases the generalizability of results in the broader context and their applicability. Future researchers could increase the approach of data collection and collect data through different cities and different organizations of Pakistan.

5.4 Future Research Directions

This study emphasizes the impact of Entrepreneurial leadership on Project Success. The core target of the study was project-based organizations. Future researchers can conduct this study in another context. Future research can also target other private and public organizations by using a larger sample size. Entrepreneurial leadership is still not much discovered and its influence on other variables can be studied in the future.

This study has used openness to experience as a moderator amongst entrepreneurial leadership and innovative work behavior in such a manner that it strengthens the relationship among entrepreneurial leadership and innovative work behavior has been rejected but through literature, it was found that openness to experience

has a positive relationship among entrepreneurial leadership and innovative work behavior. Though, another personality trait can be used to see the effect on the same model.

5.5 Conclusion

The present study intended at exploring a dominion of entrepreneurial leadership's impact on project success, which is the most desired and dynamic domain in the modern era. The foremost perseverance of the study is to expose the influence of entrepreneurial leadership on project success. Moreover, this study has shown the role of innovative work behavior as a mediator among the relationship between entrepreneurial leadership and project success. Besides this research has explored the impact of openness to experience as a moderator between the relationship between entrepreneurial leadership and innovative work behavior. In this research data for the study were collected with the help of questionnaires, which were circulated to different organizations and NGOs of Islamabad and Rawalpindi. The suggested hypothesis and this study are being validated with the leader-member exchange (LMX) theory of leadership.

The main contribution of the study is that this study has donated a significant amount in the available literature because there has been restrained work over the effect of entrepreneurial leadership on project success along with innovative work behavior as a mediator and openness to experience as a moderator. Furthermore, our research work adds to the literature on entrepreneurial leadership and project success. As entrepreneurial leadership is a recent variable familiarized, so these findings would further produce the concourses for the leadership research. Our study contributes various theoretical as well as practical implications and also provides new ways to other scholars for future studies.

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Appendix-A

Questionnaire

Dear Respondent

I am MS research scholar at Capital University of Science and Technology, Islamabad, I am collecting data for my thesis title: **The impact of Entrepreneurial Leadership on Project Success: Mediating Role Innovative Work Behavior and Moderating Role of Openness to Experience**. It will take you 10 to 15 minutes to answer the questions and to provide the valuable information. I assure you that data will be strictly kept confidential and will only be used for academic purposes. To ensure anonymity, you are not supposed to write your name or name of organization anywhere in the questionnaire.

Thanks a lot for your help and support!

Sincerely,

Tehreem Shafqat,

MS (PM) Research Scholar,

Faculty of Management and Social Sciences,

Capital University Science and Technology, Islamabad.

Section 1: Demographics

Education	1 (Intermediate), 2 (Bachelors), 3 (Master) 4 (MS/PhD), 5 (Any other)
Experience(years)	1 (0-1), 2 (2-5), 3 (5-10), 4 (10-above)
Gender	1- Male 2- Female
Age(years)	1 (20-30), 2 (31-40), 3 (41-50), 4 (51-above)

Section 2: Entrepreneurial Leadership

Please tick the relevant choices: 1=strongly disagree, 2=disagree, 3 = somewhat disagree, 4=neutral, 5=somewhat agree, 6=agree, 7=strongly agree.

Sr. No.	Items	1	2	3	4	5	6	7
1	My leader often comes up with radical improvement ideas for the products/services we are selling	1	2	3	4	5	6	7
2	My leader often comes up with ideas of completely new products/services that we could sell	1	2	3	4	5	6	7
3	My leader takes risks	1	2	3	4	5	6	7
4	My leader has creative solutions to problems	1	2	3	4	5	6	7
5	My leader demonstrates passion for his/her work	1	2	3	4	5	6	7
6	My leader has a vision of the future of our business	1	2	3	4	5	6	7
7	My leader challenges and pushes me to act in a more innovative way	1	2	3	4	5	6	7
8	My leader wants me to challenge the current ways we do business	1	2	3	4	5	6	7

Section 3: Project Success

Please tick the relevant choices: 1=strongly disagree, 2=disagree, 3 = neutral, 4=agree, 5=strongly agree.

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

13	13. The target beneficiaries were satisfied with the outcomes of the project.	1	2	3	4	5
14	14. Our principal donors were satisfied with the outcomes of the project implementation.	1	2	3	4	5

Section 4: Innovative Work Behavior

With what frequency do you engage in the behaviours listed below?

1=never, 2=rarely, 3=sometimes, 4=often, 5=always

Sr. No.	Items	1	2	3	4	5
1	Creating new ideas for difficult issues	1	2	3	4	5
2	Searching out new work methods, techniques or instruments	1	2	3	4	5
3	Generating original solutions for problems	1	2	3	4	5
4	Mobilising support for innovative ideas	1	2	3	4	5
5	Acquiring approval for innovative ideas	1	2	3	4	5
6	Making important company members enthusiastic for innovative ideas	1	2	3	4	5
7	Transforming innovative ideas into useful applications	1	2	3	4	5
8	Introducing innovative ideas into the work environment in a systematic way	1	2	3	4	5
9	Evaluating the utility of innovative ideas	1	2	3	4	5

Section 5: Openness to Experience

1 =strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree.

Sr. No.	Items	1	2	3	4	5
1	I don't like to waste my time daydreaming.	1	2	3	4	5
2	I am intrigued by the patterns I find in art and nature.	1	2	3	4	5
3	3. Poetry has little or no effect on me.	1	2	3	4	5
4	Sometimes when I am reading poetry or liking at a work of art, I feel a chill or wave of excitement.	1	2	3	4	5
5	I seldom notice the moods or feelings that different environments produce.	1	2	3	4	5
6	Once I find the right way to do something, I stick to it.	1	2	3	4	5
7	I often try new and foreign foods.	1	2	3	4	5
8	I often enjoy playing with theories or abstract ideas.	1	2	3	4	5
9	I have little interest in speculating on the nature of the universe of the human condition.	1	2	3	4	5
10	I have a lot of intellectual curiosity.	1	2	3	4	5
11	I believe letting students hear controversial speakers can only confuse and mislead them.	1	2	3	4	5
12	I believe we should look to our religious authorities for decisions on moral issues.	1	2	3	4	5