

**Ethical Leadership Impacts Intellectual Capital Facets
Paving Way to Foster Innovative Performance: A
Pakistani Software Houses Perspective**
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Abstract

In the contemporary era, the scandals of business leaders have shaken the trust and belief of stakeholders in corporate as well as in public sector organizations. Prior studies have mostly ignored how ethical leadership influences innovative performance and the presence of intellectual capital (human and social capital) as mediating variables have not been examined. This study is supported by prominent theory, i.e. social learning theory. Forgoing in view, the purpose of this research is to extend the study, which has exhibited the role of ethical leadership in the development of employees' innovative performance. Specifically, this study developed and tested a model about the mediating role of intellectual capital facets in the relationship between ethical leadership and innovative performance. This study is based on the hypothetical deductive approach. Data was collected through personally administered questionnaire from 457 employees working in software houses of Pakistan located in the cities of Lahore, Rawalpindi, Islamabad, Karachi and Peshawar. The proposed model was tested applying Structural Equation Modeling (SEM) with AMOS. The results concluded that ethical leadership plays a key role in fostering innovative performance. This research also finds the presence of social capital and human capital as mediators a causal relationship between ethical leadership and innovative performance. This research is the first attempt in Pakistan towards the given perspective, i.e. ethical leadership, and intellectual capital in relation to innovative performance. It will further contribute towards the indigenous academic and commercial arena of Pakistan.

Keywords: Ethical leadership; intellectual capital; innovative performance

Introduction

The common paradigms of the impression of governance have changed due to changes in the transition to an information society as well as changes in competition, organizational sense, and market structures.

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Consequently, ethical leadership and intellectual capital (IC) have become a valued trait of business (A. S.-Y. Chen & Hou, 2016; Özer, Ergun, & Yilmaz, 2015). The creation of innovative and valid ideas about products, services, procedures or practices, has become progressively imperative in today's businesses (Tierney & Farmer, 2011). Researchers have claimed that innovation is an effective competitive weapon for firms (Amabile, 1988), and have stressed that promoting employees' innovative performance is a major goal and objective for leaders in the 21st century. The study of Dess and Picken (2000) has recognized the vital role of ethical leaders in fostering employees' performance.

Business managers are more needed to behave morally because of the increasing significance linked to corporate social responsibility (CSR) and business ethics. Accordingly, ethical leadership has been the concern of both practitioners and academicians in the past decade (Kalshoven, Den Hartog, & De Hoogh, 2011; Walumbwa & Schaubroeck, 2009). Ethical leadership is considered as an effective predictor of moral identity, job satisfaction, organizational commitment, organizational citizenship behavior, and voice behaviour (Brown & Treviño, 2006; Brown, Treviño, & Harrison, 2005; Yidong & Xinxin, 2013).

The economic foundation of today's world is experiencing a vibrant shift into a knowledge based economy (Shabaninejad, Mirsalehian, & Mehralian, 2014). In the current knowledge economy, knowledge and intellectual capital are observed as critically imperative organizational resources and key assets to gain competitive advantage (Jalali, 2017; Ordonez de Pablos, 2004). Organizational success is principally rooted in information based intellectual activities (Bjørnson & Dingsøyr, 2008). Likewise, the significance of knowledge as a resource in relation to land, capital, or workforce has increased considerably in contemporary periods. A number of organizations have started to follow this tendency (Mehralian, A. Nazari, Akhavan, & Reza Rasekh, 2014; Mehralian, Rajabzadeh, Reza Sadeh, & Reza Rasekh, 2012). These organizations view intellectual capital to be a value-creating dynamic (Ordonez de Pablos, 2005). Research has also revealed that, unlike the reduced effectiveness linked to customary resources, for example machinery, land, and money, knowledge work as a catalyst to increase organizational performance (Tsui, Wang, Cai, Cheung, & Lee, 2014). In today's knowledge-based societies, the effectiveness of active intellectual capital has substantial significance in relationship with financial capital in determining business performance and profitability. Therefore, the dire need to study the real value of intangible assets for

instance, intellectual capital has obtained a considerable attention (Mehralian et al., 2014)

Pakistan falls behind its peers in the domains like health, education and social development. The Human Development (HDI) Report 2016 has placed Pakistan at 147th out of 188 countries in the areas of health, education and standard of living (Jahan, 2016). Defeating this shortfall is the primacy of Pakistan Vision 2025. As human capital and social capital development is a precondition for all other progress, it is the precise first of the seven pillars of Vision 2025 (Siddiqui, 2015). Identifying the magnitude and measure of this strive, we consider a substantial increase in the allocation of resource, and dramatic enhancement in the quality of service provision through innovation and good governance. Global Education Monitoring Report (2016) places Pakistan at 113th out of 120 countries. The report further states that literacy rate of Pakistan, which is 57 percent, falls behind the country's neighbors (UNESCO, 2016). This ratio also comprises those people who have the ability to write their names only. In the rural regions of Pakistan, literacy rate is lower at 50 percent. Pakistan has low net enrolment proportions at all the three levels of education - primary level, secondary level and tertiary level and woman enrolment ratio is much lower as compared to men (Amadio, 2013).

Pakistan is generally missing out of the global value chains assigned an inferior rank of distributing comparatively low-value goods and services, and receiving remittances from ordinarily low skill workforce who generally go overseas, instead of adding value at home by contributing in the progressively interconnected world service economy. Pakistan spends only 0.5% of GDP on scientific study that is lowermost in the region. On the other hand, most of advanced countries spend 2-3% of GDP on scientific study (Maqbool, 2016). It is also imperative for Pakistan to continue to highlight and support favorable zones, for example innovation and sophistication. The Global Innovation Index (GII) (2017) ranks Pakistan 113th out of 127 countries in global innovation. Expenditure on education is 2.7 percent of GDP and tertiary enrollment is 9.9%. Moreover, the country ranks at 74th in the domain of Knowledge workers (Dutta, Lanvin, & Wunsch-Vincent, 2017). The Human Capital Report 2016 ranks the country 118th out of 130 countries (Anđelković, Kovač, & Hall, 2016).

There is no shortcut for any developing country like Pakistan to realize the position in terms of financial growth, which the East Asian countries have (Vos et al., 2015). To do so, we would need unusual commitment and obligation from the country's political leadership. The country's leadership would have to exhibit commitment by changing the

structure of budgetary expenses - investing on education at all levels, and health facilities. The leadership should be depicted through their actions as devoted towards the development of intellectual capital. Mere slogans have not worked in the history, and would not work in the future (Bakir, Sofian, Hussin, & Othman, 2015).

Contribution and Gap of the Study

The study on ethical leadership specifies ethical leadership as a universal leadership process, which transforms ethical leaders behaviour to employees' behaviour through the mechanism of social identity, exchange, and social learning (Treviño, Brown, & Hartman, 2003; Walumbwa, Morrison, & Christensen, 2012). Ethical leadership is particularly imperative when group member exchanges involve fairness, trust, and empowering behaviour (Wang, Gan, Wu, & Wang, 2015). When employees have trust in their leader, they are probable to follow moral ways and may take the risks (Lu & Guy, 2014). Instead, if employees recognize their leaders to be immoral, they are probable to have depression, apprehension, anxiety and pressure at work, and to demonstrate counterproductive behaviour, for example, cheating during problem solving jobs that consequence in diluted work results (Ganjali & Rezaee, 2016; Hoyt, Price, & Poatsy, 2013). In the past decade, the research studies have focused on investigating the influence of ethical leadership on employees' ethical conduct (for example OCB, ethical decision making, and ethical identity) and followers' unethical conduct (for example deviant behaviour and counter-productive behaviour) (Hiller, DeChurch, Murase, & Doty, 2011). So far, few research studies have focused on the influence of ethical leadership on employees' innovative behaviour, in spite of the fact that leadership is considered as one of the most influential predictors of employees' performance (Volmer, Spurk, & Niessen, 2012; Yidong & Xinxin, 2013); hence, the first aim of this research is to address this vital yet comparatively understudied area.

Even though relating ethical leadership with employees' innovative performance may give the impression of counter-intuitiveness. Social learning theory postulates that people model their behaviour on those whom they respect and trust (Bandura, 1977). Ethical leaders are more likely to speak openly against inappropriate organizational behaviours, and focus on doing the right thing (Hassan, 2015). (Homans, 1958; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Wan & Antonucci, 2016). Moreover, ethical leaders exhibit high ethical principles to their followers and encourage them to voice ideas, suggestions, and opinions on ethical issues as well as on other job-related

practices (Rasheed et al., 2017). Moreover, ethical leader develops the intellectual capital of a business, causing making profit by keeping the competitive edge over the rivals in the market (Haq, Qamri, & Akram, 2015; Kumari, Usmani, & Hussain, 2014; Mahoney & Kor, 2015; Mayer, Aquino, Greenbaum, & Kuenzi, 2012; Mursaleen, Saqib, Roberts, & Asif, 2015). The ability to cultivate and exploit rare, valued and unique knowledge capitals is crucial to organizational performance. Subsequently, intellectual capital, including intangible knowledge resources an organization can utilize for competitive advantage (Schiuma & Lerro, 2008). Given this view, the present research uses social learning theory to describe the core justification for this anticipation, perceiving that by demonstrating an open speech about ethical matters, ethical leaders encourage intellectual capital in the organization. Hence, to the scope that this study challenge conservative insight, we expect it will elucidate the processes through which ethical leaders encourage employees' innovative performance, while creating supplementary timely study into these relations.

This study was intended to contribute to the prevailing literature in a number of ways. First, this study pursued to fill the literature gap in relation to ethical leadership and employees' innovative performance. Prior study has revealed that leadership is one of the most influential facets influencing employees' innovative behaviour. This research is considered to be one of the first research studies to comprehend the relationship between ethical leadership and employees' innovative performance in the software firms of Pakistan. Second, determining how intellectual capital facets (social and human capital) help employees perform well has received little consideration (Aguinis & Glavas, 2012; Piccolo, Greenbaum, Hartog, & Folger, 2010; Walumbwa et al., 2012). The study used social learning theory as the primary theoretical emphasis and move further to recognize the mediating effect of intellectual capital facets (social and human capital) regarding the ethical leadership-employees' innovative performance relationship (Haq et al., 2015; Mahoney & Kor, 2015; Mayer et al., 2012). The results of this study will promote our understanding of the processes by which ethical leadership affects innovative performance of employees. Finally, this research has adopted a hypothetical deductive approach and used a survey-based questionnaire for data collection, which has provided more vigorous and meaningful results.

Literature Review

Social Learning Theory

Social learning theory emphasize that people learn manners through observation and mock of role model (Bandura, 1977). Corporate leaders

have high level of position and power in the business; therefore, they are probable to turn out to be examples for business employees (Mayer *et al.*, 2009). Moreover, by displaying honesty, fair treatment, respect of others, accountability and proper behavior and manner a moral leader is credible, legitimate and attractive; therefore, he should rule in organizational perspective. Such leader rewards his employees' ethical behaviour, penalizes employees who break up ethical principles, and sets a role model of how to do the things in a morally acceptable way (Brown et al., 2005). Accordingly, a moral leader leads his employees by promoting their moral values and facilitating the firm to attract and keep individuals who share similar moral values and hence fit with the business (Grojean, Resick, Dickson, & Smith, 2004). Thus, ethical leadership accelerates moral value congruence among employees, which is essential to the social atmosphere of the business.

Ethical Leadership and Employees' Innovative Performance

At the individual level, when ethical business managers put emphasis on the influence of the work on others, the group, the firm, and even the whole society and imbed the meaning in the work, the employees will recognize more job importance in their work and will be more eager to make an effort in creating innovative concepts, ideas, and concepts for contributing to the business objectives and goals (Brown & Treviño, 2006; De Hoogh & Den Hartog, 2008). As moral business managers are observed to display characters such as altruism and honesty (Gardner, Avolio, Luthans, May, & Walumbwa, 2005) commitment to the business (De Hoogh & Den Hartog, 2008), employees are more probable to feel emotionally safe to exclaim their new thoughts, which encounter the status quo and are more dedicated in sharing their information and knowledge with their colleagues (Janssen, 2003). In contrast, when the employees consider business leaders as immoral who perform from selfishness and are far from the moralities, they may decide on to avoid to propose ideas, which might oppose the leaders or encouraging their thoughts in the groups. Furthermore, moral managers also differentiate themselves by promoting reciprocal open communication in their groups as they at all times pay attention honestly to their employees and inspire them in expressing their ideas and worries that sequentially will inspire the employees to discover new concepts to improve the existing processes, ways and procedures (Martins & Terblanche, 2003). According to social learning theory, people learn manners through observation, and mock of role model (Bandura, 1977). Corporate leaders have the peak stages of position and power in the business; therefore, they are probable to turn out to be examples for business employees (Mayer *et al.* 2009). Moreover, by presenting fair

treatment, honesty, liability, respect of others, and suitable mode and conduct, a ethical leader is attractive, authentic, and credible. Therefore, he should be obvious in the business context (Brown *et al.*, 2005). The ethical managers are anticipated to respect the human nature, human dignity, rights, and talent of their employees by giving them with openings to acquire the skill and knowledge, keeping them in the right place, which could fit them better (Ciulla, 2004). Ethical leaders also encourage their employees to channel their fitness into work performance; consequently, the followers would be equipped with the abilities, knowledge and skill, and exert innovative behavior in their job. Furthermore, the employees of moral managers are presented with higher level of independence and effect over decision making in the job (Brown *et al.*, 2005; De Hoogh & Den Hartog, 2008; Oke, Okeke, Amadi, & Onoduku, 2009; Sami *et al.*, 2016), for example the independence, autonomy, and discretion to schedule work, thus, they would possess control in job (Piccolo *et al.*, 2010) and less restrictions in the task, which can prevent them from offering, encouraging, and executing novel concepts. Job autonomy improved followers' behaviour of conveying productive challenges in improving work methods (LePine & Van Dyne, 1998). Consequently, we anticipate that the individual insight of ethical leadership can link to followers' innovative work behaviour.

At group level, ethical leadership incorporated diverse implications and forecasts followers' innovative work behaviour in a different way from individual insight of ethical leadership. Collective ethics emphasizes the interest for collective benefit of the team, longterm objective of the business and the concerns of stakeholders, persons are more probable to put the interests of the team beyond their own (Bass & Steidlmeier, 1999; Gini, 1997; Treviño *et al.*, 2003) and be stimulated involving in innovative performance to recognize the collective goals and objectives. When employees have the impression that their managers are people orientated, which respect their talents, value, and humanity, and promote their growth, then they are more enthusiastic to develop, apply, and leverage their ability and knowledge to innovate work. When they consider that their moral manager care their benefits and desire to perceive them performing fine and reaching their potential, then they would exercise more innovative work behaviour (Brown *et al.*, 2005; Mayer *et al.*, 2009). Moreover, at the group level, ethics may also be an interactive aspect, which develops the relations in the group and among the employees, as all the group-members tend to share the opinion that their managers are moral, they would have the shared opinion that they are open in participating in the decision making, communicating with each other, and free of the fear that their opinions and suggestion might

damage their position and status, or so, then the expressively safe atmosphere can lead the workforce be more involved in the sharing and application of their innovative concepts, thoughts, and ideas (Walumbwa & Schaubroeck, 2009; Yidong & Xinxin, 2013). Consequently, we may suggest that:

***Hypothesis 1:** Ethical leadership is positively related to employees' innovative performance.*

Ethical Leadership and Intellectual Capital

Thomas A. Stewart offered the first definition of intellectual capital proposition in 1991 in the article having title Brainpower. According to this definition, intellectual capital includes all of the information and data that offers a competitive advantage for an organization (Stewart, 2007). Leif Edvinsson, who is recognized as the first proficient manager of intellectual capital and one more discoverer on the subject matter, describes intellectual capital as knowledge, which may be transformed into a valuable asset (Edvinsson & Malone, 1997). In considering the dynamics of the idea of intellectual capital, Nick Bontis also indicated that instead of being a static object, intellectual capital is a notion-generating added value in social and the economic sides when it is employed to an organization's essentials (Bontis, 1998). In this perspective, it may be stressed that an organization's invisible and intangible resources could create a substantial difference to the organizational working and outcomes, equal to those of physical resources, and at times even more (Bontis, 1999). Because of these analyzes, several concepts and models related to intellectual capital have been developed. Agreement was reached on the constituents of intellectual capital that although intangible provides optimistic economic outcomes associated to the human input (Bontis, 2001). To evaluate intellectual capital in the strictest sense, knowing the factors containing intellectual capital assists in understanding its nature (Choo Huang, Luther, & Tayles, 2007). Different scholars have examined these definitions and categorizations in depth (Brooking, 1996; Edvinsson, 1997; Sveiby, 2008). Supplementary, investigators have established a number of IC frameworks to better recognize and investigate intellectual capital (Bontiset al., 2000). Intellectual capital is considered as one of the most imperative knowledge-based strategic resources for businesses (L. Huang, Krasikova, & Liu, 2016). In the current research, two elementary components of IC have been described as human capital and social capital.

Human capital was first proposed by Taylor, after whom it is named. After the unionization of employees, it was abandoned in favour of the human relations approach. The rise of this statement was owing to the fact that productivity has significance on condition that there are customers. Human capital is the ability to originate the best outcomes from employees, with their knowledge, experience, and skills (Bontis, 1998). It is considered as the source, store and controlling element of information, and the source of innovation and creativity. Innovative products can be developed only through human capital (Jütting, 2007; Moon & Kym, 2006; Sveiby, 2008). Moreover, it is a component that relies on employees' skills liketechnical skill and knowledge, motivation, adaptation, innovativeness, and social capital (M.-C. Chen, Cheng, & Hwang, 2005). In this study, employee's skills, level of education, and employee creativity have been taken as the major constructs of human capital.

Social capital is defined as the collection of potential and actual resources imbedded within, available through, and gained from the networks of relations owned by a person or social unit (Nahapiet & Ghoshal, 1998). The notion of social capital is used in business organizations and public study to enlighten the role of social assets imbedded in dyadic or network relations including knowledge management and resource exchange activities. The study on social capital has recognized the key role in influencing the attitudes and behavior of people in knowledge sharing (Chang & Chuang, 2011). Social capital may be relational, structural, and cognitive (Nahapiet&Ghoshal, 1998). The structural aspect mentions the relations among employees, i.e., with whom and with what rate they tend to share knowledge and information. This aspect of social capital comprises social network(Titi Amayah, 2013). The relational aspect social capital designates the form of personal relations, which the individuals have developed with each other through a history of past contacts. Trust is the key attribute of this aspect (Chang & Chuang, 2011; Shan, Xin, Wang, Li, & Li, 2013). Cognitive aspect is possessed in dimensions for example a shared code and a shared pattern which enables a mutual understanding of shared objectives and suitable means of performing in a social system. Shared goals are considered as a major concept of cognitive capital (Chow & Chan, 2008; Mohammed Fathi, Cyril Eze, & Guan Gan Goh, 2011).

Similarity between ethical leadership and intellectual capital may easily be recognized that target to the organizational value. Ethics may lead the organizational value aiming at innovation and moving the outcomes to its stakeholders. Whereas, intellectual capital deals with

knowledge distribution within the organization and giving results as to how to generate organizational value (Kaplan & Norton, 2004).

The high potential in the ethical leadership and intellectual capital can be identified in this relation, if there is an existence of cross-functional groups. High Quality of ethical leadership is believed a key resource for the businesses who want to perceive their effective performance in the market. Poor leadership characteristics towards poor resources of a business, high rate of turnover and absenteeism, low confidence level, increase in dissatisfaction, slow destruction, poor planning and unpredicted outcomes, poor means of dealing with customers and markets. Share values generally differ obviously, when substantial leaders join with any business or leave them; therefore, it is measureable in real shareholder value (Mayo, 2001).

Ethical leadership is a necessary constituent of a business as it generates a robust effect on other intangible resources. Principally, leadership contains human capital enterprises. Nonetheless, when it is assumed as a way to boost leadership, it comes to be a component of intellectual capital. Therefore, it leads one's responsiveness to the relations of human being, their capital, and behavior. It shows a positive link between ethical leadership and intellectual capital, where ethical leadership develops the intellectual capital of a business, causing making profit by keeping the competitive edge over the rivals in the market. Intellectual capital is the responsiveness, skill and talent of employees (De Hoogh & Den Hartog, 2008). Ethical managers consider their employees as worthy assets on which core capabilities are developed and competitive advantages are effectively exploited. Universally, to gain the broad competitive edge of the human capital, substantial investments are required that support in the development of intellectual capital.

In addition, it increases the productivity of the personnel to work efficiently. The personnel to broaden their knowledge horizon stimulate new opening of involvement with society. In order to gain well educated and innovative employees, continuity investment on employees is required (Kumari et al., 2014). Ethical leadership may result in all the above approaches mentioned, by means of the proper direction, which can help in the accomplishment of the desired objectives and goals. Hence, this determines that ethical leadership is imperative and critical approach that supports on execution of the intellectual capital, resulting in high benefits and profit to the stakeholders. Consequently, it can be hypothesized:

Hypothesis 2: Ethical leadership is positively related to human capital.

Hypothesis 3: Ethical leadership is positively related to social capital.

Ethical Leadership, Intellectual Capital, and Innovative Performance
Globalization is something inevitable. Globalization goes along with the strengthening of frontiers in almost every aspect of human life. Its hegemonizing approaches penetrate systematically our core foundation related to knowledge, education, human resource development and ethics. Knowledge and education play important role in shaping quality human resource in responding to the challenges of today and tomorrow. The need of value-laden perspectives in knowledge and education is pertinent in order to develop holistic personalities among the younger generation. Integration of knowledge and education is important in responding to the process of globalization. Human potentials need to be nurtured through effective teaching and learning processes so that the human being posses knowledge and skills together with values and ethics(Tang & Naumann, 2015). The issues of ethical, civic and citizenship education are really pertinent, especially to post-independence generation. The wake of globalization resulted to threat and serious challenges to the ethical standard, civic awareness and citizenship realization among the youth. Family and educational institutions play significant roles in moulding the character and attitude of the younger generation. Cognitive merit and skill-based achievement alone do not suffice the objectives of education. A good ethical standard, respecting others, involved actively in nation-building processes are the prerequisites for a holistic development. Human Capital should be holistic and integrated because the nature of challenges now and the future are no longer economic or technological alone, but also related to the issues of values, belief, vision and mission. Ethical, civic and citizenship education should be moulded as such that can bring strength not to the understanding but also to the doings.

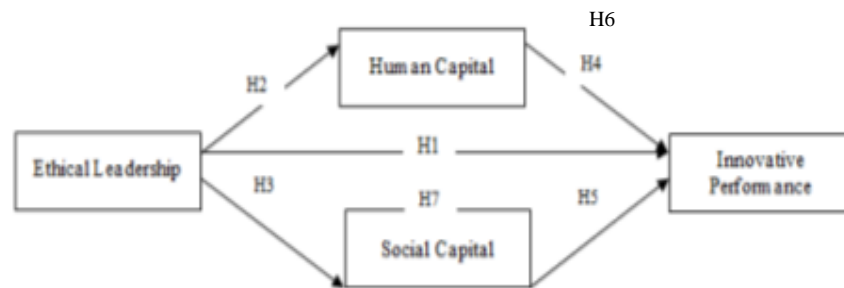


Figure 1. Proposed Model

The development of intellectual capital in a holistic approach naturally will produce people of Towering Personalities. Other than having good qualities in undertaking new and creative ventures in science and technology, the humanities factors are always be made the emphasis. Humanities factors such as trustworthiness, dedication, creativity, civic awareness, accountability are always be made the guiding principles in nation-building (Baba & Zayed, 2015). Naturally, the ability to benefit the comparative advantages from other traditions and civilization, it may bring the kind of development based on our own mould. Consequently, we can hypothesize that:

Hypothesis 4: *Human Capital is positively related with innovative performance.*

Hypothesis 5: *Social Capital is positively related with innovative performance.*

Hypothesis 6: *Human Capital mediates the relationship between ethical leadership and innovative performance.*

Hypothesis 7: *Social Capital mediates the relationship between ethical leadership and innovative performance.*

Methodology/Materials

Population, Sample and Procedure

The main population for data collection were employees working in software houses of Pakistan located in the cities of Lahore, Rawalpindi, Islamabad, Karachi and Peshawar. A new knowledge revolution age in the technology results a paradigm shift in development and wealth creation models, by keeping knowledge as the utmost vital resource in the development balance sheet (Siddiqui, 2015). Rapid modifications in the technology and introduction of turbulent new technologies are facilitating and accelerating gigantic increases in the production and providing birth to enter new areas of economic activity.

Pakistan is normally not considered as one of the world's information technology leaders; it has a share of \$2.8 billion only in IT trade of the world, of which \$1.6 billion indicates tech and IT services and software shipped abroad. This is a very small percentage of the anticipated \$3.2 trillion global market for 2015, and is behind India's \$100 billion value of software trades per year. However, IT sector of Pakistan is seeking a place for itself as a favorite place to go for freelance IT programmers, app designers and software coders. There are now 1,500 listed IT corporations in Pakistan, and 10,000 IT graduates enter the market every year (Akheilos, 2015). There are 1169 software houses, which are listed with Pakistan Software Export Board. Table 1 gives the detail of software houses of Pakistan.

The present concentration on low value added products and services persisted fruitless to make our country Pakistan a worthy player in the global export market. Several countries such as South Korea, Singapore, and Hong Kong have focused on high-tech products and services because of which their exports have exceeded 570 billion dollars, 518 billion dollars, and 524 billion dollars correspondingly (Siddiqui, 2015). In spite of having huge natural resources, strategic geographic locality and other benefits, Pakistan's export potential were not fully manipulated that require to be transformed with its true essence. The export of high - tech goods was on the increase in the world as the share of medium- tech and high tech goods in the world's trade and manufacturing was more than 65%. On the other hand, around 87% of Pakistan's total manufacturing was consisted of low-tech goods and 60% of exports associated with the textile that constituted merely approximately 3% of the total world's export of \$ 6 trillion. High tech products need priority attention and preferential incentives to boost the decreasing share of Pakistan in world export.

The creation and application of novel thoughts and techniques of improvement are needed for virtually all jobs and all business categories within industries where innovation is extremely dire for viable business growth (Shalley & Gilson, 2004). However, innovation may be as extremely needed in the industries as in high-tech organizations (Abbas & Raja, 2015). That's why, software houses of Pakistan have been targeted for this study.

Target respondents were requested to fill up the questionnaire completely and very carefully. Questionnaires were distributed among the managerial level employees doing jobs in software houses. The convenient sampling technique was used for data collection and target respondents were managerial level employees of different software houses located inLahore, Rawalpindi, Islamabad, Karachi and Peshawar. The detail of software houses located in these cities is given in table 3.1.Representative sample will be 500 employees. The given sample size is appropriate for conducting research (Roscoe, 1975).

Table 1: Detail of Software Houses of Pakistan

S. No.	City/ Location	No. of Software Houses	Remarks
1	Islamabad	268	
2	Karachi	411	
3	Lahore	315	
4	Rawalpindi	112	
5	Peshawar	45	1151
6	Other	18	1151+18=1169

Source: http://www.pseb.org.pk/company_directory

Instrument and Measures

This research was carried out using a questionnaire-based survey. The instrument to be used was a five-point Likert scale. The questionnaires were distributed among the employees of software houses of Pakistan. It had two portions. The first portion of the questionnaire was consisted of demographic data of respondents. The second portion included the questions pertaining to the independent variable (ethical leadership), mediating variables (human capital, social capital), and dependent variable (innovative performance).

Ethical leadership includes integrity, compassion, responsibility and forgiveness. Integrity, compassion and responsibility were measured using the 13 items suggested by Acquah (2004). The adapted scale of Cox (2011) will be used to measure forgiveness. This scale has 3 items. The employees were requested to show the extent to which they may agree or disagree with the items on a five-point Likert scale with 1= strongly disagree and 5= strongly agree. Sample statements include, I have a high level of integrity, and I obey and comply with organizational rules, regulations and procedures, or the rule of law in a nation.

Social capital involves networks, shared goals and trust. The scale of *network ties* was measured by three items: 'Our employees have frequent communication with their teammates', 'Our employees spend a lot of time interacting with their teammates,' and 'our employees maintain close social relationships with their teammates'. These items were developed from the literature and are very much in line with the measures used in (Chiu, Hsu, & Wang, 2006).

Three statements measured *trust*. These statements are: 'If our employees got into difficulties at work, they know their teammates would try and help them out' our employees will always keep the promises they make to one another, and 'Our employees are truthful in dealing with one another'. These items were adapted from the measures that were used in Mooradian, Renzl, and Matzler (2006). They were intended to capture the good intent facet of trust.

Shared goals was measured by three items. These items include, "Our employees always agree on what is important at work, 'Our employees always share the same ambitions and vision at work, 'Our employees always agree on what is important at work". These items were adapted from the scale of Chow and Chan (2008).

Human capital comprised Employees Skill, Level of Education, and Employees Creativity. The scale adapted from the scale of Subramaniam and Youndt (2005), Skaggs and Youndt (2004), and Hatch and Dyer (2004) was used for the measurement of human capital. This scale has nine items. Example items include, our employees are highly

skilled, our employees are widely considered the best in our industry, and our employees develop new ideas and knowledge.

Innovative performance was measured using nine statements adapted from the scale of Janssen (2003), which is adopted from the scale (Kanter, 2000), who worked on the stages of innovation covering three basic stages of individuals' innovative behaviors. These stages are idea generation, promotion, and idea realization. Three statements for each dimension of this scale measured idea generation, promotion, and idea realization. Example statements are: "Our employees generate original solutions to problems," "our employees mobilize support for innovative ideas," and "Our employees transform innovative ideas into useful applications." The answers of respondents will be taken by a five point Likert-scale having range from 1 = "Never," to 5 = "Always."

Results and Findings

Descriptive Analysis

The values of Std. Dev, means, and correlations are presented in Table 2. It is obvious from the results that the innovative performance was positively related to the ethical leadership ($r = 0.597, p < 0.01$), the social capital ($r = 0.641, p < 0.010$) and the human capital ($r = 0.598, p < 0.01$) were positively related to the ethical leadership.

Table 2: Mean, St Dev, Correlations

		Mean	S. Dev	EL	SCap	HCap	IP
EL	Pearson	3.6265	.60313	1			
	Correlation						
	Sig. (2-tailed)						
SCap	Pearson	3.6331	.62565	.641**	1		
	Correlation						
	Sig. (2-tailed)			.000			
HCap	Pearson	3.4671	.58077	.598**	.638**	1	
	Correlation						
	Sig. (2-tailed)			.000	.000		
IP	Pearson	3.6285	.58023	.597**	.732**	.630**	1
	Correlation						
	Sig. (2-tailed)			.000	.000	.000	

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

EL=Ethical Leadership, Scap=Social Capital, HCap=Human Capital, IP=Innovative Performance

Hypothesis Testing

The study model was assessed via path analysis to assess the hypothesized relations among the variables in the research framework.

Assessment of Structural Model Fit

The structural model (Figure 2) covers hypothesized paths among the hypothesized variables, i.e. the ethical leadership, human capital, social capital and innovative performance. It displays the values of path estimates. The model fit indices attained conforming to the framework of the study (GFI = .921, RMSEA = .058, AGFI = .813, NFI = .908, CFI = .909, PGFI = .687, IFI = .909) satisfy the model fit standards revealed in the above section and determine the path model's satisfactory fit to the data.

Assessment of Hypothesized Paths

Tables 3 and 4 exhibit the results of the structural equation model analysis used to observe the hypotheses of the study. These analyses are explained beneath:

Direct Effects

The results validated the significant and positive influence of ethical leadership on innovative performance as is displayed by $\beta = .57$ at $p < 0.001$ (table 3). Therefore, hypothesis 1 is accepted. Hypothesis 2 is related with the relationship between ethical leadership and human capital. It is accepted because the ethical leadership is observed as having a significant and positive influence on human capital ($\beta = .58$, $p < 0.001$). Next, hypothesis 3 about the association between the ethical leadership and the social capital is accepted, since ethical leadership is observed to have a positive and substantial influence on the social capital ($\beta = .67$, $p < 0.001$). Moreover, it is hypothesized that human capital associates with innovative performance. Complete support is observed for the hypothesis 4. In appreciation with $\beta = .29$, $p < 0.001$, a significant and positive relationship between social capital and innovative performance is observed. In addition to that, hypothesis 5 offered that social capital positively associates to innovative performance. As displayed in Table 3, social capital has a significant and positive relationship with innovative performance ($\beta = .49$, $p < 0.001$), supportive Hypothesis 5.

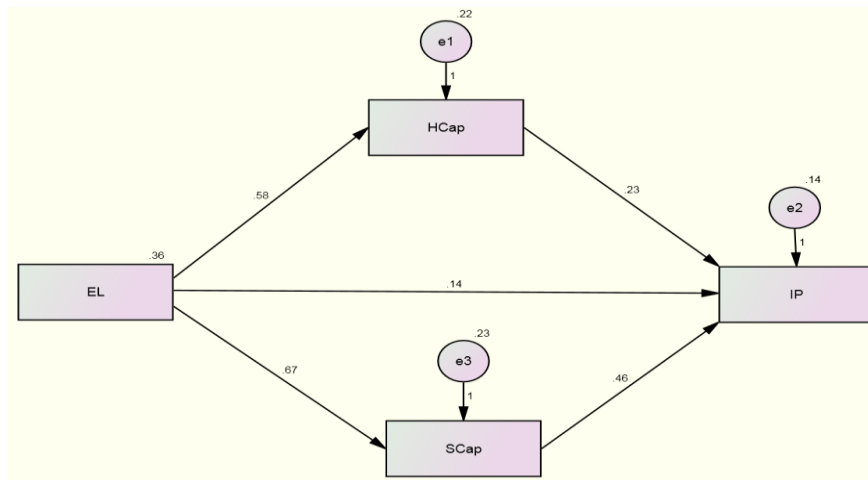


Figure 2. Path Diagram of Regression Analysis

Note: EL= Ethical leadership, Hcap = Human Capital, Scap = Social Capital, IP = Innovative Performance

Indirect Effects

It involved execution of the mediating analysis according to the method suggested by Baron and Kenny (1986). This method proposes that the predictor should have a relationship to the predicted variable, the predictor must have an association to the mediating variable, the mediating variable should have an association to the predicted variable, and addition of the mediating variable must either lower (partial mediation) or give the insignificance (full mediation) to the previous direct relationship of the predictor with the predicted variable.

Hypotheses 6, and 7 compact with the influence of ethical leadership on innovative performance through the human capital and the social capital, correspondingly. According to endorsements of Baron and Kenny (1986), support to hypotheses 1, 2, 3, 4, and 5, authenticated the preconditions. The next phase is to study the influence of addition of human capital and social capital on the association between ethical leadership and employees' innovative performance.

Table 3: Regression Weights of SEM Analysis

Relations	Estimate	P	Remarks
IP <--- EL H1	.571	***	Accepted
HCap <--- EL H2	.575	***	Accepted
SCap <--- EL H3	.665	***	Accepted
IP <--- HCap H4	.290	***	Accepted
IP <--- SCap H5	.493	***	Accepted

On including human capital, a reduction in the value of the path estimate concerning to the influence of the ethical leadership on innovative performance is found, which remained to be significant ($\beta = .33$, $p < 0.001$). It indicates that there is a decrease in the direct impact of ethical leadership on innovative performance in the existence of human capital, and shows the partial mediation of human capital in ethical leadership–innovative performance relationship. Then, on including social capital, a reduction in the value of the path estimate concerning to the influence of the ethical leadership on innovative performance is examined, which remained significant ($\beta = .14$, $p < 0.001$). It denotes that there is a decrease in the direct impact of the ethical leadership on innovative performance being there of social capital, and exhibits the partial mediation of social capital in the ethical leadership–innovative performance association.

Table 4: Results of Mediation Analysis

Relations	Estimate	P	Remarks
IP <--- HCap <--- EL (H6)	.334	***	Accepted
IP <--- Scap <--- EL (H7)	.140	***	Accepted

An inclusion attempt containing an examination of the simultaneous influence of human capital and social capital on the ethical leadership–innovative performance relationship was made. The structural path model portraying this relationship is displayed in Figure 2.

As with the inclusion of the mediations, a decrease in the outcome of ethical leadership on innovative performance is examined, therefore, it is comprehended that human capital and social capital tend to be partially mediating the influence of ethical leadership on innovative performance. Consequently, hypotheses 6, and 7 are supported.

Discussion

Applying the social learning theory, we discovered how ethical leadership has impact on the innovative performance through the mediation of and intellectual capital facets (human and social). The study results exposed that ethical leadership is observed as positively associated with the employee’s innovative performance, whereas human capital was observed to be partially mediating the association between ethical leadership and innovative performance. Also, this research offered support for the partial mediation of social capital in the association of ethical leadership and employees’ innovative performance.

Since the study results indicated ethical leadership positively and significantly foster innovative performance. It is consistent with the argument of Kalshoven et al. (2011), and Yidong and Xinxin (2013) that the ethical leadership may be considered as an impressive predecessor of employees' performance, and proved that ethical leadership positively and significantly influences followers' behaviour and attitudes at work (Mayer et al., 2009; Pasricha, Singh, & Verma). The significant and positive association between ethical leadership and employees' innovative performance also proposed that when moral leaders and managers embedded their ethical values, stressed the job impression on the firm and the society, stimulated open communication, valued every individual with dignity and respect, inspired them to release their prospective and give them with independence and the opportunity to give opinion (Bouckennooghe, Zafar, & Raja, 2015; Brown et al., 2005; Greenwood, 2016), their employees are probable to put forth innovative performance, not only when they recognize that exclusively but also when it was pooled as the shared belief. It can also be recognized to the sample of Pakistani workforce who are considered as collectivists and are probable to recognize themselves with the association and might be pretended by the collective norms, practices, and beliefs.

The study results also sustained the mediation of intellectual capital facets (human and social) in the association between ethical leadership and employees' innovative performance. The study has proved the role of intellectual capital facets (human and social) in facilitating and predicting innovative work behaviour. Present research extended the works in the logic that it examined the moral characteristic of ethical leadership, applying social learning theory (K.-H. Chen, Wang, Huang, & Shen, 2016; Mayer et al., 2012; Shin, Hur, & Kang, 2016) that recognized the impact of moral leadership as a course of social learning, this research work emphasized how ethical leadership can boost the followers' innovative performance by leading them to determine concern from the job for the sake of the work itself and speak up for suggestions.

The followers of ethical leaders are probable to recognize the job impact, independence, competence, and autonomy in the job (Chaudary & Ali, 2016; Piccolo et al., 2010) when they recognize that their managers and business leaders are moral. Subsequently, they would have higher levels of intellectual capital, according to social learning theory that focus on the outlook that ethics, social responsibility, concerns for people, respect for human dignity, and open communication can be the basis of motivation (Akdoğan, Arslan, & Demirtaş, 2016; Rego, Sousa, Marques, & e Cunha, 2014). Then the inherently innovated followers would show more innovative work behaviour as they receive more

enthusiasm, commitment, deliberation, concentration, and creativity in the job (Jalali, 2017; Wu, Kwan, Yim, Chiu, & He, 2015; Yidong & Xinxin, 2013). However, the mediating role of intellectual capital facets in the association between the ethical leadership and employees' innovative performance is only partially sustained in the present study that proposed that besides voice there can be other mechanisms, which may describe the progression.

Moreover, this study provided substantiation for the partial mediation of intellectual capital facets, including human and social capital on the association between ethical leadership and employees' innovative performance. The construct of ethical leadership hypothesized as the ethical leadership influence innovative performance, also through fostering the group intellectual capital. Social learning theory postulates that people exhibit their behaviour on those whom they respect and trust (Bandura, 1977). Ethical leaders are more likely to speak openly against inappropriate organizational behaviours, and focus on doing the right thing (Hassan, 2015). As moral leadership affects the nature of work in the firm with more demand, autonomy, influence and determines line for the employees' social relation, which is regarded as trust, emotional safety, cooperation, and subsidizes to the mutual outlook that one is more esteemed by their abilities, talent and performance instead of the outside reward (De Roeck & Farooq; X. Huang, Hsieh, & He, 2014), the individuals are probable to foster their intellectual capital that in turn lead to foster their innovative performance. Moreover, the results exhibited that intellectual capital captured more influence between the association between moral leadership and employees' innovative performance, which indicates that when employees carry out innovative work behaviour, they are probable to be affected by their intellectual capital.

Contribution to the Scholarship

A couple of strengths (theoretical and methodological) augmented our confidence in the outcomes obtained in this study. First, this research theorized ethical leadership to better exhibit the concept and its relation with employees' innovative performance, besides the underlying mechanism. Second, it also sets up a framework and applied SEM to examine how ethical leadership related to innovative performance by investigating the mediation of human capital and social capital correspondingly. Third, the sample incorporated software houses of Pakistan. Lastly, insufficient research has investigated ethical leadership and the relations with employees' outcomes in Pakistan, where morality, ethics and innovation need to be focused (Jalali, 2017; Khokhar & Zia-

ur-Rehman, 2017). Therefore, this study also contributed to the scholarship by representing the external validity and generalizability of ethical leadership and employees' innovative performance, both of which were formerly established and mostly examined in the western context and culture.

Implications of the Study

This research also offered some substantial applied implications. First, as ethical leadership was revealed to expedite the employees' innovative performance, it is suggested that business leaders should develop a moral and ethical leadership style, giving emphasis to morals in the firm, in respect of their employees' dignity and nature, empowering the job meaning to inspire their employees to create new concepts, ideas, opinions and employ them. When performing ethical leadership in the firm, they must not only emphasize their impact on the followers whose insight on their leadership might distress their performance, but also figure whole firm's collective analogy of their moral leadership style, which forecast the employees' performance away from their sensitivity. Second, this study also originates that ethical leadership is absolutely and significantly related with innovative performance through the mediation of human capital and social capital. As a moral and ethical leadership, it's recommended that in order to foster the followers' innovative performance, ethical leadership must devote to level their employees' voice by permitting them to raise their suggestions, ideas, opinions to the challenge, curiosity, and the implication of the work, on one hand. On the other hand, they may set the tone for the whole group to develop the intellectual capital of their employees where they are stimulated to emphasize on the interest of the job and team-work.

Limitations and Directions for Future Study

This study has certain limitations and give directions for further investigation, which need to be described. First, although the statistical investigations that the common method variance in the research were not as severe, it is still suggested that all the results must be described with care owing to the latent common method variance affected by the self stated data. And, it's recommended that upcoming study would collect data of the predictor and the predicted factors from diverse sources to reduce this variance. Second, the cross sectional strategy of this study averts from seizing the genuine causal association among the variables and giving that alternate description of the results, hence it is vital to perform longitudinal studies in order to examine into the system underlying the association anticipated in the study.

This study also gives some suggestions for the further research in a number of aspects. First, this research investigated how ethical leadership can influence the employees' innovative performance, whereas future study must go more by integrating other mediating as well as even moderating variables, for example personality, and self-efficacy and so on.

Second, on account of the sample selection in Pakistan, the external validity of inferences was constrained. Consequently, it is hoped that researchers may repeat this research in other countries having different contexts and cultures to observe and support the generalizability and validity of the present study. Third, with the development of the study of the ethical leadership in Pakistan, seeing Pakistan's cultural and social realism, it is advocated that more investigations about the ethical leadership, which rooted in Pakistan must be performed and Pakistani culture features must also be incorporated in the future study.

References

- Acquaah, M. (2004). Human factor theory, organizational citizenship behaviors and human resources management practices: an integration of theoretical constructs and suggestions for measuring the human factor. *Review of Human Factor Studies*, 10(1).
- Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of management*, 38(4), 932-968.
- Akdoğan, A. A., Arslan, A., & Demirtaş, Ö. (2016). A strategic influence of corporate social responsibility on meaningful work and organizational identification, via perceptions of ethical leadership. *Procedia-Social and Behavioral Sciences*, 235, 259-268.
- Akheilos. (2015, August 10). [:http://defence.pk/threads/pakistan-the-next-software-hub.390867/#ixzz3womIJPR2](http://defence.pk/threads/pakistan-the-next-software-hub.390867/#ixzz3womIJPR2). Retrieved March 10, 2016.
- Amabile, T. M. (1988). A model of creativity and innovation in organizations. *Research in organizational behavior*, 10(1), 123-167.
- Amadio, M. (2013). A rapid assessment of curricula for general education focusing on cross-curricular themes and generic competences or skills. *Background paper for EFA Global Monitoring Report, 14*.
- Andelković, B., Kovač, M., & Hall, B. (2016). UNDP Human Development Report 2016–SERBIA–SOCIAL CAPITAL: The invisible Face of Resilience.
- Baba, S., & Zayed, T. M. (2015). Knowledge of Shariah and Knowledge to Manage 'Self' and 'System': Integration of Islamic Epistemology with the Knowledge and Education. *Journal of Islamic Legal Studies/ ISSN-2519-1535*, 1(01), 45-62.
- Bakir, M., Sofian, M., Hussin, F., & Othman, K. (2015). Human Capital Development from Islamic Knowledge Management Perspective. *Revelation and Science*, 5(1).
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The leadership quarterly*, 10(2), 181-217.

- Bjørnson, F. O., & Dingsøy, T. (2008). Knowledge management in software engineering: A systematic review of studied concepts, findings and research methods used. *Information and Software Technology, 50*(11), 1055-1068.
- Bontis, N. (1998). Intellectual capital: an exploratory study that develops measures and models. *Management decision, 36*(2), 63-76.
- Bontis, N. (1999). Managing organisational knowledge by diagnosing intellectual capital: framing and advancing the state of the field. *International Journal of technology management, 18*(5-8), 433-462.
- Bontis, N. (2001). Assessing knowledge assets: a review of the models used to measure intellectual capital. *International journal of management reviews, 3*(1), 41-60.
- Bouckenoghe, D., Zafar, A., & Raja, U. (2015). How ethical leadership shapes employees' job performance: The mediating roles of goal congruence and psychological capital. *Journal of Business Ethics, 129*(2), 251-264.
- Brooking, A. (1996). Intellectual Capital, International Thomson Business Press. *Thomson Learning Europe*.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The leadership quarterly, 17*(6), 595-616.
- Brown, M. E., Treviño, 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.
- Chang, H. H., & Chuang, S.-S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & management, 48*(1), 9-18.
- Chaudary, S., & Ali, M. (2016). The Spillover Effect of CSR Initiatives on Consumer Attitude and Purchase Intent: The Role of Customer-Company Identification with the Moderating Effect of Awareness. *Pakistan Journal of Commerce & Social Sciences, 10*(2).
- Chen, A. S.-Y., & Hou, Y.-H. (2016). The effects of ethical leadership, voice behavior and climates for innovation on creativity: A moderated mediation examination. *The leadership quarterly, 27*(1), 1-13.
- Chen, K.-H., Wang, C.-H., Huang, S.-Z., & Shen, G. C. (2016). Service innovation and new product performance: The influence of market-linking capabilities and market turbulence. *International Journal of Production Economics, 172*, 54-64.

- Chen, M.-C., Cheng, S.-J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6(2), 159-176.
- Chiu, C.-M., Hsu, M.-H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems*, 42(3), 1872-1888.
- Choo Huang, C., Luther, R., & Tayles, M. (2007). An evidence-based taxonomy of intellectual capital. *Journal of Intellectual Capital*, 8(3), 386-408.
- Chow, W. S., & Chan, L. S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & management*, 45(7), 458-465.
- Ciulla, J. B. (2004). Ethics and leadership effectiveness. *The nature of leadership*, 302-327.
- Cox, S. S. (2011). *An investigation of forgiveness climate and workplace outcomes*. Paper presented at the Academy of Management Proceedings.
- 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 Roeck, K., & Farooq, O. Corporate Social Responsibility and Ethical Leadership: Investigating Their Interactive Effect on Employees' Socially Responsible Behaviors. *Journal of Business Ethics*, 1-17.
- Dess, G. G., & Picken, J. C. (2000). Changing roles: Leadership in the 21st century. *Organizational dynamics*, 28(3), 18-34.
- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (2017). *The global innovation index 2017: Innovation Feeding the World*. Ithaca, NY: Cornell University.
- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long range planning*, 30(3), 320-373.
- Edvinsson, L., & Malone, M. S. (1997). Intellectual capital: realizing your company's true value by finding its hidden brainpower.
- Ganjali, A., & Rezaee, S. (2016). Linking perceived employee voice and creativity. *Iranian Journal of Management Studies*, 9(1), 175.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The leadership quarterly*, 16(3), 343-372.

- Gini, A. (1997). Moral leadership and business ethics. *Journal of Leadership Studies*, 4(4), 64-81.
- Greenwood, M. (2016). Approving or improving research ethics in management journals. *Journal of Business Ethics*, 137(3), 507-520.
- Grojean, M. W., Resick, C. J., Dickson, M. W., & Smith, D. B. (2004). Leaders, values, and organizational climate: Examining leadership strategies for establishing an organizational climate regarding ethics. *Journal of Business Ethics*, 55(3), 223-241.
- Hassan, S. (2015). The importance of ethical leadership and personal control in promoting improvement-centered voice among government employees. *Journal of Public Administration Research and Theory*, 25(3), 697-719.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic management journal*, 25(12), 1155-1178.
- Hiller, N. J., DeChurch, L. A., Murase, T., & Doty, D. (2011). Searching for outcomes of leadership: A 25-year review. *Journal of management*, 37(4), 1137-1177.
- Homans, G. C. (1958). Social behavior as exchange. *American journal of sociology*, 63(6), 597-606.
- Hoyt, C. L., Price, T. L., & Poatsy, L. (2013). The social role theory of unethical leadership. *The leadership quarterly*, 24(5), 712-723.
- Huang, L., Krasikova, D. V., & Liu, D. (2016). I can do it, so can you: The role of leader creative self-efficacy in facilitating follower creativity. *Organizational behavior and human decision processes*, 132, 49-62.
- Huang, X., Hsieh, J., & He, W. (2014). Expertise dissimilarity and creativity: The contingent roles of tacit and explicit knowledge sharing. *Journal of Applied Psychology*, 99, 816.
- Jahan, S. (2016). Human development report 2016: human development for everyone. *United Nations Development Programme (UNDP)*, New York, NY.[Google Scholar].
- Jalali, Q. M. (2017). Investigating Causes of Human Capital Flight of Doctors and Engineers from Pakistan. *Journal of Managerial Sciences Volume XI Number, 1*, 86.
- Janssen, O. (2003). Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co-workers. *Journal of occupational and organizational psychology*, 76(3), 347-364.
- Jütting, J. (2007). *Informal institutions: How social norms help or hinder development*. OECD Publishing.

- 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.
- Kanter, R. M. (2000). When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organization.
- Kaplan, R. S., & Norton, D. P. (2004). *Strategy maps: Converting intangible assets into tangible outcomes*: Harvard Business Press.
- Khokhar, A. M., & Zia-ur-Rehman, M. (2017). Linking Ethical Leadership to Employees' Performance: Mediating Role of Organizational Citizenship Behavior and Counterproductive Work Behavior. *Pakistan Journal of Commerce & Social Sciences*, 11(1).
- Kumari, K., Usmani, S., & Hussain, J. (2014). Responsible leadership and intellectual capital: The mediating effects of effective team work. *Journal of Economics, Business and Management*, 3(2), 176-182.
- LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology*, 83(6), 853.
- Lu, X., & Guy, M. E. (2014). How emotional labor and ethical leadership affect job engagement for Chinese public servants. *Public Personnel Management*, 43(1), 3-24.
- Mahoney, J. T., & Kor, Y. Y. (2015). Advancing the human capital perspective on value creation by joining capabilities and governance approaches. *The Academy of Management Perspectives*, 29(3), 296-308.
- Maqbool, A. R. (2016, February 01). Prioritize scientific research. *Dawn*, 03.
- Martins, E., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European journal of innovation management*, 6(1), 64-74.
- Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. *Academy of Management Journal*, 55(1), 151-171.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. B. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational behavior and human decision processes*, 108(1), 1-13.
- Mayo, A. (2001). *Human Value of the Enterprise*: Nicholas Brealey Publishing London.

- Mehralian, G., A. Nazari, J., Akhavan, P., & Reza Rasekh, H. (2014). Exploring the relationship between the knowledge creation process and intellectual capital in the pharmaceutical industry. *The Learning Organization*, 21(4), 258-273.
- Mehralian, G., Rajabzadeh, A., Reza Sadeh, M., & Reza Rasekh, H. (2012). Intellectual capital and corporate performance in Iranian pharmaceutical industry. *Journal of Intellectual Capital*, 13(1), 138-158.
- Mohammed Fathi, N., Cyril Eze, U., & Guan Gan Goh, G. (2011). Key determinants of knowledge sharing in an electronics manufacturing firm in Malaysia. *Library Review*, 60(1), 53-67.
- Moon, Y. J., & Kym, H. G. (2006). A model for the value of intellectual capital. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 23(3), 253-269.
- Mooradian, T., Renzl, B., & Matzler, K. (2006). Who trusts? Personality, trust and knowledge sharing. *Management learning*, 37(4), 523-540.
- Mursaleen, M., Saqib, L., Roberts, K. W., & Asif, M. (2015). Islamic Work Ethics as Mediator between Trust and Knowledge Sharing Relationship. *Pakistan Journal of Commerce & Social Sciences*, 9(2).
- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of management review*, 23(2), 242-266.
- Oke, S., Okeke, O., Amadi, A., & Onoduku, U. (2009). Geotechnical Properties of the Subsoil for Designing Shallow Foundation in some selected parts of Chanchaga area, Minna, Nigeria. *Journal of Environmental Science*, 1(1), 45-54.
- Ordenez de Pablos, P. (2004). A guideline for building an intellectual capital statement: the 3R model. *International Journal of Learning and Intellectual Capital*, 1(1), 3-18.
- Ordenez de Pablos, P. (2005). Intellectual capital reports in India: lessons from a case study. *Journal of Intellectual Capital*, 6(1), 141-149.
- Özer, G., Ergun, E., & Yilmaz, O. (2015). Effects of intellectual capital on qualitative and quantitative performance: Evidence from Turkey. *South African Journal of Economic and Management Sciences*, 18(2), 143-154.
- Pasricha, P., Singh, B., & Verma, P. Ethical Leadership, Organic Organizational Cultures and Corporate Social Responsibility: An Empirical Study in Social Enterprises. *Journal of Business Ethics*, 1-18.

- 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.
- Rasheed, M. A., Rasheed, M. A., Shahzad, K., Shahzad, K., Conroy, C., Conroy, C., . . . Siddique, M. U. (2017). Exploring the role of employee voice between high-performance work system and organizational innovation in small and medium enterprises. *Journal of Small Business and Enterprise Development*.
- Rego, A., Sousa, F., Marques, C., & e Cunha, M. P. (2014). Hope and positive affect mediating the authentic leadership and creativity relationship. *Journal of Business Research*, 67(2), 200-210.
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioral sciences [by] John T. Roscoe*.
- Sami, A., Jusoh, A., & Qureshi, M. I. (2016). Does Ethical Leadership Create Public Value? Empirical Evidences from Banking Sector of Pakistan. *International Review of Management and Marketing*, 6(4S).
- Schiuma, G., & Lerro, A. (2008). Intellectual capital and company's performance improvement. *Measuring Business Excellence*, 12(2), 3-9.
- Shabaninejad, H., Mirsalehian, M. H., & Mehralian, G. (2014). Development of an integrated performance measurement (PM) model for pharmaceutical industry. *Iranian journal of pharmaceutical research: IJPR*, 13(Suppl), 207.
- 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.
- Shan, S., Xin, T., Wang, L., Li, Y., & Li, L. (2013). Identifying influential factors of knowledge sharing in emergency events: a virtual community perspective. *Systems Research and Behavioral Science*, 30(3), 367-382.
- Shin, I., Hur, W.-M., & Kang, S. (2016). Employees' perceptions of corporate social responsibility and job performance: A sequential mediation model. *Sustainability*, 8(5), 493.
- Siddiqui, S. U. R. (2015, November 27). ICCI for Focusing on High Tech Industry. *Business Recorder*.
- Skaggs, B. C., & Youndt, M. (2004). Strategic positioning, human capital, and performance in service organizations: A customer interaction approach. *Strategic management journal*, 25(1), 85-99.

- Stewart, T. A. (2007). *The wealth of knowledge: Intellectual capital and the twenty-first century organization*: Crown Business.
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450-463.
- Sveiby, K. E. (2008). Measuring Intangibles and Intellectual Capital: an emerging first standard. 1998. Available on: <http://www.sveiby.com/articles/EmergingStandard.htm>.
- Tang, C., & Naumann, S. E. (2015). Paternalistic leadership, subordinate perceived leader–member exchange and organizational citizenship behavior. *Journal of Management & Organization*, 21(3), 291-306.
- Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *Journal of Applied Psychology*, 96(2), 277.
- Titi Amayah, A. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454-471.
- Treviño, 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.
- Tsui, E., Wang, W. M., Cai, L., Cheung, C., & Lee, W. (2014). Knowledge-based extraction of intellectual capital-related information from unstructured data. *Expert systems with Applications*, 41(4), 1315-1325.
- UNESCO (2016). Global education monitoring report, *education for people and planet: creating sustainable futures for all*. Paris, France: UNESCO.
- Volmer, J., Spurk, D., & Niessen, C. (2012). Leader–member exchange (LMX), job autonomy, and creative work involvement. *The leadership quarterly*, 23(3), 456-465.
- Vos, T., Barber, R. M., Bell, B., Bertozzi-Villa, A., Biryukov, S., Bolliger, I., . . . Dicker, D. (2015). Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *The Lancet*, 386(9995), 743.
- Walumbwa, F. O., Morrison, E. W., & Christensen, A. L. (2012). Ethical leadership and group in-role performance: The mediating roles of group conscientiousness and group voice. *The leadership quarterly*, 23(5), 953-964.

- 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.
- Wan, W. H., & Antonucci, T. C. (2016). Social Exchange Theory and Aging.
- Wang, D., Gan, C., Wu, C., & Wang, D. (2015). Ethical leadership and employee voice: Employee self-efficacy and self-impact as mediators. *Psychological reports, 116*(3), 751-767.
- Wu, L.-Z., Kwan, H. K., Yim, F. H.-k., Chiu, R. K., & He, X. (2015). CEO ethical leadership and corporate social responsibility: A moderated mediation model. *Journal of Business Ethics, 130*(4), 819-831.
- 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.

Appendix-A

Questionnaire

Ethical Leadership

1. *I have a high level of integrity*
2. *I am humble*
3. *I believe in giving an honest day's work for an honest day pay*
4. *I am a conscientious individual*
5. *I obey and comply with organizational rules, regulations and procedures, or the rule of law in a nation.*
6. *I take responsibility and accountability for my own actions*
7. *I consistently demonstrate values and beliefs that are espoused by my organization or nation*
8. *I do not abuse the rights of others*
9. *I am always ready to lend a helping hand to those around me*
10. *I willingly help others with work-related problems*
11. *I am mindful of how my behavior and attitude affect other people and their job performance*
12. *I take steps to prevent problems and conflicts with other people*
13. *My attendance to work is above the norm*
14. *I am forgiving of other's errors, mistakes and offenses*
15. *I do not hold grudges*
16. *I am willing to overlook most errors, mistakes and offenses*

Social Capital

17. *Our employees have frequent communication with their teammates*
18. *Our employees spend a lot of time interacting with their teammates*
19. *Our employees maintain close social relationships with their teammates*
20. *If our employees got into difficulties at work, they know their teammates would try and help them out*
21. *Our employees will always keep the promises they make to one another*
22. *Our employees are truthful in dealing with one another*
23. *Our employees always agree on what is important at work*
24. *Our employees always share the same ambitions and vision at work*
25. *Our employees are always enthusiastic about pursuing the collective goals and missions of the whole organization*

Human Capital

26. *Our employees are highly skilled*
27. *Our company spends more money on employee training*
28. *Our company spends more time on training employees*
29. *Our employees are widely considered the best in our industry*
30. *Our company hires employees with high level of education*
31. *An employee need to have a degree in technical education*
32. *Our employees are creative and bright*
33. *Our employees develop new ideas and knowledge*
34. *Our employees are experts in their particular jobs and functions*

Innovative Performance

35. *Our employees create new ideas for difficult issues*
36. *Our employees search out new working methods, techniques, or instruments*
37. *Our employees generate original solutions for problems*
38. *Our employees mobilize support for innovative ideas*
39. *Our employees acquire approval for innovative ideas*
40. *Our employees make important organizational members enthusiasm for innovative ideas*
41. *Our employees transform innovative ideas into useful applications*
42. *Our employees introduce innovative ideas into the work environment in a systematic way*
43. *Our employees evaluate the utility of innovative ideas*