Let's Start!

[Mediating Role of Organizational Virtuousness in Relationship of Ethical Leadership and Work Outcomes - A Study of Higher Education Sector of Punjab, Pakistan]

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ABSTRACT

The current study examined the mediating effect of organizational virtuousness in the relationship between ethical leadership and work outcomes in the higher education sector of the province of Punjab, Pakistan. Respondents of the study included randomly selected 312 faculty members employed at universities established before 2015. A combined questionnaire measuring ethical leadership, organizational virtuousness, knowledge hiding, and organizational citizenship behaviour was used to collect data. Data were analyzed through SPSS Version 27 by applying descriptive and inferential analysis. Our study revealed that ethical leadership predicts knowledge hiding, organizational citizenship behaviour, and organizational virtuousness. The study also revealed that organizational virtuousness predicts knowledge-hiding behaviour. We also found that organizational virtuousness fully mediated the relationship between ethical leadership and knowledge hiding. Further, it was also found that organizational virtuousness partially mediated the relationship between ethical leadership and OCB. Based on the study's findings, the researcher has discussed implications of the study and offered directions for further research.

Key Words: Ethical Leadership, Organizational Virtuousness, Organizational Citizenship Behaviour, Knowledge Hiding

Introduction

Widespread commercial crimes due to the unethical conduct of directors during the last two decades ignited the need for ethical guidelines for managers and employees in the organization (Khoreva & Wechtler, 2020; Rokhman, 2010; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009). Consequently, positive organizational scholarship (POS) emerged as a broader field focused on developing and incorporating ethical guidelines in the organizations' human resource development (HRD) programs. These HRD programs mainly focused on cultivating ethical values (Khan, Abbas, Gul, & Raja, 2013) and shaping the ethical behaviour of organizational members (Mehnaz, Asadullah, Hussain, & Rehman, 2020) . It also triggered research on work as well as virtue ethics to investigate how ethical leadership promotes a virtuous culture in organizations and shapes employees' positive behaviour (Den Hartog, 2015) and how it discourages counterproductive behaviour (David, Karl, Greenbaum, & Kuenzi, 2012).

The results of studies on this stream of POS suggest that ethical leadership establishes a value system that may glue employees and organizations together (Treviño, Hartman, & Brown, 2000). It is effective in creating a culture of integrity (Zeng & Xu, 2020) , cooperation and trust (Tümkan, Dağlı, Altınay, Altınay, & Sharma, 2021) as well as compassion, forgiveness (Metwally, Ruiz-Palomino,

Metwally, & Gartzia, 2019; Bedi, Alpaslan, & Green, 2016) that may cultivate a higher level of OCB (Nemr & liu, 2021; Walumbwa, Hartnell, & Misati, 2017; Mo & Shi, 2017) and discourages Knowledge hiding in the organization (Alia & Sağsan, 2021). The organizational culture of integrity, trust, compassion, and cooperation corresponds with organizational virtuousness (Abdullah, Dechun, Ali, & Usman, 2019). It suggests that EL is instrumental in fostering positive work outcomes, such as OCB, on the one hand (Zhao & Xia, 2018) and curtails unethical behaviors, such as KH, on the other (David, Karl, Greenbaum, & Kuenzi, 2012).

Regardless of the empirical evidence suggesting that ethical leadership promotes OCB (Zhao & Xia, 2018; Shin, 2012) or deters Knowledge hiding in the organization, the literature suggests that ethical leadership does not directly translate employees' outcomes; rather, it needs certain mediating mechanisms (Eissa, Chinchanachokchai, & Wyland, 2017). Hence, a fundamental question about the relationship between ethical leadership and work outcomes arises whether these outcomes are directly translated or require any transactional mechanism. Hence, a research deficit exists about ethical leadership's effect on work outcomes. The current study addressed this question and examined the mediating role of organizational virtuousness in the relationship between ethical leadership and knowledge hiding and organizational citizenship behaviour in organizations.

Literature Review

Ethical Leadership and Knowledge Hiding

Knowledge hiding refers to destructive and immoral behavior that involves intentional concealment and withholding Knowledge from others (Babič, Černe, Connelly, Dysvik, & Škerlavaj, 2019; Connelly C. E., Zweig, Webster, & Trougakos, 2012). It is considered as a contrast to knowledge sharing. Extant literature has investigated the outcomes of Knowledge hiding in organizations (Connelly, Zweig, Webster, & Trougakos, 2012). However, there is a paucity of research on antecedents that buffer Knowledge hiding (Connelly, Zweig, Webster, & Trougakos, 2012). One mechanism that may discourage knowledge hiding is ethical leadership. It shapes the ethical behaviour of employees who refrain from hiding Knowledge of the organization (Abdullah, Dechun, Ali, & Usman, 2019). Studies suggest that when employees perceive their leaders as ethical and morally upright, they are less likely to engage in knowledge-hiding behaviors. In organizations with ethical leaders, employees are more inclined to share Knowledge openly and cooperate with their colleagues because they trust that their contributions will be treated fairly and with integrity. This fosters a culture of transparency and collaboration, reducing the occurrence of knowledge hiding, which can hinder organizational effectiveness and innovation. Based on this, it is hypothesized that;

H1: Ethical leadership negatively affects knowledge hiding.

Ethical Leadership and OCB

Organizations strive to have a workforce that displays voluntary and extra-role behavior at the workplace, which is crucial for modern organization success (Shahzad, 2011). This discretionary, extra role and voluntary behaviour is termed Organizational Citizenship Behaviour (Organ, 1997). OD managers and researchers investigated factors that may prove instrumental in shaping OCB. Studies suggest employees follow the executive, displaying and practicing normatively appropriate behavior. Hence, this ethical leadership may be pivotal in shaping OCB among employees (Walumbwa, Hartnell, & Misati, 2017). When employees realize their leaders practice what they preach, they trust them. They also engage in pro-social behaviors such as OCB. Hence, it may be hypothesized;

H2: Ethical leadership positively relates to employees' organizational citizenship behaviour.

Ethical Leadership and Organizational Virtuousness

Incidents of commercial crimes during the last 20 years have accentuated the importance of workplace ethics and ethical leadership in cultivating an organizational environment marked by forgiveness, trust, compassion, and integrity, which can encourage pro-social behavior in the workplace (Kalshoven & Boon, 2012). Various research studies have underscored the pivotal role of moral principles in effective leadership, inspiring followers through ethical conduct. Ethical leadership is defined by actions that adhere to established norms, ethical standards, personal behavior, and interactions with others (Brown, Treviño, & Harrison, 2005). Alia & Sağsan (2021) asserted that ethical leadership plays a vital role in fostering a culture of virtuousness within an organization that promotes positive behaviour among employees. Literature suggests that ethical leaders contribute to an organizational culture characterized by forgiveness, trust, integrity, and compassion, promoting favorable outcomes for individuals and the organization (Alia & Sağsan, 2021). Studies further highlight the positive impact of ethical leadership on organizational virtuousness, emphasizing the vital role of ethical leaders in cultivating positive behaviors within organizations.

H3: Ethical leadership has a positive relation with organizational virtuousness.

Organizational Virtuousness and Knowledge Hiding

Organizational virtuousness and knowledge hiding acquired substantial attention within the broader field of organizational behaviour (He & Wei, 2022). Organizational virtuousness is characterized by an ethical culture of trustworthiness, compassion, integrity, and forgiveness (Brown, Treviño, & Harrison, 2005). Further, it glues the employees to the organization through its value system and makes them feel worthwhile. When employees perceive that their actions are subject to scrutiny in a positive fashion, they are less likely to engage in knowledge hiding (Koon, 2022). Instead, they experience a stronger

sense of responsibility toward the organization and its members (Magnier-Watanabe, Uchida, Orsini, & Benton, 2017) . OV fosters a sense of responsibility and moral obligation and deters knowledge hiding (Shah & Hashmi, 2019) by fostering a transparent and collaborative work environment (Nikandrou & Tsachouridi, 2015). We hypothesize that;

H4: Organizational virtuousness has a negative relation with knowledge hiding.

Organizational Virtuousness and Organizational Citizenship Behaviour

Organizational virtue creates a culture of trustworthiness and moral integrity (Cameron, Bright, & Caza, 2004), which may ignite positive emotions among the employees and make them glued to the organization (Ribeiro & Rego, 2009) . Consequently, they are engaged in voluntary acts that promote the organization's overall well-being and display extra-role behavior or OCB (Kooshki & Zeinabadi, 2016). Employees' perceptions of their firm as virtuous cultivate positive emotions among them. Consequently, they exhibit empathetic, respectful, and helpful behavior. These positive perceptions of the organization foster a sense of loyalty, trust, and organizational identification. Employees feel valued and cared for by the organization, encouraging them to incorporate their organizational membership into their self-identity. In other words, organizational virtuousness promotes Organizational Citizenship Behaviour (OCB) among the employees (Spector & Fox, 2002).

H5: Organizational virtuousness has a positive relation with OCB.

Organizational Virtuousness as Mediator in Ethical Leadership and Work Outcomes' Relation

Much research indicates that ethical leadership leads to positive individual and organizational outcomes. These results could be translated directly or through transactional processes (Zhao & Xia, 2018). It might encourage pro-social conduct among employees in companies like OCB (Nemr & liu, 2021) and deter bad and unethical behavior like hiding Knowledge (Abdullah, Dechun, Ali, & Usman, 2019; Connelly, Zweig, Webster, & Trougakos, 2012) . In other words, business employees exhibit the same conduct as their superiors. When their supervisors treat them fairly, they behave positively. Contrary to this, subordinates conceal Knowledge when their bosses advance their interests (Walumbwa, Hartnell, & Misati, 2017).

Irrespective of the empirical shreds of evidence proving the direct effect of EL on work outcomes, the literature depicts that EL requires transactional means to translate the outcomes of employees (Eissa, Chinchanachokchai, & Wyland, 2017). Literature also depicts that positive organizational factors characterizing OV may serve as transactional mechanisms between leadership behaviour and OCB (Shah & Hashmi, 2019) or employees' knowledge hiding (Jahanzeb, Fatima, Bouckenooghe, & Bashir, 2019).

Employees may support the company and engage in pro-social conduct like OCB if they realize that the leadership has established a culture of virtue that includes justice, integrity, compassion, forgiveness, and trust (Walumbwa, Hartnell, & Misati, 2017). On the other hand, Asadullah et al. (2022) proposed that employees may begin to distance themselves from the leadership and engage in counterproductive behaviour, such as concealing information from coworkers and superiors, if they believe that the leader is not following the organization's ethical standards or is acting in a way that promotes self-interest rather than the common good. Thus, it may be hypothesized that

H6: Organizational virtuousness mediates the relationship between ethical leadership and OCB.

H7: Organizational virtuousness mediates the relationship between ethical leadership and knowledge hiding.

Theoretical Underpinning

The study is based on social exchange theory (SLT). According to SLT, social conduct results from transactional procedures that seek to maximize gain and reduce loss (Homans, 1974). Based on the tenets of SLT, organizational exchange mechanisms such as OV may function as transactional mechanisms by mediating the relation of ethical leadership and knowledge-hiding as well as employees' OCB in organizations. Therefore, ethical leadership is believed to foster an environment of virtue within the organization, decreasing Knowledge concealing and enhancing corporate citizenship behaviour.
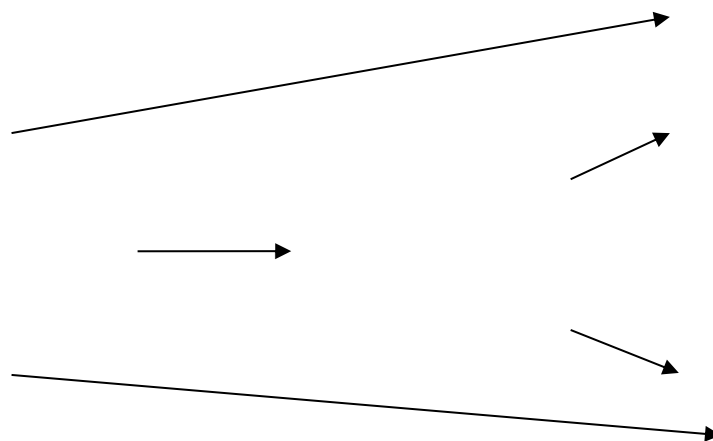
Figure 1: Research Model

Methods

Respondents: The respondents of this cross-sectional study included 385 randomly selected faculty members of public and private sector universities in the province of Punjab. Three hundred eighty-five (385) questionnaires were administered to the sampled respondents, of which 321 were returned, giving a response rate of 83%. However, nine (9) more questionnaires were excluded as

these were incomplete, leaving behind 312 workable questionnaires, and the response rate was reduced to 81%, which is sufficient for such studies.

Instrument: Data were collected using a survey questionnaire that measured the demographic and main variables of the study. We measured ethical leadership through a 10 items scale developed by Brown et al. (2005) , Knowledge hiding through a 12 items scale developed by (Connelly, Zweig, Webster, & Trougakos, 2012), OCB through 18 items scale by Podsakoff et al. (2000), and organizational virtuousness through a 14 items scale developed by Cameron et al. (2004).

Data Analysis and Results: Data were analyzed through SPSS Version 27 using correlation and regression analysis.

Table 1: Factor Loadings, Cronbach's Reliability, CR, and AVE

Constructs	Items	Outer Loadings	Cronbach's Reliability	CR	AVE
Ethical Leadership (10×items)	EL1	0.834	0.98	0.97	0.74
	EL2	0.865			
	EL3	0.904			
	EL4	0.826			
	EL5	0.844			
	EL6	0.882			
	EL7	0.884			
	EL8	0.857			
	EL9	0.907			
	EL10	0.777			
Organizational Virtuousness (10×items)	OV1	0.89	0.98	0.98	0.76
	OV2	0.877			
	OV3	0.928			
	OV4	0.865			
	OV5	0.873			
	OV6	0.88			
	OV7	0.836			
	OV8	0.834			
	OV9	0.855			
	OV10	0.912			
	OV11	0.885			
	OV12	0.835			
	OV13	0.802			
	OV14	0.889			
Knowledge Hiding (12×items)	KH1	0.836	0.97	0.98	0.77
	KH2	0.839			

	KH3	0.869			
	KH4	0.879			
	KH5	0.902			
	KH6	0.857			
	KH7	0.884			
	KH8	0.912			
	KH9	0.921			
	KH10	0.855			
	KH11	0.889			
	KH12	0.868			
Organizational Citizenship Behaviour (16×items)	OCB1	0.883	0.99	0.98	0.79
	OCB2	0.911			
	OCB3	0.906			
	OCB4	0.905			
	OCB5	0.896			
	OCB6	0.914			
	OCB7	0.873			
	OCB8	0.864			
	OCB9	0.899			
	OCB10	0.908			
	OCB11	0.877			
	OCB12	0.885			
	OCB13	0.925			
	OCB14	0.873			
	OCB15	0.881			
	OCB16	0.917			
	OCB17	0.829			
	OCB18	0.837			

Demographics of the Respondents

Details of the demographics, i.e., gender, age, university type, designation, and experience of the respondents, are presented in Table 2.

Table 2: Demographics of the Respondents

	Description	Frequency	Percent
	Male	193	62
	Female	119	38
Gender	**Total**	**312**	**100**
	20-30	69	22
	31-40	95	30
Age	41-50	68	22

	Above 50	80	26
	Total	**312**	**100**
	Private	114	37
	Public	198	63
University	**Total**	312	100
	Lecturer	153	49
	Assistant Professor	122	39
	Associate Professor	22	7
	Professor	15	5
Designation	**Total**	**312**	**100**
	1-5 Years	160	51
	6-10 Years	108	35
	11-15 Years	23	7
	16-20 Years	13	4
	More than 20 Years	8	3
Experience	**Total**	**312**	**100**

Correlation Analysis

The findings of the Pearson's correlation in Table 3 depict that OV (r=0.546, P<0.05) and OCB (r=0.576**, P<0.05) have a significant positive correlation with EL. Likewise, there is a noteworthy positive correlation between OV and OCB (r=0.681**, P<0.05).

Moreover, it is noteworthy that there is a weak positive correlation between KH and EL (r=0.082**, P<0.05). Additionally, there is a weak positive correlation between OV and KH (r=0.020*, P<0.05).

Table 3: Correlation Analysis

	EL	OV	KH	OCB
EL	1			
OV	.546**	1		
KH	0.082**	0.020*	1	
OCB	.576**	.681**	0.096**	1

Linear Regression Analysis

We performed linear regression analysis to examine the relationship between the variables in the proposed model. Results depicted no significant relationship between demographic and dependent variables; therefore, we did not control any demographic variable to nullify their effect on KH and OCB, as shown in Table 4.

Table 4: Linear Regression Analysis

Predictor	Knowledge Hiding			Organizational Citizenship Behaviour			Organizational Virtuousness		
	B	R²	Δ R²	β	R²	Δ R²	β	R²	Δ R²
Ethical Leadership	.082	.041	.039	.576**	.332	.329	.546**	.199	.197
Organizational Virtuousness	.098	.020	.087	.681**	.232	.229			

** shows P<0.05

Table 4 reveals the regression outcome of the research variables. EL predicts a 4.1% change in KH by rejecting the first hypothesis (H1). It indicates that one unit of EL causes a 0.082** (P=0.0000) unit change in KH. In other words, ethical leadership positively affects knowledge-hiding behaviour. Similarly, ethical leadership is responsible for 33.2% of the change in OCB. It also implies that 0.576** (P=0.0000) units of EL lead to a change in OCB, hence validating the study's second hypothesis (H2).

Further, EL predicts a 19.9% change in OV, explaining that one unit of EL results in a 0.566** (P=0.0000) unit change in OV, supporting the study's 3rd hypothesis (H3). Further, OV anticipated a 2.0% change in KH, depicting that one unit of OV brings .0.098** (P=0.0000) unit change in KH, disproving the 4th hypothesis (H4) of the study.

Likewise, OV predicted a 23.2% change in OCB, suggesting that one unit of OV results in 0.681** (P=0.0000) unit change in the OCB of employees, supporting the 5th hypothesis (H5) of the study.

The mediating role of OV in the relationship between EL and Work Outcomes

While examining the mediating role of OV in the relationship of EL and KH, we found a significant indirect effect of EL on KH (b=0.203, t=1.404) and an insignificant direct effect of EL on KH in the presence of organizational virtuousness (0.147, P=0.1614>0.05). Hence, organizational virtuousness fully mediated the relationship between EL and KH, supporting the 6th hypothesis.

Table 5 further depicts a significant indirect effect of EL on OCB (b=0.1225, t=9.114) as well as a significant direct effect of EL on OCB in the presence of organizational virtuousness (0.4418, P<0.0001). Hence, organizational virtuousness partially mediated the relationship between EL and OCB, supporting the 7th hypothesis of the study.

Table 5: Mediation Analysis

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		Conclusion
				Lower Bound	Upper Bound	
EL-->OV-->KH	0.3506 (0.0003)	0.1476 (0.5213)	0.203	0.1147	0.2991	Full Mediation
EL-->OV-->OCB	0.5643 (0.0000)	0.4418 (0.0000)	0.1225	0.0608	0.2005	Partial Mediation

Discussion

Unlike common beliefs, this study reported a weaker positive relation of EL with KH by rejecting our 1st hypothesis (H1). Similar to the results of Kalshoven & Boon (2012) and Strobel et al. (2010), this study depicted that EL has an insignificant relationship with destructive work outcomes. The subordinates reciprocate the supervisor's behaviors in an exchange process (Koay & Lim, 2022; Anser, Ali, Usman, Rana, & Yousaf, 2021). Consistent with the assumptions of SLT, this study reported that the self-serving behavior of leaders results in distrust among subordinates, and they retaliate by intentionally concealing Knowledge from the supervisor.

Our study reported a significant 33.2% change in the OCB of employees due to EL confirming our 2nd hypothesis (H2). Similar to the results of the studies of Abu Bakar et al. (2022), Huang et al. (2021), and Nemr and Liu (2021), our study suggests that OCB is promoted due to the ethical behavior of leaders. The findings of these researches depict that employees' voluntary behavior results from transactional processes. They reciprocate employees' perceptions of their leaders' integrity as they trust their leaders and display OCB.

Our study reported that EL predicts a significant 19.9% change in organizational virtuousness, confirming our 3rd hypothesis (H3). Similar results have been reported by Roy et al. (2023), Alia & Sağsan (2021), Hannah et al. (2011), and Neubert et al. (Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009) suggesting the leaders inspire their followers through the display of ethical conduct and succeeds in establishing a virtuous organizational culture of integrity, forgiveness, and trust. Consequently, followers reciprocate by internalizing these ethical values and displaying extra-role behavior.

Contrary to the common belief, it was found that OV predicts only a 2.0% change

in Knowledge, rejecting our 4th hypothesis (H4). Similar findings have been reported by Magnier-Watanabe et al. (2017) and Rego et al. (2010), suggesting that OV does not necessarily reduce adverse work outcomes. Transactional processes are desirable to produce positive work outcomes and curtail adverse outcomes. A study by Magnier-Watanabe et al. (2017) suggests that OV directly and indirectly affects work outcomes.

Our study reported that OV predicts a significant 23.2% change in the OCB of employees, confirming our 5th hypothesis (H5). Similar findings have been reported by Sun & Yoon (2022), Malik and Naeem (2016), and Kooshki & Zeinabadi (2016), suggesting that OV buffers destructive behaviors (e.g., Knowledge hiding) on the one hand and fosters positive outcomes (e.g., OCB) on the other hand. Further, these studies suggest that employees' perceptions of OV make them display OCB by engaging in selfless acts to help others.

While examining the mediating effect of OV in the EL and KH relationship, we found a significant indirect (b=0.203, t=1.404) and insignificant direct effect (0.147, P=0.1614>0.05) effect of EL and KH showing a full mediation. Even though our study's mediation was novice, we found certain evidence supporting our findings. Contrary to the common belief that ethical leadership produces work outcomes directly (Nemr & liu, 2021; Abdullah, Dechun, Ali, & Usman, 2019; Zhao & Xia, 2018; Coolen, 2012), studies (Eissa, Chinchanachokchai, & Wyland, 2017) reported that ethical leadership transforms work outcomes through a mediating fashion. The results of our study proved the propositions of Eissa et al. (2017) by suggesting that OV mediates the relation of EL and KH; hence, our 6th hypothesis (H6) was confirmed.

While examining the mediating effect of OV in EL and OCB relationship, we found a significant indirect (b=0.1225, t=9.114) as well as significant direct (0.4418, P<0.0001) effect of EL on OCB showing a partial mediation in support of our 7th hypothesis. Our findings are similar to the studies of Zhang & Liu (2019), Asad et al. (Asad, Naseem, & Faiz, 2017), Rego et al. (2010) and Ribeiro & Rego (2009). The results of these studies suggest that EL indirectly affects OCB through OV. Further, these studies depict that OV acts as an exchange mechanism to elucidate the relationship between EL and OCB. Perceptions of leaders' moral integrity foster trust among the subordinates, and they display extra-role behavior such as OCB. Our study, however, has reported a partial mediation. While investigating the reason for partial mediation, it was found that EL creates an organizational culture of integrity, trust, and forgiveness that is a shadow of OCB (Abdullah, Dechun, Ali, & Usman, 2019).

Conclusion

Consistent with the assumptions of SLT, it was found that EL is a double-edged sword that promotes pro-social behavior, such as OCB, on the one hand, and

curbs destructive behaviors, such as KH, on the other hand. Further, EL creates a virtuous culture by promoting behavioral integrity, forgiveness, optimism, and trust. This virtuous culture helps the organization promote OCB and KH among the employees. This virtuous culture acts as a transactional medium between EL and work outcomes. In other words, EL indirectly affects work outcomes through OV, i.e., it promotes OCB and reduces KH through OV instead of directly affecting these outcomes.

Implications

The study has certain practical implications. The findings of this study suggest that leadership development programs should prioritize ethical leadership. These programs train leaders to demonstrate integrity and transparent communication, leading to better Organizational Citizenship Behaviour (OCB) and reduced knowledge hiding. Promoting virtues like kindness and trustworthiness fosters a positive work environment, lowering knowledge hiding. Managerial training must emphasize ethical leadership, nurturing a virtuous organizational culture, influencing OCB, and minimizing knowledge hiding. Performance evaluations should include ethical leadership and virtuous contributions to incentivize ethical practices. Understanding the link between ethical leadership, organizational virtuousness, and employee behaviour aids conflict resolution and enhances team cohesion.

At theoretical frontiers, the study enhances our understanding of social exchange theory by underlining how organizational virtuousness plays a mediating role. It broadens our understanding of ethical leadership's impact by revealing its influence on positive (OCB) and negative (knowledge hiding) behaviors. By demonstrating how organizational virtuousness affects OCB and knowledge hiding, the research contributes to the literature on the interplay between organizational culture and employee behaviour. This study offers a comprehensive perspective on employee behavior, providing valuable insights for researchers and practitioners. The impact of ethical leadership in reducing knowledge hiding entirely depends on cultivating a virtuous organizational culture, emphasizing the importance of such a culture in organizations. Regarding OCB, the study identifies a partial mediation effect of organizational virtuousness, underscoring the significance of ethical leadership and a virtuous organizational culture in promoting positive employee behaviors.

Limitations and Further Research

Using a cross-sectional design may limit our ability to establish causal relationships and capture the dynamics of change over time. Using longitudinal designs, future research could examine the effects of ethical leadership and organizational virtuousness on work outcomes over time. Additionally, this study examined individual perceptions and behaviors within higher education institutions.

Organizational outcomes are influenced by multiple levels of analysis, including the department, university, and societal context. Research on ethical leadership and organizational virtuousness could take a multilevel approach to explore how they interact and impact work outcomes at different levels.

The study was conducted in the higher education sector of Punjab, Pakistan. The study should be replicated in other contexts, such as regions or countries, to determine the generalizability of the results. Cultural, institutional, and contextual factors may affect the relationship between ethical leadership, organizational virtuousness, and work outcomes. These relationships can be better understood through comparative studies across cultural and organizational contexts. These relationships can be better understood through comparative studies across cultural and organizational contexts. Further, the focus on OCB and Knowledge hiding as work outcomes may restrict our understanding of the relationship between mechanisms of ethical leadership and organizational virtuousness.

Our study explained the impact of ethical leadership on work outcomes with a mediating role of organizational virtuousness. However, organizational virtuousness is likely to affect ethical leadership as well. Future research could explore the reverse mediation effect to understand how organizational virtuousness could foster ethical leadership that affects work outcomes.

References

Abdullah, Muhammad, Huang Dechun, Moazzam Ali, and Muhammad Usman. "Ethical Leadership and Knowledge Hiding: A Moderated Mediation Model of Relational Social Capital, and Instrumental Thinking." *Frontiers in Psychology*, 2019: 1-49.

Abu Bakar, H, and S. L. Connaughton. "Ethical leadership, perceived leader–member ethical communication and organizational citizenship behavior: development and validation of a multilevel model." *Leadership & Organization Development Journal*, 2022: 96-110.

Alia, Shwana Hassan, and Mustafa Sağsan. "The Moderating Effect of Ethical Leadership between Psychological Ownership of Knowledge and Knowledge Hiding: An Empirical Study on the Public Universities in Northern Iraq." *Revista Argentina de Clínica Psicológica*, 2021: 178-188.

Anser, M. K, M. Ali, M. Usman, M. L. T Rana, and Z. Yousaf. "Ethical leadership and knowledge hiding: an intervening and interactional analysis." *The Service Industries Journa*, 2021: 307-329.

Asad, H, R Naseem, and R Faiz. "Mediating effect of Ethical Climate between Organizational Virtuousness and Job Satisfaction." *Pakistan Journal of Commerce and Social Sciences*, 2017: 35-48.

AsadUllah, M, K Rehman, F Ullah, A Khan, F Khan, and M Alam. "Mediating Role Of Distrust In Relationship Between Hypocritical Leadership And Nurses'

Knowledge Hiding Behavior In Healthcare Hospitals Of Punjab, Pakistan." *PJAEE*, 2022: 1014-1023.

Babič, K, M Černe, C Connelly, A Dysvik, and M Škerlavaj. "Are we in this together? Knowledge hiding in teams, collective pro-social motivation and leader-member exchange." *Journal of Knowledge Management*, 2019: 1502-1522.

Bedi, A, C M Alpaslan, and S Green. "A meta-Analytic Review of Ethical Leadership Outcomes and Moderators." *Journal of Business Ethics*, 2016: 517-536.

Brown, M E, L K Treviño, and D A Harrison. "Ethical Leadership: A Social Learning Perspective for Construct Development and Testing." *Organ. Behav. Hum. Decis Process.*, 2005: 117-134.

Cameron, K S, D Bright, and A Caza. "Exploring the Relationships Between OV and Performance." *American Behavioral Scientist*, 2004: 766–790.

Connelly, C E, D Zweig, J Webster, and J P Trougakos. "Knowledge hiding in organizations. Journal of Organizational Behavior." *Journal of Organizational Behavior*, 2012: 64-88.

Coolen, Henny. "International Encyclopedia of Housing and Home." In *Qualitative Methods in Housing Research*, 8-15. 2012.

David, M Mayer, Aquino Karl, Rebecca Greenbaum, and Maribeth Kuenzi. "Who Displays Ethical Leadership, and Why Does it Matter? An Examination of Antecedents and Consequences of Ethical Leadership." *Academy of Management Journal*, 2012: 151-171.

Den Hartog, D N. "Ethical leadership." *Annual Review of Organizational Psychology & Orgnizational Behavior*, 2015: 409–434.

Eissa, G, S Chinchanachokchai, and R Wyland. "The Influence Of Supervisor Undermining On Self-Esteem, Creativity, And Overall Job Performance: A Multiple Mediation Model." *Organizational Management Journal*, 2017: 185–197.

Hannah, S. T, B. J Avolio, and F. O. Walumbwa. "Relationships between authentic leadership, moral courage, and ethical and pro-social behaviors." *Business Ethics Quarterly*, 2011: 555-578.

He, Y., and X Wei. "Preventing knowledge hiding behaviors through workplace friendship and altruistic leadership, and mediating role of positive emotions." *Frontiers in Psychology*, 2022: 13.

Homans, G. C. *Social Behavior: Its Elementary Forms.* New York: Harcourt Brace Jovanivich, 1974.

Huang, N, S Qiu, S Yang, and R Deng. "Ethical leadership and organizational citizenship behavior: mediation of trust and psychological well-being." *Psychology Research and Behavior Management*, 2021: 655-664.

Jahanzeb, Sadia, Tasneem Fatima, Dave Bouckenooghe, and Fatima Bashir. "The Knowledge Hiding Link: A Moderated Mediation Model of How Abusive

Supervision Affects Employee Creativity." *European Journal of Work and Organizational Psychology*, 2019: 1-11.

Kalshoven, K, and C. T Boon. "Ethical leadership, employee well-being, and helping: The moderating role of human resource management." *Journal of Personnel Psychology*, 2012: 60–68.

Khan, K, M Abbas, A Gul, and U Raja. "Organizational Justice and Job Outcomes: Moderating Role of Islamic Work Ethic." *Journal of Business Ethics*, 2013: 1-13.

Khoreva, V, and H Wechtler. "Exploring the consequences of knowledge hiding: an agency theory perspective." *Journal of Managerial Psychology* 35, no. 2 (2020): 71-84.

Koay, K. Y, and P. K Lim. "Ethical leadership and knowledge hiding: testing the mediating and moderating mechanisms." *Journal of Knowledge Management*, 2022: 574-591.

Koon, V. Y. "The role of organisational compassion in knowledge hiding and thriving at work." *Knowledge Management Research & Practice*, 2022: 486-501.

Kooshki, S. A, and H Zeinabadi. "The role of organizational Virtuousness in organizational Citizenship behavior of teachers: The Test of Direct And Indirect Effect Through Job Satisfaction Mediating." *International Review*, 2016: 7-21.

Magnier-Watanabe, R, T Uchida, P Orsini, and C. Benton. "Organizational virtuousness and job performance in Japan: does happiness matter?" *International Journal of Organizational Analysis*, 2017: 628-646.

Malik, S. Z, and R Naeem. "Organizational virtuousness, perceived organizational support and organizational citizenship behavior: A mediation framework." *Journal of Behavioural Sciences*, 2016: 113.

Mehnaz, Rohi, Muhammad Asadullah, Bashir Hussain, and Shams Ur Rehman. "Impact of Islamic Work Ethics on Teachers' Job Performance at Elementary School Level in Punjab." *The Discourse*, 2020: 131-139.

Men, C, P. S Fong, W Huo, J Zhong, R Jia, and J. Luo. "Ethical leadership and knowledge hiding: a moderated mediation model of psychological safety and mastery climate." *Journal of Business Ethics*, 2020: 461-472.

Metwally, Dina, Pablo Ruiz-Palomino, Mohamed Metwally, and Leire Gartzia. "How Ethical Leadership Shapes Employees' Readiness to Change: The Mediating Role of an Organizational Culture of Effectiveness." *Frontiers in Psychology*, 2019: 1-18.

Mo, Shenjiang, and Junqi Shi. "Linking Ethical Leadership to Employees' Organizational Citizenship Behavior: Testing the Multilevel Mediation Role of Organizational Concern." *Journal of Business Ethics*, 2017: 151-162.

Nemr, Mohamed Ahmad Ali, and Yuhuan liu. "The Impact of Ethical Leadership on

Organizational Citizenship Behaviors: Moderating Role of Organizational Cynicism." *Cogent Business & Management,* 2021.

Neubert, Mitchell J, Dawn S Carlson, K Michele Kacmar, James A Roberts, and Lawrence B Chonko. "The Virtuous Influence of Ethical Leadership Behavior: Evidence from the Field." *Journal of Business Ethics,* 2009: 157–170.

Nikandrou, I, and I. Tsachouridi. "Towards a better understanding of the "buffering effects" of organizational virtuousness' perceptions on employee outcomes." *Management Decision,* 2015: 1823-1842.

Organ, D. W. "Organizational Citizenship Behavior: It's Construct Clean-Up Time." *Human Performance,* 1997: 85-97.

Podsakoff, P. M, S. B MacKenzie, J. B Paine, and D. G. Bachrach. "Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research." *Journal of Management,* 2000: 513–563.

Rego, A, N Ribeiro, and M. P. Cunha. "Perceptions of organizational virtuousness and happiness as predictors of organizational citizenship behaviors." *Journal of Business Ethics,* 2010: 215-235.

Ribeiro, N, and A Rego. "Does Perceived Organizational Virtuousness Explain Organizational Citizenship Behaviors?" *International Journal of Psychological and Behavioral Sciences,* 2009: 1103-1110.

Rokhman, W. "The Effect of Islamic Work Ethics on Work Outcomes." *Electronic Journal of Business Ethics and Organization Studies,* 2010: 21-26.

Rokhman, Wahibur. "The Effect of Islamic Work Ethics on Work Outcomes." *Electronic Journal of Business Ethics and Organization Studies,* 2010: 21-26.

Roy, A., A Newman, H Round, and S Bhattacharya. "Ethical Culture in Organizations: A Review and Agenda for Future Research. ." *Business Ethics Quarterly,* 2023: 1-42.

Shah, Mahira, and Maryam Saeed Hashmi. "Relationship between Organizational Culture and Knowledge Hiding in Software Industry: Mediating Role of Workplace Ostracism and Workplace Incivility." *Pakistan Journal of Commerce and Social Sciences,* 2019: 934-952.

Shahzad, K. *Development Of A Model Of Organizational Citizenship Behavior (OCB): A Comparative Study Of University Teachers From A Developing And A Developed Country. Islamabad",.* Islamabad: Mohammad Ali Jinnah University, 2011.

Shin, Yuhyung. "CEO Ethical Leadership, Ethical Climate, Climate Strength and Collective Organizational Citizenship Behavior." *Journal of Business Ethics,* 2012: 299-312.

Spector, P.E, and S Fox. "An emotion-centered model of voluntary work behavior: Some parallels between counterproductive behavior and organizational

citizenship behaviour." *Human Resource Management Review*, 2002: 269-292.

Strobel, M, A Tumasjan, and I Welpe. "Do business ethics pay off?: The influence of ethical leadership on organizational attractiveness." *Zeitschrift für Psychologie/Journal of Psychology*, 2010: 213–224.

Sun, H. J., and H. H Yoon. "Linking organizational virtuousness, engagement, and organizational citizenship behavior: The moderating role of individual and organizational factors." *Journal of Hospitality & Tourism Research*, 2022: 879-904.

Treviño, Linda Klebe, Laura Pincus Hartman, and Michael Brown. "Moral Person and Moral Manager: How Executives Develop a Reputation for Ethical Leadership." *California Management Review*, 2000: 128-142.

Tümkan, F, G Dağlı, F Altınay, Z Altınay, and R Sharma. "An Evaluation of Directors' Organizational Commitment Towards Their Transferable Leadership." *Revista Argentina de Clínica Psicológica*, 2021: 1-12.

Walumbwa, F O, C A Hartnell, and E Misati. "Does ethical leadership enhance group learning behavior? Examining the mediating influence of group ethical conduct, justice climate, and peer justice." *Journal of Business Research*, 2017: 14-23.

Wang, H. "Effect of perceived organizational virtuousness on challenge-oriented organizational citizenship behavior: A dual mediation model." *American Journal of Industrial and Business Management*, 2018: 1536.

Zeng, Jianji, and Guangyi Xu. "Ethical Leadership and Young University Teachers' Work Engagement: A Moderated Mediation Model." *International Journal of Environmental Research and Public Health*, 2020.

Zhang, Q, and Y Liu. "Employees' environmental protection and charitable donation and ethical leadership: An empirical study." *International journal of environmental research and public health*, 2019: 2282.

Zhao, Hongdan, and Qing Xia. "Nurses' Negative Affective States, Moral Disengagement, and Knowledge Hiding: The Moderating Role of Ethical Leadership." *Journal of Nursing Management*, 2018: 357-370.