

CAPITAL UNIVERSITY OF SCIENCE AND
TECHNOLOGY, ISLAMABAD



**Impact of Ethical Leadership on
Innovative Work Behavior with
Mediating Role of Thriving at
Work and Moderating Role of
Openness to Experience**

by

Muhammad Jahan Zaib

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

in the

Faculty of Management & Social Sciences
Department of Management Sciences

2018

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This work is dedicated to my parents and teachers.



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CERTIFICATE OF APPROVAL

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Behavior with Mediating Role of Thriving at Work and
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Acknowledgements

In the name of Allah, the Most Gracious and the Most Merciful, all praise to Allah for His blessings in completion of this task despite my weaknesses. I present the greatest gratitude to all those persons who provided me the possibility to complete this thesis. I am thankful to my thesis supervisor Dr. Sayyed Muhammad Mehdi Raza Naqvi for his unending support and encouragement during my thesis.

Furthermore, I would also like to acknowledge all my friends who helped me in minutest ways for completion of this thesis. Their contribution and role was very crucial. Special thanks to all the teachers at Capital University of Science and Technology (CUST), who helped me to assemble the knowledge parts and their precious suggestion about my performance during my stay at CUST. Last but not the least, I am highly thankful to my parents who have invested their resources, efforts and believed on me in achieving this goal.

Abstract

Ethical leadership plays an important role in enhancement of thriving at work and that leads to Innovative Work Behavior. In the light of Affective Event Theory, this study investigates the antecedent involved in Innovative Work Behavior. This investigation examined the role of ethical leadership in Innovative Work Behavior with mediating role of thriving at work and moderating role of openness to experience. Sample undertaken in this study consisted of 204 employees of software houses in twin cities (Rawalpindi & Islamabad) and data was collected through distributed questionnaires. Results showed that the relation between ethical leadership and Innovative Work Behavior was significant. Likewise, thriving at work mediated the relation between ethical leadership and Innovative Work Behavior. Role of openness to experience as moderator was also found significant. Theoretical and practical implications were also discussed and future directions were given.

Key Words: Ethical Leadership, Thriving at Work, Openness to Experience, Innovative Work Behavior

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Chapter 1

Introduction

1.1 Background

A business environment has become vigorous and unstable, making it difficult for business to exist and develop (Battistelli, Montani, Odoardi, Vadenbeghe, & Picci, 2014; Chowhan, Pries, & Mann, 2016). Innovativeness has become an essential part of organization as it is crucial ingredient for organizational success. In a demanding environment it is essential for an organization to integrate its business model and drastic technological transformation innovation plays an important role in doing so (Boic & Ozretic-Doen, 2015; Wan, Williamson, & Yin, 2015; Sanchez-Famoso, Maseda, & Iturralde, 2017). According to Janssen (2000) innovation is an outcome when employee follows three steps, which are development of idea, promotion of idea and implementation of idea. These three steps are core element of innovative work behavior. It is evident in the light of previous researches that innovative work behavior has vital importance at workplace (De Jong, Parker, Wennekers, & Wu, 2011). Complicated and tricky environment demand Innovative Work Behavior as supplementary behavior from employee to meet challenges faced by organization in an evolving situation (Scott & Bruce, 1998). For years Studies including Franco & Haase, 2016; Zlatanovi & Mulej, 2015; Hammond, Neff, Farr, Schwall, & Zhao, 2011 have investigated the factors and variables effecting innovative work behavior.

Current business environment demands innovation to be deep rooted in work processes which lead to highly innovated products and services. This evident importance of innovation has managed to grab attention of researchers for past 2 decades. King and Anderson (2002) are of the view that studies related to innovation is about administering management at multiple levels which include employees who have been assigned duties individually, secondly employees working in groups and at the last management networks.

World has transformed into a global village in which no one is isolated, this phenomenon has given birth to many challenges for modern organizations. These challenges demand innovation at a broad level than before. Hence it becomes important for organization to make sure that they innovate and put effort to develop and survive (Jung, Chow, & Wu, 2003).

Opportunity identification is based on many factors but the most important of them is innovation which is more vital when environment is tangled and vigorous (Shalley et al., 2004). Value creation process is the mechanism which based on innovation and this process is fueled by individual's knowledge resource and their actions at workplace (Chen and Huang, 2009). According to Janssen, Van De Vliert, & West (2004), an effective organization is outcome of innovation. West & Farr, 1990a, took it further, according to them development of new idea, then adaptation and implementation leads to innovation which tends to be a vital asset which allows organization to flourish vigorous business environment. According to Anderson, De Dreu & Nijstad (2004) it is widely accepted among researches and scholars that innovation is essential for growth in every discipline including politics, economics, technology, sociology, legal and process and procedures followed in organizations, in the era of rapid changes innovations becomes a basic requirement for an organization to prosper and sustain.

Innovative work behavior is a multifaceted phenomenon which involves creativity. According to Mumford and Gustafson (1988) creativity is about creation of new ideas accompanied by innovation and in further step it's about putting them into real life use. Hence innovative work behavior surrounds both, creation and

development of new ideas and at the same time implementation (Janssen, 2000, 2002).

Two significant researches related to innovative work behavior Janssen (2000), and Scott and Bruce (1994) proposed that innovative work behavior consist of four steps. Starting from identifying the problem, creating idea, promoting and proposing the idea and lastly apprehension of the idea. They can be classified into two categories one is based on creativity and the other is based on implementation. First two were more related to creativity because it dealt with creation and part is based on implementing it which is more practical in nature.

The reinforcing role of leadership in nurturing employee's creativity has been under notable concentration of researchers (Javed, Bashir, Rawwas, & Arjoon, 2017). Results by researches like (Gu, Tang, & Jiang, 2015; Brown, Trevio, & Harrison, 2005) state that employee's creativity is an outcome of an environment in which supervisor exhibits encouraging behavior and its ethical behavior. According to Janssen (2000), Innovative work behavior can be defined as innovation at daily basis and this is at a large extent dependent on the willingness of worker to produce ideas and products which are different from conventional products and services.

IWB is a behavior in which employee think in an unorthodox manner while avoiding conventional thinking patterns and expressing novel ideas (Kessel, Hannemann-Weber, & Kratzer, 2012). In the current literature, the effect of IWB has not just been theoretically investigated but empirically as well and the outcome are evident about its strong effect on behaviors and work attitude such as voice behavior, OCB, organizational commitment and workplace performance (Brown and Trevino 2006; Brown et al. 2005).

Janssen (2000) identified and divided innovative work behavior on the basis of behavioral task which are generation of idea, advertising idea and at the end implementing that idea. Employee behavior within boundary of organization is a determinant factor in manifestation of innovation and especially when organization is operating in an economy which is based on knowledge then it became easy to understand that exhibition of innovative work behavior is crucial for growth

and survival of organization (Thurlings, Evers and Vermeulen, 2015). Role of Ethical leadership as a predictor on employee's performances which are related to tasks has more involvement of novelty and contributes toward the betterment and improvement of competitive abilities of organization (Ireland and Hitt 2005).

It is the exhibition of culturally and generally accepted behavior by the leader through setting a personal example or through communicating formally and encouragement of such behavior to subordinates by dyadic communication, supplementation and involvement in taking decision (Brown, Trevio, & Harrison, 2005). It boosts the trust of follower in leader by giving rise to an atmosphere and climate which transmits positive vibes (Ng & Feldman, 2015). Exhibition of high moral value is an attribute of ethical leadership and leader continuously attempts to boost the same characteristics in followers. This attempt also involves the use of stick and carrot rule to make them adopt moral aspects of ethical leader and treat their subordinate with respect and care (Brown & Trevino, 2006).

Results from mentioned studies (Mo, Booth, & Wang, 2012; Zheng, Wang, & Li, 2011; Strobel, Tumasjan, & Welpe, 2010; Tu & Lu, 2013) showed that all stakeholders including candidate applying for job, purchaser and existing workforce react in a positive way whenever they experience ethical leadership. It is evident from study conducted by Mayer, Nurmohamed, Trevino, Shapiro, & Schminke (2013), that subordinates and employees follow their leader in such a way that they collect cues that what is the most appropriate behavior and what is the true definition of right. After learning from leader employees exhibit same behavior which they have learned from leaders in the form of attitude toward their assigned duties while keeping high moral and ethical values in giving their best performance (Mayer, Kuenzi, & Greenbaum, 2010). social learning argues that workers or employees who are under the supervision of an ethical leader will express positive attitude while performing at work which will enhance their performance, the reason is the fairness and caring nature of the ethical leader (Kalshoven, Den Hartog, & De Hoogh, 2011). The presence of positive and comforting feeling towards leader will lead to enhancement of satisfaction and trust which in result in effective leadership and positive evaluation. Ethical leaders represent a kind employer; secondly their

decisions are based on principles. These two factors lead to a favorable and positive feeling about work environment and organization (e.g., Piccolo, Greenbaum, Den Hartog, & Folger, 2010). According to Walumbwa et al., (2011), workers working under the supervision of ethical leader will exhibit less work strain including higher level of work satisfaction, in addition to this, subordinates will be more attached with their job which will make them committed with their work and turnover rate of organizational will decrease. Combination of just treatment and favorable attitude by ethical leader makes followers to exhibit low level of counterproductive work behavior, high level of OCB, motivation and performance (Mayer, Kuenzi, & Greenbaum, 2010).

Kalshoven et al., 2011, believe that subordinates trust their leaders more when they display ethical leadership. Ethical leadership conveys a message that they won't be harmed if they depend on leader and leader will keep on supporting and make sure to keep on treating in a gentle manner (Eisenbeiss, 2012). The behavior of copying leader is explained by social learning theory, so followers who copy their ethical leader will exhibit positive job attitude and performance. This positive job attitude results in thriving at work which is anticipated outcome of Ethical leadership.

Thriving at work has managed to grab a lot of attention in past few years despite of the fact as it is newly emerged concept (Paterson, Luthans, & Jeung, 2014). When a worker learns and feels vital at the same time, this phenomenon is called as thriving at work (Spreitzer & Sutcliffe, 2007). As employee works at a position he starts to learn and keeps on getting better, in addition to this the employee also feels lively and full of energy this state is called vitality (Porath et al., 2012). Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant (2005) also explained thriving at work. According to them thriving is a state of mind in which a person not just only improves by learning but his psychological wellbeing is also enhanced. An employee who is thriving at work has tendency to think different from others and develop new ideas on the base of newly acquired knowledge and experience. In this way thriving at work not only just focuses on enhancement and knowledge and skill but also health of the employee (Porath, Spreitzer, Gibson, & Garnett, 2012). Factors

prevailing in working environment in combination with dispositional inbuilt factors contribute to enhancement of thriving at work (Spreitzer et al., 2005).

The advantage of thriving at work is not just limited to wellbeing of worker but it also enhances and boosts the overall performance of organization. Results from Porath et al. (2012) exhibit that thriving at work leads to lowering of stress and burnout while elevating overall health and happiness. In addition to this, benefits of thriving include performing job duties with diligence while keeping the proactive aspect in consideration (Paterson et al., 2014). According to Carmeli & Spreitzer (2009) thriving at work has a positive effect on enhancement of innovation. Thus, further leads to innovative work behavior (Wallace, Butts, Johnson, Stevens, & Smith, 2016).

It's been proclaimed by contingency theorist that the extent to which leadership can be effective depends on many factors one of them is employee personality and attributes (Fiedler, 1964). Follower's insight and their response to leadership style whether it is transformational or charismatic is based upon their characteristic and personality type (Klein & House, 1995). In order to get the better understanding of the influence of ethical leadership on the innovative work behavior, we must know that whether it is uniform across the each and every employee, so we took personality as a determining factor. OCEAN is a classification of personality types which turnout to be very helpful in understanding the achievements in academics, in sports and in social interactions, including attitude on the basis of personality types (Ozer & Benet-Martinez, 2006). The most closely related personality classification which deals with all these achievements and most closely related to creativity, innovation and different thinking patterns is openness to experience (Silvia et al., 2008; Silvia, Nusbaum, Berg, Martin, & O'Connor, 2009). A sheer interest towards acquisition of uncommon knowledge, generation of unique ideas and unorthodox point of views is expressed by subordinates with an open mind, they are always ready to react in a positive manner whenever confronted by anything unexpected and challenging because they are equipped with resources (Sharot, 2011). Ethical leadership is most effective on followers who are better at openness

to experience because they enjoy being challenged and mentally stimulated, embrace change and passionate about acquiring new knowledge (Komarraju, Karau, & Schmeck, 2009). The combination of an affective event taking place inside the organization and the open-minded personality of employee further leads to trigger the thriving at work, people high at OTE are more stimulated when ethically governed, on the other hand employee with low OTE are more tilted toward routine work (Costa & McCrae, 1992).

1.2 Theoretical Gap

Role of ethical leadership in promoting innovative work behavior has not been studied in Pakistan's software houses. In international arena organizations are fostering by leaps and bounds only because they are putting effort in order to promote innovative work behavior. This is evident from the results from the study carried by Tu and Lu in 2013. According to results of the study ethical leadership and innovative work behavior are related to each other. Growth and prosperity of an organization is strongly linked with the extent to which its employees are creative and innovative (DiLiello and Houghton, 2006). Secondly, in the light of study conducted by Tu and Lu (2013) and (Carmeli & Spreitzer, 2009) it is argued that thriving at work acts as a mediator among ethical leadership and innovative work behavior, according to formerly mentioned study there is a strong relation among employee level of ethical leadership plus working departmental level ethical leadership perception and innovative work behavior. Thirdly, role of personality as moderator in boosting effect of ethical leadership towards worker's innovative work behavior has not been studied before so we took openness to experience as moderator. It has been used in previous study (Hildenbrand, Sacramento, and Binnewies, 2018) as moderator while studying relation between transformational leadership and burnout. According to results of this study relation between the transformational leadership and thriving at work was moderated by openness to experience in such manner that if openness was high the thriving at work was also high and if openness to experience was low then thriving at work was also low.

1.3 Problem statement

If we observe the current international business scenario it is evident that businesses are progressing and innovating at a pace never seen before. Information Technology industry is no exception. The total worth of global IT industry is \$303 billion out of which contribution of Pakistan is merely 0.9%. According to the information shared by PSEB (Pakistan Software Export Board) Pakistan contributes with only \$2.8 billion in total global sales out of which \$1.6 billion weighs IT related services and software development. A huge volume of activity takes place in Pakistan's IT industry with almost 10,000 IT graduates entering the IT industry in each year and number of IT firms in the country has rose to 1500 which is a remarkable development but still the global market share is mismatched and the country is far behind economies like India., Singapore and Malaysia. The evident difference between both economies is the aggressive steps taken by those economies which have boosted their global market share. On the other hand, Pakistan's IT industry is directionless and requires a total revamp. For the comparison purpose if we take stats of Indian IT industry the differences are shocking, Indian IT industry has doubled the market share from \$60 billion (in 2008/ 2009) to \$120 billion in only 9 years. This development puts a huge question mark on Pakistan's performance in this regard. Current research is also directed in this direction, it is intended to identify ways to increase the creation of innovative ideas and enhance creativity among people working in IT industry. By digging deeper into current research's population which is Software Houses, the stats tell almost same story, India's software exports cross the figure of \$60 Billion in year 2016. Whereas Pakistan is lacking behind with just \$1.6 Billion in software exports. For this purpose, we have proposed a model which comes under the Affective Event Theory. Our research models focus on the function of ethical leadership in enhancement of Innovative Work Behavior while not keeping the learning and vitality out of sight.

According to the proposed model, ethical leadership and the right personality of the follower can lead to thriving at work which further leads to Innovative Work

Behavior which is essential to progress especially in IT industry which is experience rapid changes.

A research undertaken by Ramamoorthy et al., in 2005 stated that organizations who want to enrich their daily routine tasks with innovation and creativity must work on their workers in such a way that their procedure and practices are supplemented by innovativeness. According to Janssen (2000), if an organization wants to be complemented with innovation and timely attainment of targets it has to transform innovation into an essential skill embedded in its culture and employees.

These researchers(Bilton and Cummings, 2010; Edwards, Delbridge, and Munday, 2005; Isaksen and Tidd, 2006; Jung, Chow and Wu, 2003) have highlighted the importance for acquisition of further knowledge on antecedents of Innovative Work Behavior and how employee level struggle in creation of new ideas can lead to innovation at departmental and organization level

1.4 Research Question

1. Does Ethical Leadership is directly associated to Innovative Work Behavior?
2. Does Thriving at Work mediate the linkage between Ethical Leadership and Innovative Work Behavior?
3. Does Openness to Experience moderate the linkage between Ethical Leadership and Thriving at Work?

1.5 Research objectives

The purpose behind this investigation is to investigation the relation between ethical leadership and innovative work behavior due to increase in thriving at work with the moderating path consisting of openness to experience among workers of software houses of twin cities.

1. To explore whether ethical leadership is directly associated with innovative work behavior or not.
2. To investigate whether thriving at work mediates the linkage between ethical leadership and innovative work behavior.
3. To investigate whether openness to experience moderates the relationship between ethical leadership and innovative work behavior or not.
4. To explore whether ethical leadership is directly associated with thriving at work
5. To explore whether thriving at work is directly associated with innovative work behavior
6. To explore whether ethical leadership is directly associated with openness to experience
7. To explore whether openness to experience is directly associated with thriving at work

1.6 Supporting theory

According to Affective Event Theory, the way workers manage workplace affairs is crucially based on emotions. The way employees perform, the way they show commitment and to what extent they are satisfied with their job is based on the dispositions or personality type and internal event happening inside the organization.

It is proposed by the theory that there are different types of events and occurrences inside organization which can be classified into positive and negative events. These events affect the way employee performs his job duties and to the extent he is satisfied. AET describes the phenomenon that in what way surrounding cognitively affect, in addition to this it also states that it doesn't includes any external influence. For example, if an employee has sick children outside the organization, that scenario does not falls under the domain of affective event theory.

Favorable and unfavorable happening can range from something like being rebuked on a mistake to an appreciation certificate of achievement. Each aspect of job can cause a change in cognitions which include stress at workplace, relation with colleagues, administration and handling daily tasks. Good or bad events of situation create broad emotional reactions which can alter growth and satisfaction with the job. AET also includes the role of disposition during the transferring of effect of an event on the behavior of individual. It is true that events happening at workplace have meaningful effect on employee but at the same time it is the mood which largely determines the tendency of their response to the event. In other words, personality type and mood play an important role in determining how a person will react to an event occurring.

AET acts as an overarching framework for our research model. In prescribed research model occurring of Ethical leadership (independent variable) acts as a work environment feature and it further gives rise to affective reaction (mediator) which is Thriving at work in our model. But effect of ethical leadership on thriving at work is dependent on disposition (moderator) which in our case is Openness to Experience. At the end of this process the work attitude (dependent variable) is exhibited, which in our case is Innovative Work Behavior.

1.7 Significance of the study

This study attempts to explain the relation between occurrence of ethical leadership at workplace and its effect on innovative work behavior which is said to be a crucial business element in current scenario where everything is changing at rapid pace. This relation is easy to understand if we take Affective Event Theory in account. Affective event theory states that any positive or negative occurrence at workplace can cause an uplift or downfall in the work attitude of the individual.

This study is theoretically significant as it develops a relation between ethical leadership and innovative work behavior. Secondly, it also takes in account the role of moderator which is openness to experience, in strengthening the linkage among

ethical leadership and innovative work behavior. Moreover, it also addresses the role of thriving at work as mediator.

Taking in consideration the practical significance of this study, it is evident from the complex and dynamic environment that innovative work behavior is not just an option but a compulsion (shalley et al., 2004). Innovative work behavior vastly depends on the workplace environment and employee's personal abilities. These ingredients act as an input in the value chain which creates innovative work behavior. Pakistan is lacking behind in field of Information Technology especially software development. Pakistan's IT industry total share in international market is merely 0.9 percent and total international IT industry is worth \$303.8 billion according to Pakistan Software Export Board (PSEB). That 0.9 percent share gives us a figure of \$2.8 billion of which \$1.6 billion consists of IT related services and software exports. Pakistan has almost 1500 registered IT firms and 10,000 IT graduates are entering market each year. Despite of such a huge number of man power availability our share in international market is alarming. The role of innovation becomes more significant when it comes to IT industry and specially software houses. The target population of this study is software houses of twin cities. Findings of this study will give guidelines to manager to promote ethical leadership in the organization which in return will foster innovative tendencies in workers making them to exhibit innovative work behavior.

Chapter 2

Literature Review

2.1 Ethical Leadership and Innovative Work Behavior

These days only those organizations are able to compete while maintaining market share and upholding customer satisfaction by providing them with innovative product and services. A significant study undertaken in 2005 by Ramamoorthy, Flood, Slattery, and Sardesai, came to the conclusion that in order to promote and achieve the target of innovation, organization has to put effort in its employees by implementing and devising operational and methodological techniques. According to janssen (2000) if an organization wants to innovate at organizational level as a daily routine work then it must make sure that its employee work on innovation like acquiring a skill. Extended innovation, progress and growth are not only outcomes of extended innovation, in addition to this entrepreneurship at corporate level and superior management can also be achieved (Chrisman & Sharma, 1999).

Many researchers hold opinions that those antecedents include work climate, role of leader, and relation between members of group, personal differences, work attributes, work requirements and moral values. These factors are strongly related to innovative work behavior. Between all these factors the role of leadership is most significant as an antecedent of innovative work behavior. According to Gerybadze, Hommel, Reiners, and Thomaschewski (2010) role of a supervisor is most

important factor as a helpful conduct as a linking mechanism for innovative work behavior. These findings have intrigued researcher in exploring that why role of supervisor is this much vital for innovative work behavior and in addition to this, they also came to the conclusion that that is because of the complicated characteristic of innovative work behavior. The high level of uncertainty associated with innovative work behavior depicts that it is vaguely unusual course of action in which followers try to stay away from conventional way of thinking and have the ability to express novel viewpoint (Kessel, Hannemann-Weber & Kratzer, 2012; Kanter, 1988). From these point of views and findings it can be said that for exhibiting innovative work behavior employee has to challenge higher authorities which requires a higher level of authority (Janssen, 2005). Liberty and authority to communicate novel viewpoint is only possible if the supervisor or leader provides support to its followers (Foss, Woll, & Moilanen, 2013). A huge number of studies advocate the role of leadership in boosting innovative work behavior (Javed, Bashir, Rawwas, & Arjoon, 2016: 16; Tu & Lu, 2013; Resick, Hargis, Shao, & Dust, 2013; Aryee, Walumbwa, Zhou, & Hartnell, 2012; Raub & Robert, 2010; Martens, 2011).

A distinctive method by which leader can enhance the innovative work behavior of employee is by managing a healthy and strong relation with subordinate. In a relation which is strong and based on mutual understanding, supervisor furnishes assistance while dealing with work related task with obstacles (De Jong & Den Hartog, 2007). To further explore this relation the current study examines how ethical leadership plays its role in enhancement of innovative work behavior (Carmeli, Ben-Hador, Waldman & Rupp, 2009).

Innovative work behavior can be defined as a way of behaving at workplace which results in introduction of latest products, task processes, procedures of performing work and tailor-made services; effectiveness at both level including personal and organizational level; enhancement of employee skills according to job demand and requirements; bidirectional communication between employees and job satisfaction (Janssen, van de Vliert & West, 2004). Effect of the variable in the social

environmental have effect on innovation, to understand this relation it is important to review literature keeping in view the role of communal networks (Sosa, 2011). When people are close together and working in groups at organizational level then are more chances of innovative behaviors (Lingo & O'Mahony, 2010).

Amabile (1988) differentiated between creativity and innovation, because creativity is just limited to introduction and formation of novel ideas but it lacks implementation of those ideas. Conversely, innovative work behavior is focused on getting practical benefit of those newly generated ideas and putting them to work instead of limiting them just to paperwork or mind process. Innovative work behavior is a comprehensive phenomenon while creativity is an important part of this process. Creativity is the initial step in the process of innovation and it starts when there is some issue at workplace like performance not up to the mark. These problems result in development of novel ideas to tackle such issues (West, 2002).

According to Hennessey & Amabile (2010) Innovative work behavior as an outcome is dependent on the mood of employee, if they are feeling lively and full of energy they tend to exhibit innovative work behavior. Perry-Smith & Mannucci, (2017) presented four stages of innovative work behavior; first stage is related to idea generation, second stage is about elaboration of idea, in third stage focus is on championing of idea, which means presenting it in front of colleagues and convincing them and the fourth and last stage is about implementation of the idea in which idea is put at practical application. According to them the idea presenter remains the soul driver of idea throughout the innovative work behavior. In order to generate idea according to (Taylor & Greve, 2006; Granovetter, 1973) in order to generate novel idea, it is important for the presenter to hold complicated and authentic knowledge.

Conversely, creativity literature expresses the opinion that knowledge is not essential for idea generation but the cognitive structuring ability of the presenter (Dane, 2010). The more concrete and complex knowledge a person holds more difficult it would be for him to integrate that knowledge in creation of new idea (Mueller & Kamdar, 2011).

At the root when idea has been generated, the developer or presenter of the idea refines it by checking discrepancies and disparities (Mainemelis, 2010). It is commonly observed that a novel idea has an ability to bring discomposure so in order to manage this turbulence idea presenter has to stabilize the associated uncertainty with some prospective benefits; idea presenter may foresee opposition at the beginning about the expected positive outcomes of idea and without asking someone should move toward detailed explanation (Criscuolo, Salter, & TerWal, 2013). Because of the risk and doubts associated with new idea the individual who is presenting it, feels fear of opposing comments from those with who they share idea (Detert & Edmonson, 2011). Such response can lead presenter of the idea to surrender his or her novel thinking if he does not get fortification in the shape of psychological reinforcement. Novel and groundbreaking ideas initially look like a foolish idea they require detailed clear explanation, only then they would be considered (Catmull & Wallace, 2014). Idea developers require valuable feedback and counsel to furnish them with directions to revamp and amplify their idea; to make sure that the given feedback has affected idea creation in a positive way, it's imperative to make sure that information is given in a statistical way (Harrison & Rouse, 2015).

A contribution that deviates from prevailing application may be discarded as unpractical, experience opposition from co-workers and at the end lost, until and unless it is discovered and used by other co-workers with support of an ethical leader (Anand, Gardner, & Morris, 2007; Hargadon & Beckhy, 2006). Bidirectional communication which is an attribute of ethical leader promotes shared vision which has many benefits especially magnified supportive behavior, superior sharing of information and influential devotion (Lingo & O'Mahony, 2010). In addition to this, shared vision also contributes in enhancement of dependability, resolve and possession (Fleming et al., 2007).

De Jong and Den Hartog, (2010) identified four dimensions encompassing innovative work behavior, first dimension is idea exploration which deals with identification of performance gap, second dimension is generating idea, third dimension

is collaborating and communicating idea with others and the last dimension is related to putting idea at work. The initial steps of innovation process can be result of a coincidence which can be a realization of a trouble or chance to grab opportunity. This impulse can be generated to handle suddenly arose issues or problems which need quick response.

IWB's further phase include the generation of new idea. Idea generation can be related to answer to a visible challenge; betterment in ongoing processes and procedures followed at work; entrance into a fresh market and production of unique product (Van de Ven, 1986; Amabile, 1988). Collaboration of newly gained knowledge and previous understanding can lead to creation of novel ideas which further results in providing solution for problems and enhancement in performance. Kanter (1988) advocates a term called 'kaleidoscopic thinking' which means that inception of a new idea frequently encompasses reorganizing already held knowledge.

When idea has been generated the next step of promoting it becomes evident. Majority of newly introduced ideas need to be publicized because they are not aligned with the previous procedures and processes (De Jong and Den Hartog, 2010). Despite of the fact that an idea is apparently able to enhance the current performance to level at which it is needed to be, still it is unresolved that whether that idea would be able to produce more benefits than the cost incurred on it or the opposition faced while promoting it (Kanter, 1988). To deal with such situation the advocator of idea highlights those people who have informal role in organization and ask them to push the idea over the obstacles coming in the way of implementation (Shane, 1994). Promotion of idea incorporates identifying encouragement, establishing alliances by communicating keenness and belief about the triumph of the innovation while being committed and involving suitable people (Howell, Shea & Higgins, 2005).

At the final stage of innovative work behavior implementation of idea takes place. Substantial attempt and goal-oriented stance is required to make an idea turn into reality. Innovation should be part of daily routine and consistent work process only then an idea could be considered that it is implemented (Kleysen & Street, 2001). Including behaviors such as producing an innovative product or standard

operation procedures while putting them to test and altering them according to need (Kanter, 1988).

Brown et al. (2005) defined ethical leadership as the exhibition of normatively suitable behavior by individual actions and mutual relationships, and publicizing such behavior to followers through bi-directional exchange of thoughts, fortify and taking decision. This definition encompasses both aspect of ethical leadership one is related to person who is managing his work in such a way that reliability, selflessness, uprightness, righteousness and honesty are reflected in his work (Brown and Trevino 2006). Second aspect of ethical leadership is about a person who's ethical and moral values are not just limited to himself but to others as well by two-way communication and results in fostering ethical behavior in its followers as well (Trevino and Brown 2004). Liao and Chuang (2007) used a term a "discretionary stimulus" which means the reaction or response is based on the person who is being exposed to some external factors which in this case is the perception of ethical leadership that how he apprehends the actions and behavior of his leader. Bandura (1977) proposed social learning theory in which he advocated his point of view that followers learn from their leader and in this process the leadership can shape its followers because they believe that their leaders are trustworthy appealing role model. Same is the case with ethical leadership. Taking this one step further a Meta-analysis conducted by Ng and Feldman (2015) came up with the results in which ethical leadership, orientation and behavior like organizational citizenship behavior, work performance, workplace recognition, consistency and job satisfaction can be seen positively interrelated with each other. From this it can be deduced that positive effect of ethical leadership is not limited to ethical outcomes in leader but it is also extended further De Jong and Den Hartog, (2010).

When an individual takes action in introduction and practical implementation of new idea in production, standard operation procedures and processes he might face difficulties, hurdles, challenges, resistances and a feeling arising in itself that whether the decision he is going to take will give more benefit than he cost. This situation shows that ethical leadership which supports its followers and takes responsibility while giving reward any positive contribution can result into fostering

innovative work behavior (Brown and Trevin'o 2006).

In the light of former researches, the ethical leadership behavior (Zhu et al. 2004) includes: the conduct of ethical leader is reflection of their moral value, mission and vision (Kanungo and Mendonca 1996). Clarity about what is accepted behavior and what is not, reward on performing well and punishment on bad performance (Trevino et al. 2003). Trustfulness, openness and integrity related to ethical standard are basics of bidirectional communication occurring between leader and follower (De Hoogh and Den Hartog 2008). It also includes reward system (Brown et al. 2005) and expected behavior at workplace (Brown and Trevino 2006). Reinforcement for betterment in followers (Mayer et al. 2009), include focus on followers (Resick et al. 2006), affection filled behavior at workplace with care and respect for the followers (Zhu et al. 2004) and importance (Brown et al. 2005), improving the factual job attributes of their subordinates by enhancing importance of job and freedom (Piccolo et al. 2010).

An extensive mass of prevailing literature related to ethical leadership mostly expresses that ethical leadership's effect on the follower's behavior and resultant outcome such as job satisfaction is based on the social exchange and social learning process (Brown and Trevino 2006). On the other hand, when a follower senses that leader is not ethical, does not bring some positive change at workplace and can't be trusted, he stops to contribute inform of new ideas and does not take risk of proposing something with which leader does not agree (De Jong and Den Hartog, 2010). In addition to this, ethical leadership differentiate themselves from others on the basis of bidirectional communication in which they listen to the concerns and point of view with tolerance (Martins and Terblanche 2003). Ethical leadership which focuses humans is intended to regard innovative thinking of follower, self-esteem and disposition of subordinates (Ciulla, 2004) through provision of chances to gain skills and knowledge related to task performed at workplace. This helps them to get themselves placed on the appropriate designation which suits their abilities (Zhu et al. 2004). Eventually they will be motivated to put all their abilities and attributes for performing at workplace; this will lead to attainment of latest knowledge, attributes, expertise and competencies to innovate and

there are more chances that employee will put effort in innovating procedures and process at work.

Furthermore, the subordinates of ethical leader are granted freedom and liberty in taking decisions at workplace (Oke et al. 2009), the freedom involves authority to plan working hours according to individual's suitability thus giving more controlled tasks at workplace (Piccolo et al. 2010). In addition to this, freedom lets them to experience low restrictions at workplace which may cause them to stop promoting, advocating and introducing new ways of performing tasks. Moreover Javed et al.(2017) established an important linkage between inclusive leadership and innovative work behavior. But the most relevant and significant study to be referred in this regard is Tu & Lu(2013). According to findings of this study ethical leadership and innovative work behavior are directly associated with each other. After consulting and examining results from above studies, following hypothesis is proposed.

H1: ethical leadership is positively and significantly associated with Innovative Work Behavior

2.2 Thriving at Work as Mediator between Ethical Leadership and Innovative Work Behavior

In order to achieve sustainable performance and competitive advantage, organizations have to manage workforce. The current environment requires organizations to be better than their competitors and focus should be on acquiring latest knowledge because knowledge based services are high in demand (Fritz, Lam, & Spreitzer, 2011; Prem, Ohly, Kubiceki, & Korunka, 2017). Thriving at work is a mental state in which individual encounters both sense of learning and vitality; learning relates to acquisition of latest knowledge and vitality is about being energetic in doing so (Spreitzer, Sutcliffe, Dutton, Sonenshein, & Grant, 2005) thriving helps to cope with many negative outcomes at workplace like absenteeism which can

be outcome of sickness, burnout, desolation, detachment and stress. According to Forbes (2013) and Gallup (2013) absenteeism can incur loss of \$85 billion yearly to organizations. Latest research indicates that thriving at work can be linked with number of organizational outcomes, like commitment at organizational level, satisfaction at job, low level of stress and better performance across numerous industries (Gerbasi, Porath, Parker, Spreitzer, & Cross, 2015).

It has been observed that thriving at work gives rise to many vital outcomes at organizational level like health condition of employee and performance. (Wallace, Butts, Johnson, Stevens, & Smith, 2016)

The conception of thriving is vital and pertinent because it acts as a modifying operation that supports employee in steering and altering work context in order to elevate their own evolution (Spreitzer et al., 2005). Thriving has been observed to give rise to many significant organizational outcomes such as low absenteeism, low burnout, higher motivational levels and most important higher level of innovation (Paterson et al., 2014). Spreitzer et al. (2005) did an influential work in which he differentiated thriving from other related constructs like resilience. The researcher confessed that these two constructs share some communal characteristics and claimed that these two constructs are significantly divergent in numerous manners. The first difference is that resilience focuses on ability of an individual to bounce back or recover in unfavorable and unpropitious circumstances, whereas thriving is not related to unfriendly and adverse situation, it can occur or happen at any situation. People can encounter acquisition of latest knowledge and liveliness at any stage. The second difference is that resilience encompasses someone's capacity to cope up with unlucky and adverse situations while recovering from unanticipated incidents. Conversely, thriving emphasis on favorable cognitive encounter of acquisition of latest knowledge and focus on improving and evolve at workplace. It is also observable from empirical proofs that thriving is discrete from other associated constructs such as; proactive personality, unfavorable and favorable effect (Porath et al., 2012). Even if the situation is not in favor of employee and things are not working fine if the context is filled with suitable resources and motivating factors (Spreitzer et al., 2005).

Spreitzer and Porath (2014) are of the opinion that thriving is a suitable personal encounter that supports individual to apprehend in what actually they are doing and in what manner they are doing their work-related tasks. Moreover, is it facilitating enhancement in their task performance while focusing on comfort at performing those tasks.

Level of depression and fearfulness will drop when employee will feel alive and full of energy while performing job tasks (Spreitzer et al., 2012). This state further leads to better psychological and apparent health (Keyes, 2002). The reason behind this positive effect is that favorable experiences like vitality authorize person to be physically tougher in difficult conditions (Porath et al., 2012). Physiological health experiences improvement when feeling of accomplishment and learning prevails. Mental and physical health of an individual shows a significant relation with learning at workplace (Ettner & Grzywacz, 2001). It is evident that thriving at work has a positive relation with health (Porath et al., 2012).

It is important to differentiate thriving as a construct from other construct which are related to innovation before the relationship between thriving at work and innovative work behavior is discussed. That one vital mental state investigated in previous studies is the force that enlivens behavior (Latham & Pinder, 2005). There is a common characteristic of both construct (motivation and thriving) i.e. vitality which is a task oriented behavior which means learning during performing tasks at workplace. The basic difference between both construct is that in thriving employee learns and feels good because he enjoys learning. On the other hand, intrinsic motivation is based on reward which is an external source. The difference between both is internal and external push. According to Sonenshein, Dutton, Spreitzer and Sutcliffe (2006) it has been observed that sometime notion of thriving demonstrated intrinsic motivation which means that people were more focused and motivated about content of their work while taking care of personal relationship at workplace, in some situation the notion of thriving was based on acknowledgement and attainments. A highly efficient and high performing business entity must have innovative work behaviors as a regularly exhibited behavior. Focus

on innovation is more essential in organizations with knowledge as core competency where intangible assets have more significance than tangible ones (Carmeli & Tishler, 2004). According to Carmeli & Spreitzer (2009), those intangible assets outperform tangible ones by doing more with fewer resources and play a predominant role in growth and performance of organization. Because of the day by day inclining pressure on organizations to enhance their intangible assets to compete, organizations have started to expect innovative work behavior from their irrespective of their job roles and position in hierarchy. The work nature and positioning makes it easy for ground level employee to highlight chances for innovation and improvements in procedure and process because they are in direct link with customers. Their ability is far better than upper tier managers and those who have been formally appointed to this task. Without any doubt an important factor that contributes in organizational life span is the creative destruction. Thriving is a combination of learning and vitality which mean it has two elements; this dual element composition of thriving at work makes it distinct from other form of favorable organizational outcomes. To understand this phenomenon the example of flourishing and thriving can be helpful (Diener et al., 2010).

Beginning of the innovation process is the initiative of workers who are at grass root level having more knowledge about transformations and changing trends in massive markets (Foster & Kaplan, 2001) these workers have the ability to propose new ideas and further lead to implementation. It can be easily being apprehend from this situation that it is really important to investigate and explore those factors which can play role of motivator for innovative work behavior. It is well known in case of a cognitive construct of creativity that what are those reasons behind effect on it because of the procedures, processes and structures (Ward, Patterson & Sifonis, 2004). In the light of previous researches, it can be said that creativity is the combination of two traits, first one is wisdom and the second one is intelligence, combination of both leads to expression of creativity (Sternberg, 2001). In addition to this, in some studies, creative self-efficacy (Carmeli & Schaubroeck, 2007), openness to experience (McCrae, 1987), unconscious thought processes (Martindale, 1981), has also proved to be involved in enhancement of

innovative work behavior. If the role of affect is considered there are two categories, first one is negative effect, researches in which role of negative affect has been proved are Zhou & George (2001); George & Zhou (2002) and researches in which role of positive effect in enhancement of innovative work behavior has been proved are Isen, Daubman & Nowicki (1987); Amabile, Barsade, Mueller, & Staw (2005) these finding highlight the significance of explanatory mechanism.

In old literature there had been detailed and sound explanation related to role of leadership style, belief of follower on leader and controlling strategy of the leader (Mumford, Scott, Gaddis, & Strange, 2002; Tierney, Farmer, & Graen, 1999) and role of environment at workplace (Gilson & Shalley, 2004; Hunter, Bedell, & Mumford, 2007) influence personal and group level innovative behavior and creativity.

According to Bakker, Schaufeli, Leiter, & Taris, (2008) there are some commonalities between work engagement and thriving at work, as far as conceptual construction of both variables are concerned. Both variables are influenced by presence of vitality factor which in other word can be described as energy but in work engagement instead of learning there is dedication which is regarded as a positive experience for employee with effect of absorption as supportive mechanism. Inner signals are found helpful in providing an insight about progress made in the right direction, and these inner signals are furnished by presence of vitality and learning which act as self-regulatory mechanism at job (Porath et al., 2012). In addition to this, thriving performs the role of altering role by supporting employee to re-vamp according to their environment at workplace, moreover it also facilitates in individual progress and advancement. Employees experiencing thriving are more assumed to exhibit better work efficiency as well as achievement of long term goals (Spreitzer et al., 2005). Significantly, one of the precepts of thriving is vitality and it is nearly associated with the construct of intrinsic motivation and it is also being investigated as a crucial component in relation with creativity (Amabile, 1996) as well as innovation (Anderson et al., 2009). In the research conducted by Carmeli, Dutton, & Hardin (2015) there are three methods by which innovation can be achieved through thriving; first one is via attainment of new knowledge

and progress at workplace, at that time are at most suitable situation to identify and execute those plans which bring betterment at work processes, innovative behavior is based on skill which further are dependent on learning at work (Amabile, 1998). In addition to this, learning also guarantees the accomplishment of efforts made in innovation (Carmeli & Spreitzer, 2009). Secondly, exploration and practical use of novel process of performing work related tasks becomes important part of work when worker is thriving at work. Lastly, quest of creative solution and elaborative cognitive thinking gets support from favorable emotions and reinforcing moods (Hirt, Levine, McDonald, Melton, & Martin, 1997). Fredrickson (2001) argued that creation of social resource with combination of psychological resource is dependent on favorable emotions and supports in employees to be further innovative. Former research work based on empirical evidence suggests that there is a positive linkage between thriving at work and innovation and positive innovative organizational outcomes (Walumbwa, Muchiri, Misati, Wu & Meiliani, 2017).

H2: Thriving at work mediates the relationship between ethical leadership and Innovative Work Behavior

2.3 Openness to experience as moderator between Ethical Leadership and Thriving at Work

McCrae & Costa (1987) proposed Big Five Personality Traits; one of those is Openness to Experience. Trait under discussion is the combination of comprehensive features like aesthetic interest (artistic), imagination (fantasy), creativity (unconventional) and intellectual curiosity (idea generation) these aspects make openness to experience more closely related to learning and vitality (LePine, Colquitt, & Erez, 2000). Barrick & Mount (1991) defined open personality holder person as someone who thinks comprehensively, authentically, eagerly and insightfully. Those subordinates who are high at openness to experience when come under the supervision of a leader who can be trusted, then because of the preexisted openness to experience, they tend to exhibit more creativity than before Hildenbrand, Sacramento,

and Binnewies (2018). Klein and Lee (2006) are of the opinion that being inventive, imaginative, enlightened, genuine and astute are essential characteristics for being an individual with openness to experience as personality trait. The ability to handle unstable and uncertain situation and efficacy to encounter demanding events is due to their mental state of being extremely stimulated (Kaufman, 2013).

In the light of study conducted by Dweck (2012) workforce can be categorized on the basis of the apprehension of source of their skills and abilities. Rawwas, Arjoon, & Sidani (2013) took it step further and identified those categories and highlighted their understanding about their source of being affective. According to first category of workforce their abilities and skills are inherent and inbred; those who have such mind set are categorized as individuals with a mindset which is restricted and not having many chances of progress and improvement. On the other hand, the other category of workforce who have the understanding that the abilities they possess are result of the investigation, consistency and enlightenment these types of people are presumed to fit in the category of those who are receptive and have evolving attitude. People of this category do not get frightened from unpredictability nor from risky situations and the reasons behind this sort of attitude are optimism, acceptance to their faults, ability to face risks, understand reasons behind failure and their creativity (Hildenbrand, Sacramento, and Binnewies 2018).

Researchers and scientist with an eye on upcoming events hold the opinion that effective and influence a leader makes on its followers is also dependent on the personality and attributes the followers hold (Fiedler, 1964). Till now investigation related to associates and influence made by ethical leadership are directly related to numerous worker's stance and conduct like OCB (organizational citizenship behavior), level of trust and gratification the worker has with leader, to what extent leader is effective and consistency (Kalshoven et al., 2011; Den Hartog and De Hoogh, 2009; Kalshoven and Den Hartog, 2009)

In order to insights about the linkage existing between transformation leadership and burnout, and determine that whether employees are getting same benefit from transformational leadership in form of lower the burnout, personality of the

workforce has been considered as the determinant factor or it can also be said as boundary condition (Hildenbrand, Sacramento, and Binnewies 2018). Extending this work further in this research we have considered the role of personality in enhancing the effect of ethical leadership in increasing thriving at work which further leads to innovative work behavior. More the person higher at openness of experience more the effect of ethical leadership will be transformed into enhancement of thriving at work.

Lahroodi (2007) defined epistemology as the further division of philosophy that evaluates conflicting connotation regarding morality, soul, benchmark, foundation and role of knowledge. Workers who understand and apprehend epistemic virtues are expected and are able to hold suitable point of views of virtuous awareness and are more comfortable in handling conditions related to ethical dilemma which is based on their personality attributes, rationality, competency and knowledge. Epistemic virtues are based on ability for fairly counter and tackle differently opposing beliefs and point of views without any bias or association, originality, cautious reasoning, interest and higher acceptability (Rawwas, Arjoon, & Sidani, 2013; Riggs, 2010)

In order to adopt epistemic virtues, the individual must possess openness to experience as a significant and vital personality trait. Being an open minded individual it is important to understand the element on unexpected behavior and uncertainty of other's reaction in certain situations; people can be right but can also be wrong (Riggs, 2010). Openness is all about being flexible and understanding; including readiness to attentively listen other's point of view, readiness to grasp what others are trying to express, preparedness to receives others opposing views and if those opposing views are suitable then replacing them with previous ones (Cohen-Cole, 2009).

Openness to experience is one of those five elements which constitute the formation of personality and it is regarded as the most closely learning related trait of personality (LePine, Colquitt, & Erez, 2000). In addition to this, it collaborates with transformational leadership in combination with thriving at work in order to evolve and prosper(Hildenbrand, Sacramento, and Binnewies 2018). In the

current study openness to experience in combination with ethical leadership and thriving at work leads to innovative work behavior. Workers who have openness to experience as their personality trait are widely recognized as people who are agog, imaginative, resourceful, unorthodox and willing to gain latest knowledge. Conversely, individual who do not have openness to experience as their personality trait are more tilted toward performing those tasks which are traditional while trying to hold on to conventional job timing such as going to office at 9 and leaving it at 5, and prefer those tasks which are not much of based on personal assessment and are extremely rigid with clearly defined standard operating procedures (Duff, Boyle, Dunleavy, & Ferguson, 2004). The arguments in study are based on affective event theory, according to which individual difference determines the effectiveness of resources available.

In their latest work Javed et al., (2017) used nitrogen productivity concept and phytology-growth theory in combination to elaborate the role of inputs, catalyst and output in a simple and interesting way. We have adopted the same way to explain the role of openness to experience as catalyst between input which in our case is ethical leadership and output in our case is thriving at work.

The inquiry which needs to be carried on is to get answer of the question that what's the reason behind the moderating role of openness to experience and how it enhances the relationship between ethical leadership and thriving at work. The understudy moderation effect can be easily explained and apprehended by including two concepts; one of them is phytology-growth theory and the second one is nitrogen productivity concept. Further elaboration is carried by incorporating a process with three steps which are input which in our case is ethical leadership, second is catalyst which in our case is openness to experience and output is thriving at work. Role of openness to experience between ethical leadership and thriving at work can be associated with the enhancement of plant development, the role of addition of more water and nitrogen decides the relation between input and output (Ågren & Franklin, 2003).

Necka and hlawacz (2013) investigated those elements and condition which can result in enhancement of exhibition of creativity in artists. In the light of their

research it can be said that artists have a different kind of unconventional personality which makes them to investigate and commence many pursuits and tasks which leads them to viewing the world from different angle.

To explain how individual respondent differently it is important to understand what idiographic approach is. In Greek language "idios" means "individual", "own" or "personal". Researchers working in this domain are in quest of finding those factors which make us different from each other (McLoed, 2007). Keeping in view the definition of idiography, Halbesleben and colleagues (2014) argued that employees respond to resources in an unusual pattern, the reason behind this unlike response is the compatibility between the resource and the personality that employee has.

In addition to this Ten Brummelhuis & Bakker (2012) also carried the same understanding of key resources and discussed management resource, by putting this management resource at work employee decides how he is going get the benefit from those resources by putting them to efficient use. Keeping in view these literary finding and contributions we build our argument that openness to experience is the determinant factor which decides that to what extent employee is going to get benefit from ethical leadership in thriving at work. Employee having high level of openness to experience would be able to efficiently transform ethical leadership effect into thriving at work. Ethical leadership is the exhibition of culturally and normatively accepted behavior by the leader through setting a personal example or through communicating formally and encouragement of such behavior to subordinates by dyadic communication, supplementation and involvement in taking decision (Brown, Trevio, & Harrison, 2005). In addition to this, leadership boosts the trust of follower in leader by giving rise to an atmosphere and climate which transmits positive vibes (Ng & Feldman, 2015).

Perry et al., (2010); Gooty, Gavin, Johnson, Frazier, & Snow, (2009) argued that the reaction of the employees towards leadership is not uniform, some take it as positive effect on their behavior and others don't. It is expected that employees who are open to experience have more chances to get gain from ethical leader as supervisor, the reason behind this gain is that employee who are open to experience

are achievement oriented, like to get indulged in intellectual debates, accept change and passionate learner (Komarraju, Karau, & Schmeck, 2009).

Compatibility between ethical leadership as an event occurring within boundary of organization and the personality of the employee accustomed with trait of openness to experience leads to enhanced thriving at work. Conversely employees who are not open to experience do not enjoy being getting involved in though provoking discussion and like to stick to conventional work routine (Costa & McCrae, 1992).

In accordance with previously mentioned finding theories and arguments we can say that when ethical leaders are determined to exhibit importance for morality and ethical values, willing to highlight transparent ethical standards, exhibit honesty and show that they can be trusted, keep their actions consistent, fulfill their promises, act fair unbiased while assigning tasks, acknowledges mistakes and takes responsibility, puts needs of others above his own interest and stays objective while evaluating members performance, these reasons lead to development of a relation enriched with trust, instead employee avoiding constructing of strong bond. Such mental state leads to learning while being vital and energized at workplace. Flexibility to accept own mistake, giving space to other's opinions and being a good listener additionally, in short openness to experience affirms the relation between leader and follower. In the light of literature previously discussed we came up with this hypothesis.

H3: Openness to experience moderates the relation between ethical leadership and thriving at work

2.4 Theoretical framework

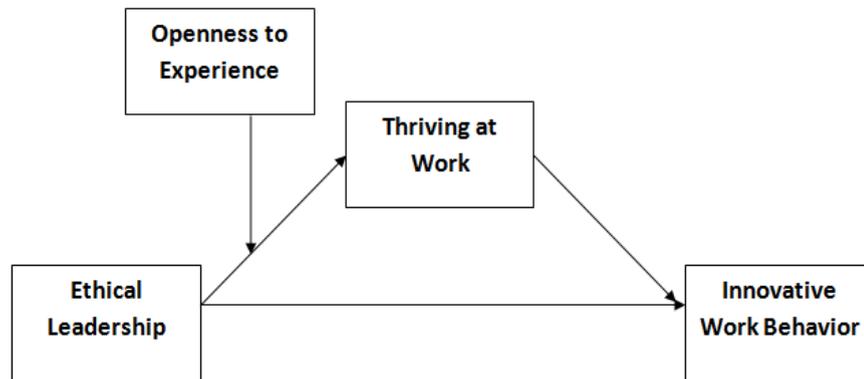


FIGURE 2.1: The Conceptual Model

Following hypothesis are being inferred by this conceptual framework

H1: Ethical leadership is positively and significantly associated with Innovative Work Behavior.

H2: Thriving at Work mediates the relationship between Ethical Leadership and Innovative Work Behavior.

H3: Openness to Experience moderates the relation between Ethical Leadership and Thriving at Work.

Chapter 3

Research Methodology

This section of thesis will address the methodological approach taken to complete this quest. The major components of this section include description of population, sample size, instruments used for measurement, data analysis procedure and statistical tools adopted.

3.1 Nature of the study

The intention of current investigation was to check the relation among ethical leadership and innovative work behavior, so it falls under the category of causal study. Further this study also accounted for testing the role of thriving at work (mediator) between ethical leadership and innovative work behavior. Current study also addressed the function of personality as a moderator so this investigation included openness to experience (moderator) between ethical leadership and thriving at work. Source of data collected in this study were software houses of Islamabad and Rawalpindi, questionnaires were used in this collection which took almost four months, which were from October 2017 to January 2018. Thus, the population in this scenario is Software Houses of Islamabad and Rawalpindi. The data was only once collected in this study which makes it cross sectional in nature.

The current undertaken study is empirical study in nature because it uses empirical evidence. Empirical evidence is that evidence which is gathered by Questionnaires.

In empirical evidence collection each respondent taking part in research is called unit of analysis and when all unit of analysis are combined they are called population. The determinants of selection of unit analysis which can be organization or any individual are what the nature of study is and what is objective of study. In our case it was not possible to get data from whole organization so we have collected data from individuals working in software houses across Rawalpindi and Islamabad.

3.2 Population and sampling

As stated by Castillo (2009), individuals or organization having homogenous attributes form a group which is further named as population of study. Total numbers of respondents involved in this study were 204 who were working in software houses of Islamabad and Rawalpindi. Notable software houses involved in this study with their respective share in total sample size were Eziline Software House Pvt.Ltd. (22%), Ideatech Software House (11%), MASIA Software House (18%), and Solution Player Pvt. Ltd (24%). As far as gender of respondents was concerned, 139 were males which are 68.1 of total sample and 65 were females which are 31.9 % of total sample size.

The theme behind this exploration was to check the effectiveness of the relationship among ethical leadership on the innovative work behavior of employees, while taking in account personality difference of employees (which were respondents) and role of thriving at work as mediator. innovative work behavior is the visible part which is reflected in one's work attitude and work performance. so, it was important to get it rated by supervisors instead of main respondents themselves. because if responses related to innovative work behavior were also given by respondents then there were chances of self-reporting bias. all variable except innovative work behavior were rated by respondents.

TABLE 3.1: Population and Sampling

Name of Software Houses	Number of Respondents
Eziline Software House Pvt Ltd	45
Ideatech SoftwareHouse	23
MASIA SoftwareHouse	37
Software Linkers	24
Purgesol	25
Solutions Player Pvt.Ltd.	50
Total	204

3.3 Sampling technique

In this research the technique used for data collection was convenient sampling technique. Convenient sampling technique is a non-probability technique. By using this technique researcher collects sample from those respondents which are in its reach and easily accessible. Convenient sampling technique has been used by researchers for generations, the reasons of it being so popular is its ease and cost effectiveness. In addition to this it also takes less time and less effort. These attributes make it more attractive and suitable for researchers. Despite being this much popular it also has a huge disadvantage of biasness involved in selection of sample which limits its results to sample involved in study.

Data were collected by questionnaires which were distributed by hand to different software houses in Islamabad and Rawalpindi. Respondents were guaranteed the secrecy and confidentiality of responses they were providing. In addition to this it was also made clear that collected data will only be used for educational purposes.

Questionnaires were distributed among respondents by hand and they were given the introduction related to objective and purpose of research to minimize errors. They were given general guidelines about usage of Likert scale and were told how to express themselves in the form of categories given in Likert scale. 300 questionnaires were distributed out of which 204 were returned making 68% response rate.

3.4 Instrumentation

In the intended research questionnaire was composed of items from four different variables. items from four variables which were ethical leadership, openness to experience, thriving at work and innovative work behavior contributed to form a questionnaire which was distributed to our sample for responses. responses against ethical leadership, openness to experience and thriving at work were given by employees and responses against innovative work behavior were given by respective supervisors.

3.4.1 Ethical Leadership

A 15-item scale developed by Yukl et al. (2013) was used to measure of Ethical leadership. Items in the scale covered various aspect of leader's behavior encompassing ethical and moral values. It also collected the responses from employee related to the ability of supervisor to communicate ethical standards. Responses against the honesty of supervisor were also collected. Items included in scale are My supervisor shows a strong concern for ethical and moral values, My supervisor communicates clear ethical standards for members, My supervisor sets an example of ethical behavior in his/her decisions and actions, My supervisor is honest and can be trusted to tell the truth, My supervisor keeps his/her actions consistent with his/her stated values ("walks the talk"), My supervisor is fair and unbiased when assigning tasks to members, My supervisor can be trusted to carry out promises and commitments, My supervisor insists on doing what is fair and ethical even when it is not easy, My supervisor acknowledges mistakes and takes responsibility for them, My supervisor regards honesty and integrity as important personal values, My supervisor sets an example of dedication and self-sacrifice for the organization, My supervisor opposes the use of unethical practices to increase performance, My supervisor is fair and objective when evaluating member performance and providing rewards, My supervisor puts the needs of others above his/her own self-interest and My supervisor holds members accountable for using ethical practices in their work.

3.4.2 Openness to Experience

A 10-item scale developed by John & Srivastava (1999) was used to measure openness to experience. This scale measured the effect of personality as a moderator on the outcomes of our model. Selected scale deals with the ability of an individual to create new ideas and be curious about different things while deeply thinking. In addition to this, involvement in music and artistic activities was also taken in account by this scale. Items included in scale are I see myself as someone who is original, comes up with new ideas, I see myself as someone who is curious about many different things, I see myself as someone who is ingenious, a deep thinker, I see myself as someone who has an active imagination, I see myself as someone who is incentive, I see myself as someone who values artistic, aesthetic experiences, I see myself as someone who prefers work that is routine, I see myself as someone who like to reflect, play with ideas, I see myself as someone who has few artistic interests and I see myself as someone who is sophisticated in art music.

3.4.3 Thriving at work

A 10-item scale by Porath et al., (2012) was used to measure thriving at work. This scale measured the effect of thriving at work (mediator) and focused on the ability of an individual to learn and be happy at the same time. The scale developed by Porath et al., (2012) covers two dimensions i.e. learning and vitality. Learning focuses on getting better with each coming day and Vitality concentrates on being lively and energized in doing so (Paterson, Luthans, & Jeung, 2014). Each dimension has 5 items and one item each of those dimensions was reversed. Items are At work, I find myself learning often, At work, I continue to learn more and more as time goes by, At work, I see myself continuously improving, At work, I am not learning, At work, I have developed a lot as a person, At work, I feel alive and vital, At work, I have energy and spirit, At work, I don't feel very energetic, At work, I feel alert and awake and At work, I am looking forward to each new day.

3.4.4 Innovative Work Behavior

Innovative Work Behavior was measured by using 9-items scale developed by Janssen's (2000). This scale covered 3 dimensions which covered generation of idea, its promotion and realization. All of these dimensions had 3 items each. Items are Employee creates new ideas for difficult issues, Employee searches out new working methods, techniques, or instruments, Employee generates original solutions for problems, Employee mobilizes support for innovative ideas, Employee acquires approval for innovative ideas, Employee makes important organizational members enthusiastic for innovative ideas, Employee transforms innovative ideas into useful applications, Employee introduces innovative ideas into the work environment in a systematic way and Employee evaluates the utility of innovative ideas.

3.5 Data Analysis Tools

SPSS version 21 was used to analyze data. In order to get the true understanding of what data is trying to say we had to run several tests. The test undertaken to analyze the data were correlation, mediation, regression, moderation and reliability. Value of Cronbach alpha was calculated against each variable by using reliability test. Linkages and relations between variables were calculated by using correlation test. Dependency between variable was investigated by using regression analysis. Moderation and mediation was tested by taking in account method put forth by Preacher and Hayes.

3.6 Sample Characteristics

Data was analyzed on the basis of gender which gave us the percentage of males and females involved in the study. According to the results total numbers of respondents were 204 out of which 139 were male and 65 were female. If we see

results in the form of percentage then there were 68.1% male and 31.9% female which shows that male respondents were higher in number.

As far as frequencies on the basis of age are concerned age of major proportion of respondents are between 26-30 years, and a small fraction of respondents was above 40. 61 respondents were between 20-25, 86 were between 26-30, 46 were between 31-35, 10 were between 36-40 and only one respondent was in category of 40 and above.

According to the frequencies based on education a large number of respondents have bachelors as their last degree very few were above masters and metric. Going in detail, we can see that number of employee with metric as their last degree were 9, number of employee with inter as their last qualification were 27, employee with bachelors as their last qualification were 93, employee with masters as their last degree were 70 and at last there was only five employees with education higher than master.

TABLE 3.2: Sample Characteristics

	Frequency	Percent	Cumulative Percent
Gender			
MALE	139	68.1	68.1
FEMALE	65	31.9	100
Age			
20-25	61	29.9	29.9
26-30	86	42.2	72.1
31-35	46	22.5	94.6
36-40	10	4.9	99.5
Above 40	1	0.5	100
Education			
MATRIC	9	4.4	4.4
INTER	27	13.2	17.6
BACHELOR	93	45.6	63.2
MASTER	70	34.3	97.5
ABOVE MASTER	5	2.5	100

3.7 Reliability of scales

Under given tables depicts the reliabilities of different scales used in this research. In order to find these values of Cronbach Alpha reliability analysis through SPSS was done.

TABLE 3.3: Reliability of Scales

Variables	Cronbach's Alpha	No. of Items
Ethical Leadership	0.968	15
Openness to Experience	0.728	10
Thriving at Work	0.814	10
Innovative Work Behavior	0.826	9

The objective behind running a reliability test is to check whether the scale is reliable or not. In other words, it shows that whether scale is consistent with the results or not. The value which determines the reliability of the scale is Cronbach Alpha which ranges from Zero to One (0-1). As this constant move nearer to 1 it means higher reliability and as it moves near to 0 it means low reliability. The adequate and acceptable level of Cronbach Alpha is 0.7. If any variable has 0.7 as value of Cronbach Alpha it means that results are reliable.

Chapter 4

Results

This study aimed at studying the influence of ethical leadership on innovative work behavior with the mediating effect of thriving at work and moderating effect of openness to experience among ethical leadership and thriving at work. this chapter covers the relation of these variables are tested by using tests and descriptive statistics. Most notable tests are regression analysis, correlation, and moderation and mediation test.

4.1 Descriptive Statistics

The table which is presented as an output of running descriptive statistic test gives us a brief overview of data. The results induced from this test are in form of table which is given below which has several columns and rows. Each row and column has its own importance and gives distinct information. In order to understand what these particulars of table tells us, its importance to know what headings of rows and columns showing. For instance, column with sample size as heading shows the number of individuals who have participated in this study. Column with "Minimum" as heading shows the value of least response given by participants. In addition to this, "Maximum" column shows the highest value of responses given by participants. Furthermore, last two columns show the Mean and standard deviation. Mean is used to show the whole data set with a single value. It is

useful when data is very extensive and limited time and space is available to show what data depicts. Secondly, standard deviation tells us that to what extent the member of group or responses deviate from the mean value.

"Sample size" column of the Output tables' shows that total number of respondents involved in this study which are 204. Corresponding values of ethical leadership depicts that "Minimum" value of the responses is 1.4; "Maximum" value of the responses is 4.87 while mean & standard deviation are 3.5 and 0.9 respectively. Similarly, openness to experience has 1 as "minimum" value, 4.8 as "maximum" value while mean & standard deviation are 3.8 and 0.58.

In addition to this, thriving at work had almost same value as of openness to experience with just a difference in standard deviation which is 0.62 in this case. Moreover, Innovative Work Behavior has 1.44 as minimum value and 4.67 as maximum, mean & standard deviation are 3.6 and 0.62087.

Ethical leadership highest level of standard deviation and openness to experience showed least at the same time, while thriving at work showed highest value of mean.

TABLE 4.1: Descriptive Statistics

	Sample Size	Minimum	Maximum	Mean	Std.Dev
Ethical Leadership	204	1.4	4.87	3.501	0.94539
Openness to Experience	204	1	4.8	3.8324	0.58219
Thriving at Work	204	1	4.8	3.8696	0.62134
Innovative Workplace Behavior	204	1.44	4.67	3.6906	0.62087

4.2 Control variables

In this study demographics were also considered so responses related to demographics were also collected. It is obligatory to check the relevance and significance of the demographics variables which are Gender, Age and Education with Dependent Variable which in our case is innovative work behavior. In order to check whether demographic variable influence innovative work behavior or not we run one-way ANOVA analysis. Results we got after running this test are given below.

TABLE 4.2: One Way Anova

Control Variable	F	Sig.
Gender	0.733	0.818
Age	1.041	0.417
Education	1.511	0.066

4.3 Correlation Analysis

Correlation analysis is carried on in order to explore the relation between variables. It shows the relation between the variable irrespective of direction. It only focuses that whether variables are related to each other or not. The condition which is to be applied on variables whose correlation is to be calculated is that they should be continuous variable in nature and they must be measured by using numbers. Correlation analyses come handy when the aim of researcher is to investigate the potential connection among variables. A wrong perspective of correlation analysis has been widely spread that effect and cause is established by it. But this is not true because there are certain other variables which are part of current research and they are present in the environment which can cause a change in the other variable.

Organized change in value of one variable cause a methodological change in value other variable, this condition can only withstand when there is correlation among two variables. This change in value of variable on the basis of change in value of other variable is limited to a specific time limit. Correlation value which is outcome of this analysis depends on the value of both variables and it can be positive and it can also be negative.

There are two conditions in which correlation value can be negative and positive. In first condition when increment in value of one variable results increase in the value of other variable then value of coefficient would be positive. In the second condition when there is inverse relation, in other words increase in variable cause decrease in other's value or decline in value of one variable results increment in value of other variable, then the coefficient of correlation would be negative. Pearson coefficient is measure of the correlation among variables and it ranges from +1 to -1. The more a coefficient is nearer to +1 the more it is positive relation and

the more it is near to -1, more it will be negative relation. 0 value of coefficient indicated no relation.

The given table represents the detailed depiction of relation between variables of the study.

TABLE 4.3: Correlations analysis

Variables	1	2	3	4
EL	1			
OTE	.357**	1		
TW	.355**	.839**	1	
IWB	.704**	.488**	.516**	1

Ethical leadership is significantly and positively associated with thriving at work, the value of coefficient of correlation is $R = 0.355$ and $P < 0.05$, secondly, EL is positively and significantly related with Openness to Experience with a 0.357 as value of coefficient of correlation (R) and $P < 0.05$, thirdly, EL is also positively and significantly related with Innovative Work Behavior as well with the 0.704 as coefficient of correlation (R) and $P < 0.05$.

Openness to Experience is positively and significantly associated with Thriving at work, coefficient of correlation in this case is 0.839 and value of P is less than 0.05. In addition to this, Openness to Experience is positively and significantly related to Innovative Work Behavior with a value of 0.488 (R) and value of P is less than 0.05.

Thriving at work is significantly related with Innovative Work Behavior, the value of coefficient of correlation in this case is 0.516 and the value of P is less than 0.05 ($P < 0.05$).

4.4 Regression Analysis

Regression analysis is also known as predictive analysis and most commonly used method of regression analysis is linear regression. The concept behind the linear regression provides answer to two major questions. First one is about the ability

of independent variables that whether they do justice in explaining the change in dependent variables and the second one is the identification of that those independent variables which explain the significant change in outcome. In addition to this also gives the answer about to what extent the variable explains and direction of estimated represented by beta.

TABLE 4.4: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	38.776	1	38.776	198.41	.000 ^b
	Residual	39.477	202	0.195		
	Total	78.253	203			

a. Dependent Variable: IWB

b. Predictors: (Constant), EL

The former given tables tell about the goodness of model fit, in other words it tells about how well the recorded data responds to the presumed model. Model of fitness explores the difference between the values which are observed and the anticipated values which are part of the questions asked in the model. In the Anova table obtained after running regression analysis the value under the column of Sig. shows the significance of model fit. If this value is less than 0.05 then the model is fit for further explanation and interpretation. If not then model needs to be revisited. In current scenario the F value is significant which shows that anticipated and actual data is not different.

TABLE 4.5: Regression

R ²	Adjusted R ²	B	Sig.
0.496	0.493	0.462	.000

a. Predictors: (Constant), EL_mean

The model summary gives the details about how much variation in the predicted variable has been explained by independent variable. Simple value of R is the actually Pearson coefficient, when it is multiplied by itself we get R Square. In results of current regression analysis, the value of R Square is 0.496 which indicates that almost 50% change in the value of Dependent Variable (Innovative Work Behavior) is explained by Independent Variable (Ethical Leadership).

Secondly, the Value of Beta Coefficient tells about the change in value of Dependent Variable (Innovative Work Behavior) if value of Independent Variable (Ethical Leadership) experiences an increase of 1. The sign with the beta determines the direction of this change, if it's negative then it is decreasing and if it has positive sign then it is increasing. Lastly, the value significant value of significance of Beta value describes that whether it is worthwhile to examine the Beta value or not.

4.5 Mediation Analysis

For the purpose of exploring the mediating role of Thriving at Work, process written by Dr. Andrew F. Hayes was used. In the light of our theoretical framework model number 4 was selected in SPSS and Boot Strap Samples were raised to 5000. In addition to this, Confidence Interval was 95%. From the "Option" tab, "OLS/ML Confidence Interval" was preselected. Furthermore, we selected "Effect Size" and "Total Effect Model".

The results we got from this analysis were evident of occurrence of mediation. Total effect of the independent variable (Ethical Leadership) and mediator (Thriving at Work) on the dependent variable (Innovative Work Behavior) was 0.463 with a standard error was 0.328, while LLCI and ULCI were 0.3976 and 0.5270 respectively.

Secondly, direct effect between Ethical Leadership & Innovative Work Behavior was 0.3914 in size with a standard error of 0.323 with a LLCI of 0.3278 and ULCI of 0.4550.

Lastly, the indirect effect encompasses around the presence of Mediator (thriving at work) between Independent variable (Ethical Leadership) and Dependent Variable (Innovative Work Behavior). The effect size of indirect path passing through mediator was 0.0709 with a standard error of 0.0238 and LLCI of 0.0307 and ULCI of 0.1242. We see that bootstrap confidence interval includes zero or not, this CI gives us a rough idea of population value of indirect effect is. From the results we got it shows that population value is not zero or it's really unlikely to be zero. The indirect effect is most important effect in this part of analysis because

it tells about that whether mediation has occurred or not. In this case the results showed the significance of indirect path i.e. mediation path. This proves our second hypothesis according to which thriving at work mediates the relationship among ethical leadership and Innovative Work Behavior. We see that bootstrap confidence interval includes zero or not, this CI gives us a rough idea of population value of indirect effect is. From the results we got it shows that population value is not zero or it's really unlikely to be zero.

TABLE 4.6: Mediation Analysis

Effect	Effect Size	S.E	LLCI	ULCI
Total Effect	0.463	0.328	0.3976	0.527
Direct Effect	0.3914	0.323	0.3278	0.455
Indirect Effect	0.0709	0.0238	0.0307	0.1242

4.6 Moderation Analysis

In order to find whether moderation is significant or not we used process written by Dr. Andre F. Hayes in which we selected model 1 and bootstrapped our sample to 5000 while confidence interval for confidence level was 95%. This method auto created interaction term which was of Ethical Leadership and Openness to Experience (ELxOTE). The significance of this interaction term was tested with Mediator which is Thriving at work. Result showed that Change in value of R was 0.197 it was significant because the value of p was 0.0020 while value of F was 9.7729. Hence moderation path was significant too.

TABLE 4.7: Moderation Analysis

R² Change	F	Sig
0.197	9.7729	0.0020

Chapter 5

Discussion and Conclusion

5.1 Discussion

According to bill gates, business and information technology are not more a separate phenomenon and in current era they can't be discussed without discussing other. Business is the backbone of any economy; interconnectivity of businesses and globalization is solely dependent on technology which makes Information Technology make or break element for a nation's economy. Milan Kundera in his iconic novel "The Unbearable Lightness of Being" writes that innovating and marketing are the only two functions of business.

This intended research is all about investigating the antecedent of Innovative Work Behavior which is the paramount of an IT services business. Worldwide economies are greatly influenced by this business not just it creates job and taxes for economy but in also providing innovative business platforms in flourishing businesses. An epitomic example of current era is AliBaBa which has opened whole world for Chinese businessmen.

This investigation was about knowing those antecedents which can help Pakistani software industry to develop and exhibit innovative work behavior. Our proposed research model took support of Affective Event Theory as an underpinning mechanism which explained that events happening inside workplace can influence the performance outcomes of individuals based on their dispositions. For this purpose,

we tested the role of Ethical leadership in generation of innovative work behavior-while thriving at work mediated this path and openness to experience moderated the influence of ethical leadership on thriving at work.

The results we got through this research were almost as they were expected relation between innovative work behavior and ethical leadership was significant and the change in innovative work behavior was almost 50% explained by ethical leadership, this was our first hypothesis. The second hypothesis was related to mediating role of thriving at work among ethical leadership and innovative work behavior, this path was also significant. The path between ethical leadership and thriving at work significant, moreover the path from thriving at work to innovative work behavior was also significant. These two significant paths resulted in significance of indirect effect between ethical leadership and innovative work behavior through thriving at work. Third hypothesis was related to moderation of openness to experience which is a personality trait and acted as a differentiating factor among respondents. According to results this hypothesis was also accepted making all paths of the theoretical framework significant and positively associated.

When in an organization leader behaves ethically by upholding ethical values it turns himself into an ethical leader, furthermore ethical leader develops a feeling a trust in follower about leader which results into exhibition of innovative work behavior. This of exhibition innovative work behavior becomes a daily routine of the employee when they see that their leader can be trusted and they will be regarded for their innovative and out of the box thinking.

Our finding related to first hypothesis which was about the relation of ethical leadership & Innovative Work Behavior is consonant with the research of Tu & Lu, 2013. In which they said that ethical leadership was a vital predictor of innovative work behavior at individual and group level as well. De Hoogh and Den Hartog (2008); Brown and Trevino (2006) emphasized on the role of ethical leader and put forth the idea that ethical leadership effect is not just limited to organizational setup but also societal level, according to them when followers are familiar with the job significance they will be more willing to go extra mile in innovative thinking which will lead organization to achieve its goals. Attributes such as selfness,

sincerity and righteousness are expected from ethical leader to be displayed (Gardner et al. 2005), this exhibition leads to generation of a state in which follower feels psychologically protected resulting in expressing their innovative thinking and unique ideas, while transmitting their knowledge with their colleagues Kalshoven et al.'s (2011) also asserted the importance of ethical leader in enhancing follower's innovative abilities.

According to Martins and Terblanche (2003) Ethical leaders differentiate themselves from other by carrying out a two-way communication, giving chance to follower to become vocal and express themselves resulting in generation of ideas which can contribute in improvement of procedures followed at work and existing processes.

Many other studies were of same view related to linkage among ethical leadership & Innovative Work Behavior such as De Hoogh and Den Hartog (2008); Oke et al. (2009); Piccolo et al. (2010).

According to Zhu et al., (2004) ethical leaders help employee to learn new skills and develop themselves by giving them confidence which will eventually translate into Innovative Work Behavior. De Hoogh and Den Hartog (2008) specifically highlighted the role of self-determination and authority over decisions allow employee to experiment new ideas.

Our second hypothesis was related to role of thriving at work. We proposed in our research that thriving at work mediated between ethical leadership and innovative work behavior. Carver (1998) stated that thriving is said to be a psychological state in which a person experiences development in a constructive frame of mind which enables individual to enjoy and feel lively. Thriving at work as a multifaceted construct encompassed two aspects; one is learning and other one is vitality. According to this study the role combination of these two factors motivated employee to indulge in innovative work behavior while role of leader stayed positive by giving trust and confidence to follower. Our statistical results showed that relation among ethical leadership and thriving at work is significant. The second relation in same path which is between thriving at work and innovative work behavior is also significant which results in significant mediation between ethical

leadership and innovative work behavior through thriving at work. According to Chen and Kanfer (2006, p. 252), with any doubt leadership is most influential and important contextual factor that may facilitate emergent states, such as collective thriving at work.

Chen and Kanfer (2006) are of the opinion that one of the most important and vital influencer in the environment in fostering and arising states like thriving at work is presence of leadership. It is argued that when followers are given chance by the leader to flourish and prosper eventually they are naturally tilted toward learning a wide variety of knowledge while keeping their interest high. This interest part contributes to vitality which in combination with learning gives rise to thriving at work.

Spreitzer et al., (2012) also hold almost same opinion, according to them encouragement and chances given by leadership to followers for developing and learning help them to thrive at work which is a positive state. In addition to this they also found out that two-way communication for engaging employees and taking them in confidence while solving complex problems proved to be strong influencers in boosting thriving at work.

In another qualitative study carried out by Sonenshein, Dutton, Grant, Spreitzer, and Sutcliffe (2013) within three organizations, employees were asked questions related to thriving at work, responses suggest that there was a vital and weighty effect of nearest leader.

Results of the study also indicate that the linkage between thriving at work and innovative work behavior is also significant. Thriving at work is said to be a state in which an individual learns and stays vital at same time. His energy level stays up and enjoys learning.

Amabile (1998) is of the opinion that innovative work behavior is enhanced when employee learn while working, this includes specialized methods and theoretical proficiency. This is because of the learning that allows employees to indulge in development of distinctive methods and procedures of performing at work. Learning and gaining new knowledge foster the implementation of idea which is an element

of innovating process it deals with the putting an idea into work. Attainment of knowledge makes an employee more competent and capable shifting them to a good position in the eye of administration and colleague as well. Further it leads to a confident employee who is willing to take risk and responsibility in applying new method and ideas.

In addition to this, the second dimension of thriving at work which is vitality has also shown positive relation with innovative work behavior in our study. The reason behind this positive relation is the presence of energy which equips a person with passion to think and implement new ideas leading to innovative work behavior. According to Dutton (2003) and Quinn & Dutton (2005), when a person experiences this sort of energy he gets himself indulged in numerous task with efficacy and willingly. Research conducted by Filipowicz (2006) showed the result in which they found out that the positive effect which leads to innovative work behavior is due to the arousal, the arousal acts as a fuel to positive effect and further leads to innovative work behavior. Furthermore, Kark and Carmeli (2009) also hold the same opinion, according to them employee tend to be more creative and associated to their work. An employee driven by positivity at workplace and highly energized eventually leads to express Innovative Work Behavior (Hirt, Levine, McDonald, & Melton, 1997).

In a significant research carried by Fredrickson (2003) he presented a theory of positive emotions and named it "broaden and built" and explained the reasons behind the positive relation between thriving and innovative work behavior. Further in 2001 Frederickson put forth a term called though-action repertories. As the term itself tells that cognitive activities give rise to behaviors, he further argued that the positive effect does not itself give rise to innovative behavior but it is the development of activities happening in the mind. Taking it step further, cognitive activities broadens the mind allowing employee to think out of box.

These arguments and finding are parallel to our findings that are presence of a positive and significant relation among thriving at work and innovative work behavior. Thus, our second hypothesis of stating the role of thriving at work as

mediator between ethical leadership and innovative work behavior has also been proved and supported by previous researchers.

Third hypothesis related role of openness to experience as a moderator states that, openness to experience moderates the relation between ethical leadership and innovative work behavior in such a way that employees more open to experience will get the most benefit of ethical leadership in translating this effect into thriving at work. According to AET, when an event within boundary of organization occurs it effect the performance and behavior of employee but this effect is not uniform for all employees. The variable effect of that event depends on the individual's differences. In line of the Affective Event Theory our research model also proposes a role of personality difference in the form of a personality type which is Openness to Experience in our case.

Halbesleben et al. (2014) argued that the responses toward resources differ from person to person, and the response is based upon the harmony and alignment of the personality of the individuals and the nature of resource. In addition to this, according to Ten Brummelhuis & Bakker (2012) key resources are conceptualized as managerial resource which help employee to decide how to implement resource and how to get maximum output. To the extent to which resources are translated into outcomes (behavior) and nature and magnitude of resource is determined by the personal dissimilarities (Hetland et al., 2007).

A number of researcher hold the opinion that effective of leadership behavior is not unvaried, it is based on many circumstances one of them is attributes of the follower. The prominent researches in this regard are Kellerman, 2007; De Hoogh, Den Hartog, & Koopman, 2005.

These findings and arguments are in line with our results and support our findings. In some situation there are chances that leader is ethical but followers are unable to translate it into thriving at work. The reason behind this is the personality difference which doesn't allows followers to get benefit from ethical leadership.

Summarizing the discussion, it is clear and evident that innovative work behavior has a significant role in performance of Software houses which are targeted population of this study. Current era is era of Information technology and development of

software has emerged into a mass revenue generation sector of economy. Developed and developing nations are equally harvesting the benefit of investing in development of IT culture across their nations. Free training programs and certification on government level have been fruitful in boosting software development.

Pakistan on other hand is also investing in this regarding by introducing latest courses under the administration of PITB (Punjab Information and Technology Board) and Technical Education & Vocational Training Authority Punjab. But a lot more needs to be done in this regard, despite of efforts made at government level and the fact that a huge number of fresh IT graduates are produced by Universities, Pakistan is unable to enhance its international market share. The arguments of absence of Innovative Work Behavior in IT related firm, gains strength from current scenario.

The current study investigated the antecedent involved in enhancement of innovative work behavior and solution for making employees to exhibit innovative behavior. Ethical leadership was the variable proposed to be antecedent of innovative work behavior its effect was significant. In addition to this a mediator (thriving at work) significantly mediated the relationship between ethical leadership and innovative work behavior. Furthermore, the relation between ethical leadership and thriving at work was moderated by openness to experience which explained why some individuals gained from ethical leadership and some did not.

5.2 Implications and recommendations

Current era's high paced development and innovation has made it obligatory for researchers to investigate the ways to promote innovative work behavior because only those organizations would be able to compete in this upcoming cut throat competition who would be able to provide something different from existing product and services. Even now a day it has become really difficult for organizations to withstand the tsunami of globalization aimed at destroying every idle organization which comes in its way. Environment has become dynamic and volatile, it is changing at rapid pace last 20 years have witnessed ground breaking development.

According to Shalley et al. (2004) with the passage of time as the complexity of situation increases organizations need of producing superior services and grabbing opportunity increases.

In the light of Chen and Huang (2009), employees are the core input of any organization's innovative process and productions so it becomes important to enhance them. To investigate how this study can be carried on this research takes the role of leadership in account and individuals difference at the same time. The study takes into account the explanatory role of thriving at work between ethical leadership and innovative work behavior.

This study takes one step further by investigating that why some employees do not respond to ethical leadership the way some do. The dispositional variable used in this study is openness to experience as it is most closely related to creativity and innovation. In short, the study contributes at three levels, firstly, illustrating and proving the linkage between ethical leadership and innovative work behavior. Secondly, addressing the explanatory role of thriving at work between ethical leadership and innovative work behavior. Thirdly, the role of personality in determining the differential attributes which leads to conversion ethical leadership into innovative work behavior.

The study also has practical implications keeping in view the large number of software houses in twin cities who have to be innovative at a rapid pace as compared to other businesses. The findings of this study help leaders in increasing the innovative behavior in followers by being an ethical leader. Mayer et al. (2009) came to this conclusion that ethical leadership was negatively related with workplace deviance and positively associated with citizenship behavior. Taking a step further Walumbwa and Schaubroeck (2009) validated that ethical leadership leads to employee's voice behavior. In the light of these studies it can easily be understand that ethical leadership changes the behavior of individuals. Results of this study show same effect of ethical leadership. Thus, this study gives a guideline to managers that how the Innovative Work Behavior of follower can be enhances. Leaders portraying themselves as a leader who can be trusted and holding highest ethical values while interacting with followers can make followers to make effort

for learning new skills and knowledge while taking risks for implementing and introducing new ideas without fear of being judged.

In addition to highlighting the significance of ethical leadership for innovative work behavior, the current study also answers a vital question of why some employees and followers do not respond to ethical leadership and are not that much innovative. The reason is explained by taking in account the personality difference in followers. People high at openness to experience exhibit innovative behavior. So, it allows leader to focus more on employees high on openness to experience.

5.3 Limitations

While conducting this study it was tried to make sure that it covers all aspects but there are still areas which need to be considered and can be improved in upcoming studies.

(i) Self-reporting can cause results to be in the favor of responded, for tackling this issue, responses on the behavior of employee were collected from supervisors and ethical leadership of the employee was reported by subordinates but the openness to experience which determines the personality type of the followers was self-reported and which can result into self-reporting bias. (ii) A number of response biases can emerge when responses are self-reported (Campbell & Fiske, 1959; Graham, Collins, Donaldson, & Hansen, 1993; Schwartz, 1999; Stone & Shiffman, 2002; Donaldson, Thomas, & Graham, 2002). (iii) The conclusions made from correlations and regression analysis can increase rapidly which gives rise to common variance bias (Borman, 1991; Spector, 1994; Donaldson, Thomas, Graham, Au, & Hansen, 2000). (iv) The population of study is limited to software houses of twin cities (Islamabad & Rawalpindi) so it can't be a true representative at whole of the industry. There are chances that due to contextual difference and working conditions results from other cities in Pakistan show different results. (v) Convenient sampling was the method used in collecting sample. A large number of respondents were of young and middle aged. Organizations involved in the study were also selected at the base of convenience.

5.4 Future Research Direction

The current study opens many further research avenues. The finding of this study raises many questions in the mind of researchers. (i) Like if openness to experience can moderate the relationship between ethical leader and Innovative Work Behavior then what about other personality traits such as Conscientiousness, people having this trait are organized and known to do their tasks timely. (ii) Extroverts are the people who are expressive and get energized while interacting. These traits can be used as moderator in future studies. Other explanatory mechanism can also be used between ethical leadership and Innovative (iii) Work Behavior such as epistemic curiosity, relating to knowledge or to the degree of its validation. (iv) Context can also affect findings so if any one conducts this study in other industries such as textile and construction, it can further strengthen our findings. Culture can also play its role in determining the role of ethical leadership, conducting the same research in some other country can come up with interesting findings.

5.5 Conclusion

Significance and importance of Innovative Work Behavior is not hidden from anyone, especially in current era as the technology is changing rapidly. This study in the light of Affective Event Theory gives a complete overview to how Innovative Work Behavior can be enhanced. In accordance with our findings, ethical leadership and Innovative Work Behavior have significant relation with each other. While thriving at work acts as a mediator between them and plays a role of explanatory mechanism. Affective Event Theory also highlights the role of individuals differences, so to take this aspect in account this research also included a moderator, openness to experience which differentiates between employees who take benefit of ethical leadership and those who do not respond to ethical leadership.

Bibliography

- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, 39(5), 1154-1184.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in Organizational Behavior*, 10(1), 123-167.
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly*, 50(3), 367-403.
- Amabile, T. M., & Grysiewicz, N. D. (1989). The creative environment scales: Work environment inventory. *Creativity Research Journal*, 2(4), 231-253.
- Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Hachette UK.
- Ashkanasy, N. M., Hrtel, C. E., & Daus, C. S. (2002). Diversity and emotion: The new frontiers in organizational behavior research. *Journal of Management*, 28(3), 307-338.
- Anderson, N. R., & West, M. A. (1998). Measuring climate for work group innovation: Development and validation of the team climate inventory. *Journal of Organizational Behavior*, 19(3), 235-258.
- Anderson, N., De Dreu, C. K., & Nijstad, B. A. (2004). The routinization of innovation research: A constructively critical review of the state-of-the-science. *Journal of organizational Behavior*, 25(2), 147-173.

- Anderson, J. C., Narus, J. A., & Narayandas, D. (2009). *Business market management: Understanding, creating, and delivering value*. Pearson Prentice Hall.
- Aryee, S., Walumbwa, F. O., Zhou, Q., & Hartnell, C. A. (2012). Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Human Performance*, 25(1), 1-25.
- Anand, N., Gardner, H. K., & Morris, T. (2007). Knowledge-based innovation: Emergence and embedding of new practice areas in management consulting firms. *Academy of Management Journal*, 50(2), 406-428.
- Ågren, G. I., & Franklin, O. (2003). Root: shoot ratios, optimization and nitrogen productivity. *Annals of Botany*, 92(6), 795-800.
- Brown, M. E., & Trevino, L. K. (2006). Ethical leadership: A review and future directions. *Leadership Quarterly*, 17(6), 595-616.
- Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117-134.
- Batey, M., & Furnham, A. (2006). Creativity, intelligence, and personality: A critical review of the scattered literature. *Genetic, social, and general psychology monographs*, 132(4), 355-429.
- Battistelli, A., Montani, F., Odoardi, C., Vandenberghe, C., & Picci, P. (2014). Employees concerns about change and commitment to change among Italian organizations: The moderating role of innovative work behavior. *The International Journal of Human Resource Management*, 25(7), 951-978.
- Božić, L., & Ozretić-Doen, . (2015). Enabling innovation and creativity in market-oriented firms. *Baltic Journal of Management*, 10(2), 144-165.
- Basadur, M. (2004). Leading others to think innovatively together: Creative leadership. *The Leadership Quarterly*, 15(1), 103-121.
- Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24(1), 45-68.

- Bilton, C., & Cummings, S. (2010). *Creative strategy: Reconnecting business and innovation* (Vol. 3). John Wiley & Sons.
- Brass, D. J. (1995). Creativity: It's all in your social network. *Creative Action in Organizations*, 94, 99.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: a meta-analysis. *Personnel Psychology*, 44(1), 1-26.
- Borman, W. C. (1991). Job behavior, performance, and effectiveness.
- Carmeli, A., & Spreitzer, G. M. (2009). Trust, connectivity, and thriving: Implications for innovative behaviors at work. *The Journal of Creative Behavior*, 43(3), 169-191.
- Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, 94(6), 1553-1561.
- Carmeli, A., & Tishler, A. (2004). The relationships between intangible organizational elements and organizational performance. *Strategic Management Journal*, 25(13), 1257-1278.
- Carmeli, A., & Schaubroeck, J. (2007). The influence of leaders' and other referents' normative expectations on individual involvement in creative work. *The Leadership Quarterly*, 18(1), 35-48.
- Carmeli, A., Dutton, J. E., & Hardin, A. E. (2015). Respect as an engine for new ideas: Linking respectful engagement, relational information processing and creativity among employees and teams. *Human Relations*, 68(6), 1021-1047.

- Carson, S. H., Peterson, J. B., & Higgins, D. M. (2003). Decreased latent inhibition is associated with increased creative achievement in high-functioning individuals. *Journal of Personality and Social Psychology*, 85(3), 499-506.
- Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, 13(6), 653-665.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the family business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19-39.
- Chowhan, J., Pries, F., & Mann, S. (2017). Persistent innovation and the role of human resource management practices, work organization, and strategy. *Journal of Management & Organization*, 23(3), 456-471.
- Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance? The mediating role of knowledge management capacity. *Journal of Business Research*, 62(1), 104-114.
- Chen, G., & Kanfer, R. (2006). Toward a systems theory of motivated behavior in work teams. *Research in organizational behavior*, 27, 223-267.
- Cronin, M. A., Weingart, L. R., & Todorova, G. (2011). Dynamics in groups: Are we there yet? *Academy of Management Annals*, 5(1), 571-612.
- Criscuolo, P., Salter, A., & Ter Wal, A. L. (2013). Going underground: Bootlegging and individual innovative performance. *Organization Science*, 25(5), 1287-1305.
- Catmull, E., & Wallace, A. (2014). *Creativity, Inc: overcoming the unseen forces that stand in the way of true inspiration*. Random House.
- Cardinal, L. B. (2001). Technological innovation in the pharmaceutical industry: The use of organizational control in managing research and development. *Organization Science*, 12(1), 19-36.
- Ciulla, J. B. (2004). Ethics and leadership effectiveness. *The Nature of Leadership*, 302-327.
- Corlett, J. A. (2008). Epistemic responsibility. *International Journal of Philosophical Studies*, 16(2), 179-200.

- Cohen-Cole, J. (2009). The creative American: Cold War salons, social science, and the cure for modern society. *Isis*, 100(2), 219-262.
- Castillo, J. J. (2009). Convenience sampling. Retrieved on October, 2, 2013.
- Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social Issues*, 54(2), 245-266.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81.
- Detert, J. R., Trevio, L. K., Burris, E. R., & Andiappan, M. (2007). Managerial modes of influence and counterproductivity in organizations: A longitudinal business-unit-level investigation. *Journal of Applied Psychology*, 92(4), 993.
- DeYoung, C. G. (2014). Openness/Intellect: A dimension of personality reflecting cognitive exploration. *APA handbook of personality and social psychology: Personality processes and individual differences*, 4, 369-399.
- DiLiello, T. C., & Houghton, J. D. (2006). Maximizing organizational leadership capacity for the future: Toward a model of self-leadership, innovation and creativity. *Journal of Managerial Psychology*, 21(4), 319-337.
- De Jong, J. P. J., Parker, S. K., Wennekers, S., & Wu, C. (2011). Corporate entrepreneurship at the individual level: Measurement and determinants. *EIM research reports*. Zoetermeer: EIM, 11, 13.
- De Jong, J. P., & Den Hartog, D. N. (2007). How leaders influence employees? innovative behaviour. *European Journal of Innovation Management*, 10(1), 41-64.
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23-36.
- Drucker, P. F. (1985). *The practice of innovation. Innovation and Entrepreneurship Practice and Principles*, Harper & Row, New York, 19-33.
- Dane, E. (2010). Reconsidering the trade-off between expertise and flexibility: A cognitive entrenchment perspective. *Academy of Management Review*, 35(4), 579-603.

- Detert, J. R., & Edmondson, A. C. (2011). Implicit voice theories: Taken-for-granted rules of self-censorship at work. *Academy of Management Journal*, 54(3), 461-488.
- De Hoogh, A. H., & Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study. *The Leadership Quarterly*, 19(3), 297-311.
- De Hoogh, A. H., Den Hartog, D. N., & Koopman, P. L. (2005). Linking the Big Five-Factors of personality to charismatic and transactional leadership; perceived dynamic work environment as a moderator. *Journal of Organizational Behavior*, 26(7), 839-865.
- Duff, A., Boyle, E., Dunleavy, K., & Ferguson, J. (2004). The relationship between personality, approach to learning and academic performance. *Personality and Individual Differences*, 36(8), 1907-1920.
- Den Hartog, D. N., & De Hoogh, A. H. (2009). Empowering behaviour and leader fairness and integrity: Studying perceptions of ethical leader behaviour from a levels-of-analysis perspective. *European Journal of Work and Organizational Psychology*, 18(2), 199-230.
- Dweck, C. S. (2012). Mindsets and human nature: Promoting change in the Middle East, the schoolyard, the racial divide, and willpower. *American Psychologist*, 67(8), 614.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156.
- Donaldson, S. I., Thomas, C. W., & Graham, J. W. (2002). Understanding self-report bias in prevention research.
- Donaldson, S. I., Thomas, C. W., Graham, J. W., Au, J. G., & Hansen, W. B. (2000). Verifying drug abuse prevention program effects using reciprocal best friend reports. *Journal of Behavioral Medicine*, 23(6), 585-601.

- Dutton, J. E. (2003). Breathing life into organizational studies. *Journal of Management Inquiry*, 12(1), 5-19.
- Eisenbeiss, S. A. (2012). Re-thinking ethical leadership: An interdisciplinary integrative approach. *The Leadership Quarterly*, 23(5), 791-808.
- Edwards, T., Delbridge, R., & Munday, M. (2005). Understanding innovation in small and medium-sized enterprises: a process manifest. *Technovation*, 25(10), 1119-1127.
- Ettner, S. L., & Grzywacz, J. G. (2001). Workers' perceptions of how jobs affect health: A social ecological perspective. *Journal of Occupational Health Psychology*, 6(2), 101.
- Farr, J. L., & Ford, C. M. (1990). Individual innovation.
- Farr, J. and Ford, C. (1990) Individual Innovation. In West, M. and Farr, J. (eds.), *Managing Innovation*. Sage, London.
- Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and social psychology review*, 2(4), 290-309.
- Feist, G. J., & Barron, F. X. (2003). Predicting creativity from early to late adulthood: Intellect, potential, and personality. *Journal of research in personality*, 37(2), 62-88.
- Fiedler, F. E. (1964). A Contingency Model of Leadership Effectiveness¹. In *Advances in experimental social psychology* (Vol. 1, pp. 149-190). Academic Press.
- Franco, M., & Haase, H. (2017). Collective entrepreneurship: Employees' perceptions of the influence of leadership styles. *Journal of Management & Organization*, 23(2), 241-257.
- Foss, L., Woll, K., & Moilanen, M. (2013). Creativity and implementations of new ideas: Doorganisational structure, work environment and gender matter? *International Journal of Gender and Entrepreneurship*, 5(3), 298-322.

- Fletcher, J. K. (2004). The paradox of postheroic leadership: An essay on gender, power, and transformational change. *The Leadership Quarterly*, 15(5), 647-661.
- Fletcher, J. K. (2007). Leadership, power, and positive relationships. In J. E. Dutton, & B. R. Ragins (Eds.), *Exploring positive relationships at work: Building a theoretical and research foundation* (pp. 347-371). New York: Psychology Press.
- Fleming, L., Mingo, S., & Chen, D. (2007). Collaborative brokerage, generative creativity, and creative success. *Administrative Science Quarterly*, 52(3), 443-475.
- Fritz, C., Lam, C. F., & Spreitzer, G. M. (2011). It's the little things that matter: An examination of knowledge workers' energy management. *The Academy of Management Perspectives*, 25(3), 28-39.
- Flood, A. T. (2008). Epistemic badness. *Journal of Philosophical Research*, 33, 253-262.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden- and-build theory of positive emotions. *American psychologist*, 56(3), 218.
- Fredrickson, B. L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American scientist*, 91(4), 330-335.
- Finke, R. A. (1996). Imagery, creativity, and emergent structure. *Consciousness and Cognition*, 5(3), 381-393.
- Friedman, R. S., & Frster, J. (2002). The influence of approach and avoidance motor actions on creative cognition. *Journal of Experimental Social Psychology*, 38(1), 41-55.
- Filipowicz, A. (2006). From positive affect to creativity: The surprising role of surprise. *Creativity Research Journal*, 18(2), 141-152.

- Gerybadze, A., Hommel, U., Reiners, H. W., & Thomaschewski, D. (Eds). (2010). Introduction: Managing innovation in turbulent times. In *Innovation and international corporate growth* (pp. 1-7). Heidelberg: Springer Berlin.
- Gu, Q., Tang, T. L. P., & Jiang, W. (2015). Does moral leadership enhance employee creativity? Employee identification with leader and leader?member exchange (LMX) in the Chinese context. *Journal of Business Ethics*, 126(3), 513-529.
- Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological theory*, 201-233.
- Gerbasi, A., Porath, C. L., Parker, A., Spreitzer, G., & Cross, R. (2015). Destructive de energizing relationships: How thriving buffers their effect on performance. *Journal of Applied Psychology*, 100(5), 1423.
- George, J. M., & Zhou, J. (2002). Understanding when bad moods foster creativity and good ones don't: the role of context and clarity of feelings. *Journal of Applied Psychology*, 87(4), 687.
- Graham, J. W., Collins, N. L., Donaldson, S. I., & Hansen, W. B. (1993). Understanding and controlling for response bias: Confirmatory factor analysis of multitrait-multimethod data. *Psychometric methodology*, 585-590.
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader?member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827.
- Gooty, J., Gavin, M., Johnson, P. D., Frazier, M. L., & Snow, D. B. (2009). In the eyes of the beholder: Transformational leadership, positive psychological capital, and performance. *Journal of Leadership & Organizational Studies*, 15(4), 353-367.
- Hildenbrand, K., Sacramento, C. A., & Binnewies, C. (2018). Transformational leadership and burnout: The role of thriving and followers? openness to experience. *Journal of Occupational Health Psychology*, 23(1), 31.

- Howell, J. M., Shea, C. M., & Higgins, C. A. (2005). Champions of product innovations: defining, developing, and validating a measure of champion behavior. *Journal of business venturing*, 20(5), 641-661.
- Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A. R., & Zhao, X. (2011). Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), 90.
- Hargadon, A. B., & Bechky, B. A. (2006). When collections of creatives become creative collectives: A field study of problem solving at work. *Organization Science*, 17(4), 484 -500.
- Hennessey, B. A., & Amabile, T. M. (2010). Creativity. In S. T. Fiske, D. L. Schachter, & R. J. Sternberg (Eds.), *Annual review of psychology* (Vol. 61, pp. 569-598). Palo Alto, CA: Annual Reviews.
- Harvey, S. (2014). Creative synthesis: Exploring the process of extraordinary group creativity. *Academy of Management Review*, 39(3), 324-343.
- Harrison, S. H., & Rouse, E. D. (2015). An inductive study of feedback interactions over the course of creative projects. *Academy of Management Journal*, 58(2), 375-404.
- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the COR understanding the role of resources in conservation of resources theory. *Journal of Management*, 40(5), 1334-1364.
- Hunter, S. T., Bedell, K. E., & Mumford, M. D. (2007). Climate for creativity: A quantitative review. *Creativity research journal*, 19(1), 69-90.
- Hirt, E. R., Levine, G. M., McDonald, H. E., Melton, R. J., & Martin, L. L. (1997). The role of mood in quantitative and qualitative aspects of performance: Single or multiple mechanisms? *Journal of Experimental Social Psychology*, 33(6), 602-629.
- Hetland, H., Sandal, G. M., & Johnsen, T. B. (2007). Burnout in the information technology sector: Does leadership matter? *European journal of work and organizational psychology*, 16(1), 58-75.

- House, R. J. (1996). Path-goal theory of leadership: Lessons, legacy, and a reformulated theory. *The Leadership Quarterly*, 7(3), 323-352.
- Ireland, R. D., & Hitt, M. A. (2005). Achieving and maintaining strategic competitiveness in the 21st century: The role of strategic leadership. *Academy of Management Executive*, 19(4), 63-77.
- Isen, A. M., Daubman, K. A., & Nowicki, G. P. (1987). Positive affect facilitates creative problem solving. *Journal of personality and social psychology*, 52(6), 1122.
- Jung, D. I., Chow, C., & Wu, A. (2003). The role of transformational leadership in enhancing organizational innovation: Hypotheses and some preliminary findings. *The leadership quarterly*, 14(4-5), 525-544.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302.
- Janssen, O. (2002). Transformationeel leiderschap en innovatief werkgedrag van medewerkers: een kwestie van benaderbaarheid van de leider. *Gedrag and Organisatie*, 15, 275-293.
- Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology*, 78(4), 573-579.
- Janssen, O., Van de Vliert, E., & West, M. (2004). The bright and dark sides of individual and group innovation: A special issue introduction. *Journal of Organizational Behavior*, 25(2), 129-145.
- Javed, B., Bashir, S., Rawwas, M. Y., & Arjoon, S. (2017). Islamic Work Ethic, innovative work behaviour, and adaptive performance: the mediating mechanism and an interacting effect. *Current Issues in Tourism*, 20(6), 647-663.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research*, 2(1999), 102 -138.

- Kalshoven, K., & Den Hartog, D. N. (2009). Ethical leader behavior and leader effectiveness: The role of prototypicality and trust. *International Journal of Leadership Studies*, 5(2), 102-120.
- Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. (2011). Ethical leadership at work questionnaire (ELW): Development and validation of a multidimensional measure. *The Leadership Quarterly*, 22(1), 51-69.
- King, N. and Anderson, N. (2002) *Managing Innovation and Change: A Critical Guide for Organizations*. Thomson, London.
- King, L. A., Walker, L. M., & Broyles, S. J. (1996). Creativity and the five-factor model. *Journal of Research in Personality*, 30(2), 189- 203.
- Kanter, R. M. 1983. *The change masters*. New York: Simon & Schuster.
- Kanter, R. M. (1988). Three tiers for innovation research. *Communication Research*, 15(5), 509- 523.
- Klein, K. J., & House, R. J. (1995). On fire: Charismatic leadership and levels of analysis. *The Leadership Quarterly*, 6(2), 183-198.
- Klein, H. J., & Lee, S. (2006). The effects of personality on learning: The mediating role of goal setting. *Human Performance*, 19(1), 43-66.
- Komarraju, M., Karau, S. J., & Schmeck, R. R. (2009). Role of the Big Five personality traits in predicting college students' academic motivation and achievement. *Learning and Individual Differences*, 19(1), 47-52.
- Kleysen, R. F., & Street, C. T. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of intellectual Capital*, 2(3), 284-296.
- Kessel, M., Hannemann-Weber, H., & Kratzer, J. (2012). Innovative work behavior in healthcare: The benefit of operational guidelines in the treatment of rare diseases. *Health Policy*, 105(2), 146-153.
- Kanungo, R. N., & Mendonca, M. (1996). *Ethical dimensions of leadership* (Vol. 3). Sage.
- Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43, 207-222.

- Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. *Handbook of Industrial and Organizational Psychology*, 1(2), 75-130.
- Kaufman, S. B. (2013). Opening up openness to experience: A four-factor model and relations to creative achievement in the arts and sciences. *The Journal of Creative Behavior*, 47(4), 233-255.
- Kawall, J. (2002). Other regarding epistemic virtues. *Ratio*, 15(3), 257-275.
- Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. *Organizational Behavior and Human Performance*, 22(3), 375-403.
- Kellerman, B. (2007). What every leader needs to know about followers. *Harvard Business Review*, 85(12), 84.
- Kark, R., & Carmeli, A. (2009). Alive and creating: The mediating role of vitality and aliveness in the relationship between psychological safety and creative work involvement. *Journal of Organizational Behavior*, 30(6), 785-804.
- Lauser, B. (2010). Post-merger integration and change processes from a complexity perspective. *Baltic Journal of Management*, 5(1), 6-27.
- Lingo, E. L., & O'Mahony, S. (2010). Nexus work: Brokerage on creative projects. *Administrative Science Quarterly*, 55(1), 47-81.
- Liao, H., & Chuang, A. (2007). Transforming service employees and climate: a multilevel, multisource examination of transformational leadership in building long-term service relationships. *Journal of Applied Psychology*, 92(4), 1006.
- Lahroodi, R. (2007). Collective epistemic virtues. *Social Epistemology*, 21(3), 281-297.
- Latham, G. P., & Pinder, C. C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annu. Rev. Psychol.*, 56, 485-516.
- LePine, J. A., Colquitt, J. A., & Erez, A. (2000). Adaptability to changing task contexts: Effects of general cognitive ability, conscientiousness, and openness to experience. *Personnel Psychology*, 53(3), 563-593.

- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Decision Processes*, 108(1), 1-13.
- Mayer, D. M., Nurmohamed, S., Trevino, L. K., Shapiro, D. L., & Schminke, M. (2013). Encouraging employees to report unethical conduct internally: It takes a village. *Organizational Behavior and Human Decision Processes*, 121(1), 89 -103.
- Mayer, D. M., Kuenzi, M., & Greenbaum, R. L. (2010). Examining the link between ethical leadership and employee misconduct: The mediating role of ethical climate. *Journal of Business Ethics*, 95(1), 7-16.
- Mumford, M. D., & Gustafson, S. B. (1988). Creativity syndrome: Integration, application, and innovation. *Psychological Bulletin*, 103(1), 27.
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, 13(6), 705-750.
- Mo, S., Booth, S. A., & Wang, Z. (2012). How do Chinese firms deal with inter-organizational conflict? *Journal of Business Ethics*, 108(1), 121-129.
- McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of personality and social psychology*, 52(6), 1258.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81.
- Martens, Y. (2011). Creative workplace: Instrumental and symbolic support for creativity. *Facilities*, 29(1/2), 63-79.
- Mueller, J. S., & Kamdar, D. (2011). Why seeking help from teammates is a blessing and a curse: a theory of help seeking and individual creativity in team contexts. *Journal of Applied Psychology*, 96(2), 263.
- Mainemelis, C. (2010). Stealing fire: Creative deviance in the evolution of new ideas. *Academy of Management Review*, 35(4), 558-578.

- Martins, E. C., & Terblanche, F. (2003). Building organizational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64-74.
- Mitchell, T. R., & Daniels, D. (2003). Observations and commentary on recent research in work motivation. *Motivation and work behavior*, 7, 225-254.
- Martindale, C. (1981). Cognition and consciousness.
- Montmarquet, J. (2008). Virtue and voluntarism. *Synthese*, 161(3), 393-402.
- McLeod, S. A. (2007). Nomothetic idiographic debate. Retrieved from www.simplypsychology.org/idiographic.html
- Ng, T. W., & Feldman, D. C. (2015). Ethical leadership: Meta-analytic evidence of criterion -related and incremental validity. *Journal of Applied Psychology*, 100(3), 948.
- Niessen, C., Sonnentag, S., & Sach, F. (2012). Thriving at work? A diary study. *Journal of Organizational Behavior*, 33(4), 468-487.
- Necka, E., & Hlawacz, T. (2013). Who has an artistic temperament? Relationships between creativity and temperament among artists and bank officers. *Creativity Research Journal*, 25(2), 182-188.
- Oke, A., Munshi, N., & Walumbwa, F. O. (2009). The influence of leadership on innovative processes and activities. *Organizational Dynamics*, 38(1), 64-72.
- Ozer, D. J., & Benet-Martinez, V. (2006). Personality and the prediction of consequential outcomes. *Annual Review of Psychology*, 57, 201-221.
- Obstfeld, D. (2005). Social networks, the tertius iungens orientation, and involvement in innovation. *Administrative Science Quarterly*, 50(1), 100-130.
- Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior*, 35(3), 434-446.
- Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work: Toward its measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior*, 33(2), 250-275.

- Piccolo, R. F., Greenbaum, R., Hartog, D. N. D., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31(2-3), 259-278.
- Perry-Smith, J. E., & Shalley, C. E. (2003). The social side of creativity: A static and dynamic social network perspective. *Academy of management review*, 28(1), 89-106.
- Perry-Smith, J. E., & Mannucci, P. V. (2017). From creativity to innovation: The social network drivers of the four phases of the idea journey. *Academy of Management Review*, 42(1), 53-79.
- Prem, R., Ohly, S., Kubicek, B., & Korunka, C. (2017). Thriving on challenge stressors? Exploring time pressure and learning demands as antecedents of thriving at work. *Journal of organizational behavior*, 38(1), 108-123.
- Parker, A., Gerbasi, A., & Porath, C. L. (2012). The effects of de-energizing ties in organizations and how to manage them.
- Phelan, S., & Young, A. M. (2003). Understanding creativity in the workplace: An examination of individual styles and training in relation to creative confidence and creative self-leadership. *The Journal of Creative Behavior*, 37(4), 266-281.
- Perry, S. J., Witt, L. A., Penney, L. M., & Atwater, L. (2010). The downside of goal-focused leadership: The role of personality in subordinate exhaustion. *Journal of Applied Psychology*, 95(6), 1145.
- Quinn, R. W., & Dutton, J. E. (2005). Coordination as energy-in-conversation. *Academy of Management Review*, 30(1), 36-57.
- Ramamoorthy, N., Flood, P. C., Slattery, T., & Sardesai, R. (2005). Determinants of innovative work behaviour: Development and test of an integrated model. *Creativity and Innovation Management*, 14(2), 142-150.
- Runco, M.A. and Chand, I. (1994) *Problem Finding, Problem Solving, and Creativity*. Ablex, Norwood,NJ.

- Raub, S., & Robert, C. (2010). Differential effects of empowering leadership on in-role and extra-role employee behaviors: Exploring the role of psychological empowerment and power values. *Human Relations*, 63(11), 1743-1770.
- Resick, C. J., Hargis, M. B., Shao, P., & Dust, S. B. (2013). Ethical leadership, moral equity judgments, and discretionary workplace behavior. *Human Relations*, 66(7), 951-972.
- Resick, C. J., Hanges, P. J., Dickson, M. W., & Mitchelson, J. K. (2006). A cross-cultural examination of the endorsement of ethical leadership. *Journal of Business Ethics*, 63(4), 345-359.
- Rawwas, M. Y., Arjoon, S., & Sidani, Y. (2013). An introduction of epistemology to business ethics: A study of marketing middle-managers. *Journal of Business Ethics*, 117(3), 525 -539.
- Riggs, W. (2010). Open-mindedness. *Metaphilosophy*, 41(1-2), 172-188.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580 -607.
- Scott, S. G., & Bruce, R. A. (1998). Following the leader in R&D: The joint effect of subordinate problem-solving style and leader-member relations on innovative behavior. *IEEE Transactions on Engineering Management*, 45(1), 3-10.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*, 37(3), 580-607.
- Strobel, M., Tumasjan, A., & Welpe, I. (2010). Do business ethics pay off, The influence of ethical leadership on organizational attractiveness. *The Journal of Psychology*, 218, 213 -224.
- Tumasjan, A., Strobel, M., & Welpe, I. (2011). Ethical leadership evaluations after moral transgression: Social distance makes the difference. *Journal of Business Ethics*, 99(4), 609-622.

- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially embedded model of thriving at work. *Organization science*, 16(5), 537-549.
- Spreitzer, G. M., & Porath, C. (2012). Creating sustainable performance. *Harvard Business Review*, 90, 92-99.
- Spreitzer, G. M., & Sutcliffe, K. (2007). Thriving in organizations. In D. Nelson & C. Cooper (Eds.), *Positive Organizational Behavior* (pp. 74-85). Thousand Oaks, CA: Sage.
- Spreitzer, G., & Porath, C. (2014). Self-determination as a nutriment for thriving: Building an integrative model of human growth at work. *The Oxford handbook of work engagement, motivation, and self-determination theory*, 245-258.
- Silvia, P. J., Nusbaum, E. C., Berg, C., Martin, C., & O'Connor, A. (2009). Openness to experience, plasticity, and creativity: Exploring lower-order, high-order, and interactive effects. *Journal of Research in Personality*, 43(6), 1087-1090.
- Silvia, P. J. (2008). Another look at creativity and intelligence: Exploring higher-order models and probable confounds. *Personality and Individual differences*, 44(4), 1012-1021.
- Silvia, P. J. (2008). Discernment and creativity: How well can people identify their most creative ideas? *Psychology of Aesthetics, Creativity, and the Arts*, 2(3), 139.
- Sharot, T. (2011). The optimism bias. *Current biology*, 21(23), R941-R945.
- Sanchez-Famoso, V., Maseda, A., & Iturralde, T. (2017). Family involvement in top management team: Impact on relationships between internal social capital and innovation. *Journal of Management & Organization*, 23(1), 136-162.
- Shane, S.A. (2003) *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Edward Elgar, Aldershot.
- Shane, S. A. (1994). Are champions different from non-champions? *Journal of Business Venturing*, 9(5), 397-421.

- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here?. *Journal of management*, 30(6), 933-958.
- Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The leadership quarterly*, 15(1), 33-53.
- Silvia, P. J. (2008). Discernment and creativity: How well can people identify their most creative ideas?. *Psychology of Aesthetics, Creativity, and the Arts*, 2(3), 139.
- Sosa, E. (2011). Can there be a discipline of philosophy? And can it be founded on intuitions?. *Mind & Language*, 26(4), 453-467.
- Staw, B. M. (1990). An evolutionary approach to creativity and innovation.
- Sonenshein, S., Dutton, J., Grant, A., Spreitzer, G., & Sutcliffe, K. (2006). Narrating of growth at work: Rationalist and socio-emotionalist and logics of development. Center for Positive Organizational Scholarship, Ross School of Business, University of Michigan.
- Sonenshein, S., Dutton, J. E., Grant, A. M., Spreitzer, G. M., & Sutcliffe, K. M. (2013). Growing at work: Employees' interpretations of progressive self-change in organizations. *Organization Science*, 24(2), 552-570.
- Sternberg, R. J. (2001). What is the common thread of creativity? Its dialectical relation to intelligence and wisdom. *American Psychologist*, 56(4), 360.
- Spector, P. E. (1994). Job satisfaction survey.
- Schwartz, S. H. (1999). A theory of cultural values and some implications for work. *Applied psychology*, 48(1), 23-47.
- Tushman, M. L., & Nelson, R. R. (1990). Introduction: Technology, organizations and innovation. *Administrative Science Quarterly*, 35(1), 1-18.
- Tierney, P., Farmer, S. M., & Graen, G. B. (1999). An examination of leadership and employee creativity: The relevance of traits and relationships. *Personnel psychology*, 52(3), 591 -620.

- Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management journal*, 45(6), 1137 -1148.
- Tu, Y., & Lu, X. (2013). How ethical leadership influences employees? innovative work behaviour: A perspective of intrinsic motivation. *Journal of Business Ethics*, 116, 441 -455.
- Thurlings, M., Evers, A. T., & Vermeulen, M. (2015). Toward a model of explaining teachers? innovative behavior: A literature review. *Review of Educational Research*, 85(3), 430 -471.
- Trevio, L. K., Brown, M., & Hartman, L. P. (2003). A qualitative investigation of perceived executive ethical leadership: Perceptions from inside and outside the executive suite. *Human relations*, 56(1), 5-37.
- Tidd, J. (2006). A review of innovation models. Imperial College London, 16.
- Taylor, A., & Greve, H. R. (2006). Superman or the fantastic four? Knowledge combination and experience in innovative teams. *Academy of Management Journal*, 49(4), 723-740.
- Trevino, L. K., & Brown, M. E. (2004). Managing to be ethical: Debunking five business ethics myths. *The Academy of Management Executive*, 18(2), 69-81.
- Ten Brummelhuis, L. L., & Bakker, A. B. (2012). A resource perspective on the work?home interface: The work?home resources model. *American Psychologist*, 67(7), 545.
- Uhl-Bien, M. (2006). Relational leadership theory: Exploring the social processes of leadership and organizing. *The Leadership Quarterly*, 17(6), 654-676.
- Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management science*, 32(5), 590-607.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal*, 41(1), 108-119.

- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. 1993. Toward a theory of organizational creativity. *Academy of Management Review*, 18(2) : 293-321.
- Wallace, J. C., Butts, M. M., Johnson, P. D., Stevens, F. G., & Smith, M. B. (2016). A multilevel model of employee innovation: Understanding the effects of regulatory focus, thriving, and employee involvement climate. *Journal of Management*, 42(4), 982-1004.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in organizational behavior: An annual series of analytical essays and critical reviews*, Vol. 18.
- Wan, F., Williamson, P. J., & Yin, E. (2015). Antecedents and implications of disruptive innovation: Evidence from China. *Technovation*, 39, 94-104.
- West, M.A. (2002) Sparkling Fountains or Stagnant Ponds: An Integrative Model of Creativity and Innovation Implementation in Work Groups. *Applied Psychology: An International Review*, 51(3), 355-87.
- Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, 115(2), 204-213.
- Walumbwa, F. O., Muchiri, M. K., Misati, E., Wu, C., & Meiliani, M. (2018). Inspired to perform: A multilevel investigation of antecedents and consequences of thriving at work. *Journal of Organizational Behavior*, 39(3), 249-261.
- Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: mediating roles of ethical leadership and work group psychological safety. *Journal of applied psychology*, 94(5), 1275.
- Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of business venturing*, 19(2), 173-188.
- Ward, T. B. (1994). Structured imagination: The role of category structure in exemplar generation. *Cognitive psychology*, 27(1), 1-40.

- Ward, T. B., Patterson, M. J., & Sifonis, C. M. (2004). The role of specificity and abstraction in creative idea generation. *Creativity Research Journal*, 16(1), 1-9.
- Yidong, T., & Xinxin, L. (2013). How ethical leadership influence employees? innovative work behavior: A perspective of intrinsic motivation. *Journal of Business Ethics*, 116(2), 441 -455.
- Yukl, G., Mahsud, R., Hassan, S., & Prussia, G. E. (2013). An improved measure of ethical leadership. *Journal of leadership & organizational studies*, 20(1), 38-48.
- Zheng, Q., Wang, M., & Li, Z. (2011). Rethinking ethical leadership, social capital and customer relationship. *Journal of Management Development*, 30(7/8), 663-674.
- Zlatanovic, D., & Mulej, M. (2015). Soft-systems approaches to knowledge-cum-values management as innovation drivers. *Baltic Journal of Management*, 10(4), 497-518.
- Zhu, W., May, D. R., & Avolio, B. J. (2004). The impact of ethical leadership behavior on employee outcomes: The roles of psychological empowerment and authenticity. *Journal of Leadership & Organizational Studies*, 11(1), 16-26.
- Zhou, J. (2003). When the presence of creative coworkers is related to creativity: role of supervisor close monitoring, developmental feedback, and creative personality. *Journal of applied psychology*, 88(3), 413.
- Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management journal*, 44(4), 682-696.

Annexure

Questionnaire

Dear Participants,

The purpose of this questionnaire is to study the relationship of Ethical Leadership and Innovative Work Behavior with mediating role of Thriving at Work and moderating role of Openness to Experience. This questionnaire is partial requirement in completing a thesis for MS in management sciences.

Your response will be kept as strictly confidential, and for the purpose of academic research only.

Sincerely

Muhammad Jahan Zaib

MS (HRM) Research Scholar

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Section 1:

The following statements concern your views about Ethical Leadership. For each item of the statement below, please indicate one choice by marking the appropriate number.

S No	Items	Strongly dis-agree	Disagree	Neither agree/nor disagree	Agree	Strongly agree
1	My supervisor shows a strong concern for ethical and moral values.	1	2	3	4	5
2	My supervisor communicates clear ethical standards for members.	1	2	3	4	5
3	My supervisor sets an example of ethical behavior in his/her decisions and actions.	1	2	3	4	5
4	My supervisor is honest and can be trusted to tell the truth.	1	2	3	4	5
5	My supervisor keeps his/her actions consistent with his/her stated values (walks the talk).	1	2	3	4	5
6	My supervisor is fair and unbiased when assigning tasks to members.	1	2	3	4	5
7	My supervisor can be trusted to carry out promises and commitments.	1	2	3	4	5
8	My supervisor insists on doing what is fair and ethical even when it is not easy.	1	2	3	4	5
9	My supervisor acknowledges mistakes and takes responsibility for them.	1	2	3	4	5
10	My supervisor regards honesty and integrity as important personal values.	1	2	3	4	5
11	My supervisor sets an example of dedication and self-sacrifice for the organization.	1	2	3	4	5
12	My supervisor opposes the use of unethical practices to increase performance.	1	2	3	4	5
13	My supervisor is fair and objective when evaluating member performance and providing rewards.	1	2	3	4	5
14	My supervisor puts the needs of others above his/her own self-interest.	1	2	3	4	5
15	My supervisor holds members accountable for using ethical practices in their work.	1	2	3	4	5

Section 2:

The following statements concern your views about Openness to Experience. For each item of the statement below. Please indicate one choice by marking the appropriate number.

S.No	Items	Strongly disagree	Disagree	Neither agree/nor disagree	Agree	Strongly agree
1	I see myself as someone who is original, comes up with new ideas.	1	2	3	4	5
2	I see myself as someone who is curious about many different things	1	2	3	4	5
3	I see myself as someone who is ingenious, a deep thinker	1	2	3	4	5
4	I see myself as someone who has an active imagination	1	2	3	4	5
5	I see myself as someone who is inventive	1	2	3	4	5
6	I see myself as someone who values artistic, aesthetic experiences.	1	2	3	4	5
7	I see myself as someone who prefers work that is routine.	1	2	3	4	5
8	I see myself as someone who like to reflect, play with ideas	1	2	3	4	5
9	I see myself as someone who has few artistic interests.	1	2	3	4	5
10	I see myself as someone who is sophisticated in art music or literature.	1	2	3	4	5

Section 3:

The following statements concern about Thriving at Work. Please indicate one choice by marking the appropriate number.

S.No	Items	Strongly disagree	Disagree	Neither agree/nor disagree	Agree	Strongly agree
1	At work, I find myself learning often.	1	2	3	4	5
2	At work, I continue to learn more and more as time goes by.	1	2	3	4	5
3	At work, I see myself continuously improving.	1	2	3	4	5
4	At work, I am not learning.	1	2	3	4	5

5	At work, I have developed a lot as a person.	1	2	3	4	5
6	At work, I feel alive and vital.	1	2	3	4	5
7	At work, I have energy and spirit.	1	2	3	4	5
8	At work, I don't feel very energetic.	1	2	3	4	5
9	At work, I feel alert and awake.	1	2	3	4	5
10	At work, I am looking forward to each new day	1	2	3	4	5

Section 4:

The following statements concern about your views Innovative Work Behavior. Please indicate one choice by marking the appropriate number. This Section of Questionnaire is to be filled by respective Supervisor.

S No	Items	Strongly dis-agree	Disagree	Neither agree/nor disagree	Agree	Strongly agree
1	Employee creates new ideas for difficult issues.	1	2	3	4	5
2	Employee searches out new working methods, techniques, or instruments.	1	2	3	4	5
3	Employee generates original solutions for problems.	1	2	3	4	5
4	Employee mobilizes support for innovative ideas.	1	2	3	4	5
5	Employee acquires approval for innovative ideas.	1	2	3	4	5
6	Employee makes important organizational members enthusiastic for innovative ideas.	1	2	3	4	5
7	Employee transforms innovative ideas into useful applications.	1	2	3	4	5
8	Employee introduces innovative ideas into the work environment in a systematic way.	1	2	3	4	5
9	Employee evaluates the utility of innovative ideas.	1	2	3	4	5

Section 5:

Gender

1	2
Male	Female

Age

1	2	3	4	5
20-25	26-30	31-35	36-40	Above 40

Education

1	2	3	4	5
Metric	Inter	Bachelor	Master	Above Master

Thanks for your time and cooperation. I greatly appreciate your help in assisting me with this research.

Certificate

This is to certify that **Mr. Muhammad Jahan Zaib** has incorporated all observations, suggestions and comments made by the external evaluators as well as the internal examiners and thesis supervisor. The title of his thesis is: **Impact of Ethical Leadership on Innovative Work Behavior with Mediating role of Thriving at Work and Moderating role of Openness to Experience**

Forwarded for necessary action.

Dr. S. M. M. Raza Naqvi

(Thesis Supervisor)