



# Understanding the dynamic nexus between ethical leadership and employees' innovative performance: the intermediating mechanism of social capital

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## Abstract

Research suggests that ethical leadership influences employees' behavior and organizational functioning. Thus, the purpose of this study is to investigate the role of ethical leadership in the improvement of employees' innovative performance. Specifically, this research developed and tested a framework about the intermediating mechanism of social capital in the relationship between ethical leadership and employees' innovative performance. The current study integrated assumptions of social learning and social exchange theories, which postulate that the leadership has a direct effect on the employees' conduct, principally through role modeling and the reciprocal landscape. Data were collected through in-person administered questionnaire-based survey from 297 employees working in the manufacturing sectors of Pakistan. The conceptual model of our research was analyzed applying Structural Equation Modeling (SEM). The results exhibited that the ethical leadership plays an important role in fostering employees' innovative performance. The present study also found that social capital plays an intermediating role between the ethical leadership and employees' innovative performance relationship. The current study contributed to the leadership and innovation literature and provided insights in examining the ethical leadership-employees' innovative performance relationship through the intermediating mechanism of social capital.

**Keywords** Ethical leadership · Social capital · Innovative performance

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## Introduction

Innovation is considered as a key factor for organizational success in today's dynamic and competitive atmosphere (Freire & Bettencourt, 2020). The research scholars recognize leadership as one of the most imperative dynamics influencing innovation and creativity (Bahadori et al., 2021; Mostafa & Bottomley, 2020). Shafique et al. (2019) noted that the concern in the influence of the ethical leadership on innovativeness and creativeness is growing. The increasing intellectual concern in innovative situations is also observed in ethical leadership, while the validity has become a "widespread emerging social trend" (Goswami et al., 2020; Grošelj et al., 2020) and a "gold standard for leadership." Not only the academic research but also the focus of the experts is growing. Innovation in the work setting is, next to the learning, critical for businesses, societies, groups, and organizations and intrinsically delivers the important part of the nations' agenda of the globalization and the knowledge-intensive world. Capability to innovate at the firm level as well as the country level is considered as a critical dynamic for economic growth and social development, while, at the individual level, innovation entrenched in a job is the prerequisite for higher job satisfaction (Chamtitigul & Li, 2020).

Ethical leadership is a pivotal factor for business organizations for the reason that it benefits organizations to reduce business operating cost through reasonable and moral conduct of their employees and supplementary or other resources (Thomas et al., 2004). Mayer et al. (2009), in their research study, have examined the constructive role pertaining to the ethical leadership in lessening the disparaging behaviors of organizational employees and discouraging immoral work practices. However, comparatively less consideration has been given to probe the association between the ethical leadership and employees' innovative performance (Yidong & Xinxin, 2013; Zaim et al., 2021). Brown, Treviño, and Harrison (2005) propagated social learning context, but very few research studies considered this perspective as an influencing paradigm to elucidate how convincing and why the temperament of ethical leadership associates exert pressure towards employees pertaining to innovative work behavior as detailed by Byun et al. (2018).

Ethical leadership is theorized according to the purported trickle-down effect (Constandt & Willem, 2019), reinforced by the social learning theory and social exchange theory, which will be conversed in the later section of this research. Both of these theories shed light on the spilling effect of the moral and suitable conduct (Lin & Ling, 2021; Wang et al., 2018) from top to bottom. This paradox happens when individuals (the leaders and their subordinates) work diligently together. Zainun et al. (2020) consider that those neighboring to workers, explicitly their direct supervisors and associates, and not their administrative leaders, effect moral-related resolutions, decisions, and conduct the most. On the other hand, administrative and executive leaders are perceived as an isolated element of the leadership in the business organizations and are then not the emphasis of the contemporary research study.

The influence that ethical leadership has on followers' behavior may be described from both a "social learning" (Bandura, 1971) and a "social exchange

theory” (Blau, 1964) context. The social learning theory postulates that the organizational leaders are considered as role models and workers can recognize them and try to follow their behavior comprising moral conduct and behavior (Brown et al., 2005). Followers will try to follow the constructive and normative suitable behavior due to role modeling behavior exhibited by their leaders. The social exchange theory (Blau, 1964) highlights that exchange between the leaders and followers is established on a sense of commitment for reciprocating negative or positive actions and behavior.

Thus, the main hypothesis of this paradigm suggests that ethical leaders exert pressure towards employees’ behaviors through role modeling, while practicing the moral management temperament, for example, emphasizing employees to practice ethics and, through this practice, compensating employees by adopting and practicing moral temperaments. Being a role model in the capacity of moral leader can motivate employees and restrict, i.e., not to get involved in such behaviors, which can hurt their innovative work behavior (Bahadori et al., 2021).

The research on the ethical leadership postulates the concept of ethical leadership as a widespread leadership process that is more likely to transform the leader’s behavior to followers’ behavior through social identity, learning, and exchange (Treviño et al., 2003). Ethical leadership is principally vital when employees exchanges include trust, justice, fairness, and empowering behavior (Wang et al., 2016). When business employees have trust in their leaders, they are more likely to follow ethical behaviors and are more likely to take the risks (Hermann, 2015). Rather, if followers consider their managers and leaders to be unethical, they are more likely to have pressure, depression, stress, and nervousness and exhibit counterproductive behavior, for instance, to cheat in problem-solving jobs which may result in weak work outcomes (Grobler & Grobler, 2021). Prior research has concentrated on examining the effect of the ethical leadership on followers’ moral behavior (for instance, organization citizenship behavior, ethical decision-making, and moral identity), and employees’ immoral behavior (for instance, counterproductive and deviant work behavior) (Hiller et al., 2011). So far, few studies have analyzed the effect of the ethical leadership on followers’ innovative work behavior (Kashefi et al., 2019; Zahra & Waheed, 2017). Therefore, the first objective of the contemporary research study is to deal with this imperative yet relatively understudied domain of the research.

Furthermore, previous studies have ignored the role of social capital in the ethical leadership and employees’ innovative performance association. Javed et al. (2017) examined the impact of the ethical leadership on employee creativity. In addition to that, Shafique et al. (2019) witnessed the link between the ethical leadership and innovation. Kashefi et al. (2019) investigated the effect of ethical leadership on innovative work behavior. Moreover, Ullah et al. (2020) investigated the effect of ethical leadership on employees’ innovative performance. In addition to that, in their study, Bahadori et al., (2021) witnessed the effect of the ethical leadership on the commitment of the organizational employees. Consequently, the said scholars overlooked and did not observe the outlooks concerning the ethical leadership on employees’ innovative performance via the underlying mechanism of social capital.

Hence, the second objective of the contemporary study is to bridge the existing literature gap by examining the intermediating mechanism of social capital in the relationship between the ethical leadership and employees' innovative performance. Social learning theory suggests that individuals model behavior on those whom they respect and have trust (Bandura, 1986). Moral business leaders are probable to express their concerns openly against unsuitable business behaviors, and in this way, they have focused on doing the right thing (Badrinarayanan et al., 2019; Hassan, 2015). Likewise, moral managers display high moral values to their employees and subordinates and hence inspire them to voice suggestions, ideas, and views on moral concerns along with other work practices (Su, 2014). In addition to that, ethical leader cultivates the social capital of the organization, instigating the employees to pursue the proposition of profit making by keeping the comparative advantage and the competitive edge over the competitors at the marketplace (Edwards & Ashkanasy, 2018). The capability to nurture and exploit unique and rare knowledge is an asset and essential to business performance. Consequently, social capital comprising intangible knowledge assets, a firm may exploit for differential edge (Kong, 2010). Given this outlook, the contemporary study integrates two theories pertaining to social learning theory and social exchange theory to designate the fundamental rationale for this stance, recognizing that by representing an explicit discourse about moral problems, moral leaders boost social capital of their followers within the firm. Therefore, the contemporary research scope encounters the traditional paradigms by comprehending, and it is further expected that this study will explain the processes through which moral leaders inspire followers' innovative work behavior.

## Literature review and hypotheses development

### *Ethical leadership.*

Brown et al. (2005) defined ethical leadership as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making.” The term “normatively appropriate conduct” points out the moral component of the ethical leaders, who have a temperament comprising responsibility, fairness, trustworthiness, and honesty (Piccolo et al., 2010). Definitely, moral leaders demonstrate moral styles, communicate the effects of moral values, provide rewards for moral behaviors, implement penalty for immoral actions, and dynamically relate themselves in the moral identity (Brown et al., 2005). Their moral identity shows their openness towards the interests and expectation of others as carrying out the contradictory activities can lead to consequences in relation to dissonance and self-condemnation.

On the other side, the ethical leader is a strategic endeavor of the manager to influence the moral behavior of his followers (Huma et al., 2020). Positive initiatives can encompass and support a message about morals and integrity, being purposely demonstrating moral actions, executing a compensation platform to keep employees accountable for moral activities, and punishing any temperament that may not conform expectations (Badrinarayanan et al., 2019).

Brown et al. (2005) described that moral leaders are more likely to shape their employees' conduct, firstly through "role modeling" and secondly through "social exchange." Brown and Treviño (2006) used the social exchange and the social learning theories in an endeavor to report the impact of managers' ethical behavior on their employees and to identify the significance of ethical leadership. They found that moral behavior and constructive conduct are standard on the imitation and internalization of the conduct of reliable role models ("social learning theory") within a naïve and observed moderate work atmosphere ("social exchange theory"). Ethical leadership is more likely to initiate subordinates' moral decision-making, pro-social conduct, and, eventually, employee satisfaction, commitment, and motivation (Grobler & Grobler, 2021).

### **Social capital**

Social capital may be defined as "the actual and potential resources embedded within, available through and derived from the networks of relationships possessed by an individual or social unit" (Nahapiet & Ghoshal, 1998, p. 243). The notion of social capital may be used in the firms and civic research for enlightening the role of social assets and resources embedded in dyadic or network associations comprising resource exchange and knowledge management practices. The literature on the social capital has documented the vital role in persuading the outlooks and conduct of individuals in the knowledge sharing (Bhatti et al., 2021). "Social capital can be cognitive, structural, and relational" (Nahapiet & Ghoshal, 1998). The structural feature remarks the associations among the business personnel (Sharabati et al., 2010). This part of social capital includes "social network" (Amayah, 2013). The relational feature of the social capital labels the arrangement of individual associations that the persons have established with each other through a series of historical relations. "Trust is a significant aspect of this characteristic" (Mehralian et al., 2012; Shan et al., 2013). Cognitive feature is obsessed in extents, for instance, a common code and a common configuration that permits a shared temperament of common goals and appropriate worth of performing in the social structure. "Shared goals are reflected as a key impression of cognitive capital" (Fathi et al., 2011).

### **Innovative performance**

Innovation may be on one hand being observed as a distinct outcome being as a product, explicitly as a new idea, or process, or on the other hand as a process in terms of presenting somewhat new. On the most elementary stage, "innovation indicates something new" (Gopalakrishnan & Damanpour, 1997). According to Thompson (1965), "Innovation is the generation, acceptance and implementation of new ideas, processes products or services." Hage (1999) recognizes the concept of innovation as the "adoption of an idea or behaviour that is new to the organization." Saeed et al. (2019) presented that innovative performance is a multidimensional concept, which includes all behaviors through which workers donate to the innovative process. Innovative performance has obtained the consideration of practitioners,

professionals, and researchers for many years, while the notion of an innovative work behavior initiates from persons' creative behavior, which supports in the generation, modification, communication, and implementation of innovative ideas (Maqbool et al., 2019). "Innovative work behavior is one of the elementary constructs of efficacious firms; that is why the documentation of motivational dynamics of innovative work behavior offers a significant role towards the understanding pertaining to innovation at the individual level" (Usmanova et al., 2020). Although substantial studies have yet to surface towards the relationship, i.e., between the ethical leadership and innovative performance, however, there are several explanations in favor of positive association (Grošelj et al., 2020). These are being discussed below:

### **Ethical leadership and employees' innovative performance**

According to Treviño et al. (2003), a moral leader is open to new and unique ideas and is honest and trustworthy and firmly follows moral values. In their study, the following attributes of moral leader propagated by Resick et al. (2006) reveal accordingly: (a) accomplishes moral responsibilities, (b) being ethical and having a moral personality, (c) empowers and motivates his followers, and (d) deliberates people and society. Similarly, there are other nine attributes being detailed by Bligh and O'Connell (2009) pertaining to ethical leadership: (a) holds others answerable for their moral activities, (b) moral leader has moral vision, (c) arranges trainings for subordinates to impart working morally, (d) involves in moral decision-making, (e) recognizes himself and others who work with him, (f) is role model of moral behavior, (g) treats his followers honestly, (h) communicates significance of moral values to his followers, and (i) gives importance to long-term decision-making.

Prior study has displayed the relationship among ethical leadership and followers' consequences comprising citizenship behaviors, deviant work conducts, and moral behavior (Avey et al., 2012). Since ethical leaders register themselves as honest entities and to be termed as role models and imperative foundation to be classified as knowledge during their "normatively appropriate" behavior and open communication of ethical values and principles (Brown et al., 2005). This supports to institute a common understanding of suitable behaviors among workforces for enhancing their knowledge and imitating the behaviors of managers that sequentially nurtures their work-related outcomes (Piccolo et al., 2010). Since social learning theory offers a comprehensive paradigm to elucidate how moral leaders influence the innovative work behavior of their followers (Bandura, 1986). This theory advocates that moral managers use their inspiration on followers' behavior, principally using role modeling (Cropanzano & Walumbwa, 2010). Accordingly, role modeling gives to the followers the foundation for learning those behaviors that are indispensable to display fine on the job (Shafique et al., 2018). Moral leaders tend to be smart and honest by registering themselves as role models catching the courtesy of their followers and influence them positively by helping to obtain their potential at the maximum while at work (Bandura, 1986). It is highlighted that leaders being moral definitely influence followers' performance via reward and punishment, and steer their followers driving them in the right direction to

execute the job proposition (Den Hartog & De Hoogh, 2009). Moral managers also stress on reciprocal message with their subordinates; consequently, they feel more accountable and devote more exertions to do their job well (Frieder et al., 2015; Grobler & Grobler, 2021). Subordinates realize that their managers always carry the best sentiments leading to better care towards them. In response, followers always depict to pursue the proposition of hard work effort to return within their better performance (Cai et al., 2019). Furthermore, moral values may also be a collaborative feature that can develop the relationship among the business employees, because all the employees incline in sharing the outlook that the leaders are honest, moral, and ethical, they will have the common view that they are open in contributing in the decision-making, and free of the fear that their suggestions and opinions could prone to hurt their position and status at that time, when the emotionally safe atmosphere could lead to the organizational employees to be more involved in presenting their new ideas, concepts, and thoughts (Bahadori et al., 2021; Zaim et al., 2021). Therefore, it is postulated that:

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

### **Ethical leadership and social capital**

The high prospective in the perspective of the ethical leadership and the social capital may be recognized in this association, if there is a presence of the cross-functional clusters. High excellence of the ethical leadership temperament is being assumed as an important source for the companies who need to recognize their operational performance. The features of poor leadership temperaments towards the poor assets of an organization, high rate of absenteeism, low level of confidence, rise in frustration, slow demolition, insufficient planning and unforeseen consequences, and poor resources to deal with clientele and the markets (Aravena, 2019). Shared values mostly vary clearly, when important managers join the industry or leave; hence, it is quantifiable in actual shareholder value (Brown et al., 2021).

Ethical leadership is being considered as an essential component of corporate culture because it produces a vigorous influence on the other intangible assets. Primarily, leadership encompasses intellectual capital initiatives. The ethical leadership is more likely to develop the social capital of corporate culture and business, causing to make profit by keeping the differential competitive advantage over the competitors (Crona et al., 2017; Jardon & Martínez-Cobas, 2019). Moral leaders are more likely to consider their subordinates as commendable resources on which basic abilities and skills are developed, and differential competitive benefits are being obtained. To obtain the wide-ranging differential advantage social capital, extensive funds are needed which can support for developing the social capital. Further, employees do expand their knowledge perspectives by encouraging the new initiatives of involvement with the society. To obtain knowledge and acquire new personnel, continuous investment is needed in this regard (Chow & Chan, 2008; Kumari et al., 2014). Ethical leadership is being considered to have consequences towards the above-mentioned tactics, by means of the appropriate course that may assist in the achievement of the anticipated corporate goals and objectives of an organization.



Therefore, this defines that ethical leadership is a vital and imperative attitude and approach, which can support the accomplishment of employees' social capital, resulting in high paybacks, profit, and benefits to stakeholders. Accordingly, the following hypothesis may be developed:

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

## **Ethical leadership, social capital, and innovative performance**

Globalization is being considered as an inevitable proposition in the prevailing competitive environment. According to Chatterjee (2020), "globalization goes along with the strengthening of borders in every phase of life." Knowledge and education play a dynamic role to shape the human resource in answering to the encounters of the today's and tomorrow's (Castro Laszlo & Laszlo, 2002). The need of value-laden outlooks in education and knowledge is imperative for developing universal behaviors among the individuals. Human capabilities need to be developed through training and learning practices so that the individuals grasp the skills and knowledge with moral principles (Ahmed et al., 2021; Pasricha & Rao, 2018; Tang & Naumann, 2015; Yukl et al., 2013). The concerns related to civic, moral, and citizenship education are imperative for the individuals. The effect of globalization caused hazard and serious concerns to the moral values, public awareness, and social responsibility among the employees. Family and academic bodies play a dynamic role in molding the personality, character, and conduct of the individuals (Hedman & Magnusson, 2021). A worthy moral principle, respecting others, included the proposition of being energetically rich in relation to nation-building developments and are being considered as the preconditions for a universal change.

The development of social capital in a universal style can naturally create individuals of high personalities. Other than having noble abilities in enterprising innovative and creative endeavors in science and technology, the civilizations aspects are continuously imperative. Humanities aspects, for example, honesty, responsibility, creativity, dedication, and public awareness must be the guiding values in nation-building (Baba & Zayed, 2015; Hasan et al., 2020; Mooradian et al., 2006). Indeed, the capability to value the relative benefits from other conducts and evolution can bring the kind of growth based on our own mold. Accordingly, it can be hypothesized that:

Hypothesis 3: Social Capital is positively related with innovative performance.

Hypothesis 4: Social Capital mediates the relationship between ethical leadership and innovative performance.

## **Methodology**

### **Participants and procedure**

In the contemporary study, the participants were management-level employees of different tiers of hierarchy working in the manufacturing firms of Pakistan.



According to the Census carried out by the Federal Bureau of Statistics, 6417 manufacturing organizations exist in Pakistan. These organizations included 72 districts; ten districts encompass the major groups of manufacturing sector with 3906 organizations. These districts are Karachi, Hyderabad, Gujrat, Faisalabad, Lahore, Gujranwala, Multan, Shiekhupura, Quetta, and Sialkot. The contemporary research study used a convenient sampling technique for data collection. The sample included the firms' category related to leather, textile, automobile, chemicals, food and beverages, and steel manufacturing. The demographic profile of the sample structure, including manufacturing sector and target respondents, is exhibited in Table 1. Target employees were asked to fill the questionnaire-based survey forms carefully. Survey forms were circulated in person among the respondents. Four hundred survey forms were distributed, whereas 297 filled forms were received back. In this way, the response rate was 74.25% in the contemporary research study.

## Measures

A questionnaire-based survey with a 5-point Likert scale was used in the present study. This survey had two parts. The first part of the survey was related to the demographic profile of the target respondents and the second part was related to the statements concerning the ethical leadership, social capital, and employees' innovative performance.

For measuring the ethical leadership, 15-items "Ethical Leadership Questionnaire (ELQ)" of Yukl et al. (2013) was used. The individuals were asked to display the extent to which they may "agree" or "disagree" with elements on the Likert scale with 1 = "strongly disagree" and 5 = "strongly agree." The example item includes, "my boss shows a strong concern for ethical and moral values."

Social capital includes shared goals, networks, and trust. Three statements were used to measure *network ties*: "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 statements were extracted from the previous research and are considered as in line with the measurement scale used in the research of Chiu et al. (2006). In order to measure *trust*, three items were used. These items are "If our employees got into difficulties at work, they know their teammates would try to 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 statements were extracted from the scale of Mooradian et al. (2006). These items were anticipated to get the worthy intent aspect of trust. Three statements were used to measure *Shared goals*. These statements are, "Our employees always agree on what is important at work," "Our employees always share the same ambitions and vision at work," and "Our employees are always enthusiastic about pursuing the collective goals and missions of the whole organization." These statements were extracted from the measures of Chow and Chan (2008).

Employees' innovative performance was measured by nine items adapted from the measures of Janssen (2003) that was adopted from the measurement scale of

**Table 1** Detail of demographics

Demographic	Category	Frequency	Percentage	
Demographic data of manufacturing industry	Type of manufacturing firm			
		Leather	52	17.6
		Chemicals	33	11.1
		Food and beverages	65	21.8
		Steel	37	12.4
		Textile	69	23.2
		Automobile	41	13.9
		50–100	57	15.8
		101–200	63	17.8
		201–300	71	20.5
Demographic detail of target sample/respondents	Number of regular employees working in the firm	301–400	47	12.5
		401–500	59	16.5
		More than 500	111	37.4
		Work experience		
			1 Year	12
		2 Years	19	6.4
		3 Years	23	7.7
		4 Years	87	29.3
		5 Years and above	156	52.5
	Gender		Male	237
		Female	60	20.1
Management hierarchy		Lower level	134	45.1
		Middle level	102	34.3
		Top level	61	20.6

Sample size ( $n$ ) = 297

Kanter (2000). The same scale was also used by Abbas and Raja (2015) and Ullah et al. (2020) in their research studies titled, “*Impact of psychological capital on innovative performance and job stress*” and “*Fostering innovative performance through ethical leadership: examining the mediating role of employee voice*” respectively. Kanter (2000) worked at the phases of innovation, including three elementary stages of innovative work behavior. These stages are “idea generation, idea promotion, and idea implementation.” Three items for each facet of this scale measured “idea generation, idea promotion, and idea implementation.” Example items 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 responses were measured on a 5-point Likert scale ranging from 1 = “Never” to 5 = “Always.”

## Data analysis

The contemporary research study used SEM method for analyzing the structural associations among the variables. Most researchers prefer this method because it evaluates the interrelated and multiple dependence in a solo analysis. AMOS (20) software was used in this study to analyze the structural relations. We followed Anderson and Gerbing (1988) for our analysis. These researchers indicated the necessity for applying a two-step method. The first step estimates a measurement model, which demonstrates how the measured variables congregate to signify the theory, and the second step designs a structural model showing how the variables relate to other variables.

## Results

### Descriptive analysis

The values of means, Std. Deviation, and correlations among the research variables are exhibited in Table 2. The results showed that the employees’ innovative performance was positively correlated with ethical leadership where  $r=0.597$  at  $p<0.01$ . The results also showed that social capital was observed as positively associated with the ethical leadership where  $r=0.541$  at  $p<0.010$ .

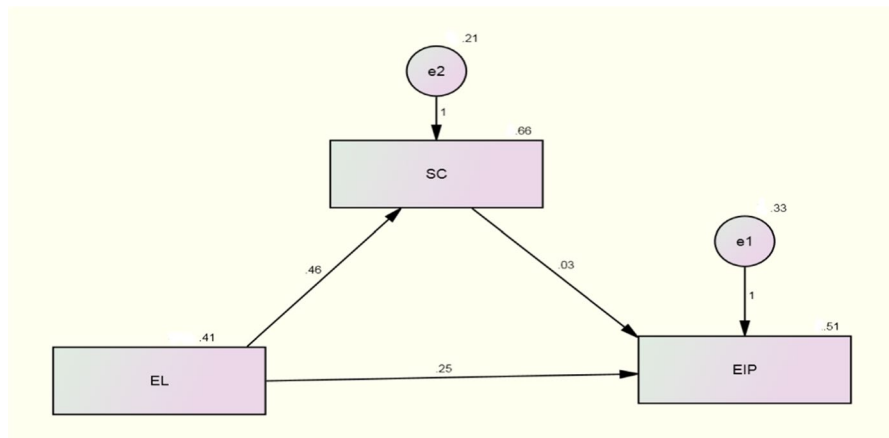
### Hypothesis testing

The conceptual framework was evaluated through the path analysis in order to measure the conjectured associations among the variables of the contemporary research study. The structural model, which is exhibited in Fig. 1 covers hypothesized paths among the conjectured variables. Moreover, the results show the values of the path estimates. The model fit indices achieved conformance with the research model (GFI=0.903, RMSEA=0.058, AGFI=0.831, NFI=0.916, CFI=0.917,

**Table 2** Results showing mean, Std. Deviation, and correlations

		Mean	S. Dev	Ethical leadership	Social capital	Employees' innovative performance
Ethical leadership	Pearson correlation	3.7403	.64002	1		
	Sig. (2-tailed)					
Social capital	Pearson correlation	3.3717	.54230	.541**	1	
	Sig. (2-tailed)			.000		
Employees' innovative performance	Pearson correlation	3.5352	.59711	.597**	.168**	1
	Sig. (2-tailed)			.000	.000	

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



**Fig. 1** Path diagram of regression analysis. Note: EL, ethical leadership; SC, social capital; EIP, employees' innovative performance

PGFI=0.687, IFI=0.915) fulfill model fit criterion exposed in the above segment and assure the path model's satisfactory fit to the analyzed data. Table 2 displays the results of the SEM used to witness the given hypotheses.

### Direct impact

The results authenticated a substantial and positive effect of ethical leadership on employees' innovative performance ( $\beta=0.28$  at  $p<0.001$ ) (Table 3). Hence, Hypothesis 1 is substantiated. The result pertaining to Hypothesis 2, i.e., the association between the ethical leadership and social capital is also validated, as the ethical leadership has a positive and significant impact on social capital where  $\beta=0.54$  at  $p<0.001$ . Furthermore, Hypothesis 3 presented that the social capital definitely

**Table 3** Results of direct effects

Relationships			Estimates	<i>P</i>	Remarks
Employees' innovative performance	<—	Ethical leadership	H1	.281	*** Accepted
Social capital	<—	Ethical leadership	H2	.542	*** Accepted
Employees' innovative performance	<—	Social capital	H3	.174	*** Accepted

links to employees' innovative performance. The results demonstrated in Table 3 show that social capital has a positive and substantial association to employees' innovative performance where  $\beta=0.17$  at  $p < 0.001$ .

### Indirect effects

For mediation analysis, the method recommended by Baron and Kenny (1986) was used. This method recommends that the independent variable must have an association with the dependent variable, the independent variable should have a relationship with the intermediating variable, and the intermediating variable must have a relationship with the dependent variable. Moreover, adding the intermediating variable should have either lower or provide the insignificance to the prior direct association of the independent variable with the dependent variable. According to Baron and Kenny (1986), Hypotheses 1, 2, and 3 should be established as the prerequisites. The subsequent stage is to investigate the effect of inclusion of social capital on the link between the ethical leadership and employees' innovative performance (Table 4).

On adding the social capital, a decrease in the coefficient value about the effect of ethical leadership on employees' innovative performance was observed that was substantial as  $\beta=0.251$  at  $p < 0.001$ ). It specifies that there is a reduction in the direct effect of the ethical leadership on employees' innovative performance in the presence of the social capital and displays as the partial intermediation of social capital in the relationship between ethical leadership and employees' innovative performance. Hence, the result support Hypothesis 4.

### Discussion

The contemporary research work was based on two integrating theories, i.e., the "social learning" (presented by Bandura, 1986) and "social exchange theory" (presented by Blau, 1964). Both of these theories propose that the insight on the leadership may have impact on the follower conduct because of its "role modeling" and "reciprocal effect." Followers would try to emulate the moral conduct of leaders (supervisors) and would attempt to return the concern (reciprocate) through constructive work approaches and conduct (as proposed by Brown et al., 2005) — in the case of contemporary research study, through employees' and innovative performance. Moreover, it was also claimed that the relationship between ethical

**Table 4** Results of mediation analysis

Relationships	Estimates	<i>p</i> value	Decision
Employees' innovative performance	<--	<--	Accepted
Social capital	<--	<--	Accepted
Ethical leadership (H4)	.251	***	Accepted

leadership and innovative performance would be boosted through social capital (as intermediating variable).

In the present research study, it was witnessed that the ethical leadership definitely influenced followers' innovative performance. This result is in line with the contention of Lei et al. (2019) that ethical leadership can be deliberated as a remarkable antecedent of employees' innovative work behavior and showed that the ethical leadership optimistically and substantially affects employees' behavior at the workplace (Zaim, 2021). This result also recommended that when ethical managers entrenched their moral standards, strained the job impress on the organization and the society, encouraged open communication, stimulated them to give their prospective, and provided them the opportunity to give their views and opinions (Tourigny et al., 2017), their workers are more likely to present innovative performance, not only when they identify that absolutely but also when it was shared as common belief (Shafique, et al., 2018). This may also be anticipated to Pakistani employees who are reflected as collectivists and are more likely to identify themselves with the relationship and may be conjured by the collective values and beliefs. Moreover, the findings of the contemporary research are also in line with the outcomes of Gu et al. (2015), Kashefi et al. (2019), and Ullah et al. (2020), who witnessed the positive relationship between the ethical leadership and employees' innovative performance.

Moreover, the present manuscript provided substantiation for the partial mediating mechanism of social capital in the linkage between the ethical leadership and employees' innovative performance. The study results demonstrate that ethical leadership has effect on employees' innovative performance, also through increasing social capital. Social learning theory proposes that individuals demonstrate their conduct on those persons whom they give respect and on whom they have trust (Bandura, 1977). Ethical leaders always communicate explicitly against those employees, who adopt out of line business behavior (Phuong & Takahashi, 2021). As the ethical leadership influences the nature of work in the organization with more demand and autonomy and defines line for the workers' societal relations that are considered as trust and psychological safety, and promotes to the common stance that one is more valued by their skills, ability, and performance instead of extrinsic rewards (Bahadori et al., 2021). Consequently, the people are more likely to increase their social capital, which sequentially leads to improve their innovative performance. In addition to that, the results demonstrated that the social capital acquired more impact on the leadership — employees' innovative performance relationship, which specifies that when people have innovative performance, they are expected to be effected by their social capital.

The framework established that social capital effects the link between the ethical leadership and followers' innovative work behavior as an intermediating variable. Employees' innovative performance can be further improved through mediation, which improves the perception of ethical leadership. This can be developed through transparent and honest communication, as well as through the solid moral behavior of the leader. Social capital can be inserted to increase both ethical leadership and employees' performance through continuous collaboration intended at enhancing value analogy between the leaders and their followers.



## Conclusions

The contemporary article exhibited that in the manufacturing work setting, managers' ethical behavior is a significant moral temperament, because it has a positive relationship with employees' innovative performance. Social capital has been observed as to be playing an intermediating mechanism in the relationship of ethical leadership and employees' innovative performance. Ethical leadership inclines to increase subordinates' role model observations and social learnings at the job setting, in that way increasing followers' social capital and foster innovative work behavior.

## Research contribution and strength

The present research study investigates the relationship between the perception of ethical leadership and innovative performance and the intermediating mechanism of social capital on the focused and concentrated relationship in the manufacturing sector context. The contemporary research study contributes to the literature in several ways. First, the contemporary research study conceived the ethical leadership to better reveal the theory and its relationship with followers' innovative work behavior, in addition to the underlining role. Second, it also establishes a paradigm and utilized SEM to investigate how the ethical leadership is related with innovative performance by probing the mediating mechanism of social capital. Third, the sample of this study included the manufacturing sector of Pakistan. Finally, limited research has examined the ethical leadership and its relationship with followers' outcomes in Pakistani context, where morality and innovative perspectives must be concentrated (Shafique et al., 2019). Consequently, the contemporary research study also added value within the existing literature by representing the generalizability and external validity of the ethical leadership and followers' innovative behavior, both of which were in the past recognized and mostly witnessed in the western culture and contextual paradigms.

## Managerial implications

The present study also presented some important managerial implications. First, since the ethical leadership was witnessed as to improve followers' innovative performance, it is recommended that the leaders need to develop the style focusing on morals in the organization, with respect to their followers' self-respect, dignity, empowering the job meaning to encourage their followers to generate new ideas, thoughts, and views and utilize them. While practicing the ethical leadership style in the organization, they need not only give emphasis on their influence on the employees whose impression on their leadership may disturb their performance but also shape the whole organization's collective inference of the ethical leadership temperament that forecast the followers' performance from their feelings. Second, the present research also establishes that the ethical leadership is positively and considerably associated with employees' innovative performance via intermediation of social

capital. As an ethical leadership, it is proposed that to improve their subordinates' innovative behavior, the leadership proposition needs to devote to the levels pertaining to their followers' voice by letting them raise their thoughts, concepts, suggestions, and views to the encounter and the inference of work, on the one hand. On the other hand, they can set the attitude for the entire group in order to develop social capital of their followers where they are encouraged to focus on the importance of the job and teamwork.

### Limitations and further study directions

The contemporary research study has certain limitations, in particular pertaining to the research design. The current research study is a cross-sectional in nature; no inference pertaining to the causality proposition can be tempted. Similarly, predictability does exist in relation to job satisfaction that employees may develop certain assertions towards ethical leadership besides the causal relationship being suggested by the current research study. Consequently, guiding principles for future research propositions have been recommended, i.e., to adopt a longitudinal research perspective to resolve the causality persisting issues. Further, adopting the longitudinal research technique towards the contemporary research study will allow comprehending substantial data points presented within the given time span will support and elaborate, i.e., how employees towards the proposition of social capital may influence employees towards innovative performance. Subsequently, the prevailing study has sufficient sample to observe significant results within the domain of mediation analysis. Further, a large sample size is to be attained for future research study and this proposition will allow further gauging the contemporary research model with a more vigorous logical rather analytical ways similar to multilevel Structural Equation Modeling (Kline, 2015).

Lastly, the current research study clearly illustrates a healthier relationship of employees registered among the tested variables, i.e., social capital pertaining to employees' innovative performance, only having synchronization with the ethical leadership. Substantial attributes of a further leadership style or type can also partly cover, for example, transformational leadership. The prevailing research study gauged through academic perspective; variables having these relationships can further be described with other modes of leadership, not being tested within this contemporary research study.

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