

AN INVESTIGATION OF THE RELATIONSHIP BETWEEN LEADER-MEMBER EXCHANGE AND KNOWLEDGE HIDING: THE MODERATED MEDIATING EFFECTS OF EQUITY SENSITIVITY AND MORAL DISENGAGEMENT

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Abstract

Knowledge hiding is a significant threat to the operational performance of knowledge driven organizations operating in competitive environments. Grounded in Social Exchange Theory, this study proposes a moderated mediation model to examine the influence of Leader Member Exchange (LMX) on Knowledge Hiding Behavior (KHB) through Moral Disengagement (MD) with Equity Sensitivity (ES) as a boundary condition. To minimize common method bias, data were collected from 523 employees in Pakistan's telecommunications sector using a three wave, time-lagged survey design. The results support the hypothesized model by showing that high quality LMX significantly reduces KHB both directly and indirectly by lowering MD. Moreover, ES strengthens the negative relationship between LMX and MD, resulting in a stronger indirect effect of LMX on KHB among employees with high ES than those with low ES. These findings provide practical insights for reducing unethical knowledge hiding by reinforcing moral self-regulation and incorporating employees' fairness orientations into leadership development and HR practices. Limitations and directions for future research are also discussed.

Introduction

The way people interact is a key feature of contemporary competitive and dynamic work environments (Vuchkovski et al., 2023). LMX explains the quality of the relationship between supervisors and subordinates, shaping employees' attitudes and behaviors (Assefa et al., 2024). High quality LMX is characterized by trust, mutual exchange and emotional support while enhancing employees' sense of responsibility and organizational citizenship behavior. Low quality LMX is characterized by formal and transactional exchanges that increase stress

and reduce cooperation (Tanko & Kwarteng, 2025). Consequently, LMX provides an effective framework for understanding both positive and negative workplace behaviors (Bennouna et al., 2025).

Although extensive research associates LMX with positive outcomes such as performance, commitment and engagement (Assefa et al., 2024), its role in preventing counterproductive work behaviors remains unclear. Emerging evidence suggests that LMX may also produce unintended outcomes including emotional exhaustion and unethical behavior (Tano et al., 2023). In knowledge

driven organizations, one such behavior is knowledge hiding. It is the intentional concealment of requested information that undermines teamwork, innovation and competitive advantage (Wen et al., 2022). As organizations increasingly depend on knowledge based resources for sustained competitive advantage, understanding how LMX influences knowledge hiding has become essential. However, this relationship remains underexplored (Cristache et al., 2025). This issue is particularly important in Pakistan's telecommunication sector where rapid technological change, customer attrition and rising operating costs make effective knowledge sharing essential for organizational performance (Waseem et al., 2025).

Explaining why employees hide knowledge despite supportive leader to employee relationships therefore remains an important research question. A potential explanation lies in moral disengagement, a cognitive process through which employees justify unethical behaviors such as knowledge concealment without experiencing guilt (Afshan et al., 2023). Although MD provides a plausible mechanism linking leadership and unethical behavior, its mediating role between LMX and knowledge hiding has received limited empirical attention (Kumar et al., 2025).

In addition, equity sensitivity, a stable individual difference reflecting fairness preferences influences how employees interpret workplace relationships. Individuals with high ES are more responsive to fairness whereas those with low ES are less sensitive to inequity (Jo & Shin, 2025; Jonker et al., 2022). However, the moderating role of ES in the relationship between LMX and MD remains largely unexplored (Veetikazhi et al., 2020).

This study addresses these gaps by examining a moderated mediation model. It proposes that LMX reduces knowledge hiding by decreasing moral disengagement and equity sensitivity strengthens this indirect relationship (Guo et al., 2021). By focusing on Pakistan's telecommunication sector, the study contributes to the limited literature on organizational behavior in emerging economies (Amber et al., 2021). Practically,

the findings highlight the importance of ethics training and leadership development. And considering equity sensitivity during recruitment and team formation to better align leadership practices with employees' fairness orientations (Liu et al., 2024).

Theory and Hypothesis Development

Supporting theory

Grounded in Social Exchange Theory (Wallenburg & Handfield, 2022), this study posits that workplace relationships are based on the reciprocal exchange of valued resources such as trust, emotional and moral support. Individuals evaluate these relationships by weighing their costs and benefits which shapes the quality of professional ties and subsequent workplace behaviors (Ahmad et al., 2023).

Relating this scaffold to the present study, high quality LMX fosters positive social exchanges which encourages favorable employee responses towards management. Whereas low quality LMX leads employees to perceive workplace exchanges as biased or inequitable, particularly among those who are sensitive to fairness (Xu et al., 2022). Consequently, low LMX is associated with knowledge hiding, reduced social interaction and higher levels of moral disengagement whereas high LMX fosters trust, reciprocity and ethical workplace behavior (Gusmerotti et al., 2023).

Relationship between leader-member exchange and knowledge hiding behavior

Scholars describe LMX as a positive exchange relationship characterized by professional support, emotional well-being and mutual respect (Wagner & Koob, 2022). Knowledge hiding behavior refers to deliberate withholding of requested information from a colleague or employer (Sun et al., 2022). Empirical evidence consistently shows that LMX negatively predicts KHB as high quality LMX fosters trust and strong task based relationships, whereas greater knowledge hiding is associated with less trustworthy employer to employee relationships (Eliason, 2025).

Research shows that effective leadership including inclusive and transformational

leadership promotes knowledge sharing and effective knowledge management. Moreover, it reduces KHB by fostering interpersonal trust between managers and employees. (Sharif et al., 2024). Similarly, higher LMX is associated with greater employee job satisfaction, productivity and knowledge management in Pakistan's private banking sector (Liang & Yin, 2024). Collectively, these outcomes contribute to operational innovation and improved organizational performance (Kamal et al., 2022).

Research has found that cultivating a knowledge sharing culture through transformational leadership positively affects organizational performance (Jaffar, 2020). High LMX promotes knowledge exchange and a socially engaging organizational culture. This enriches employees' experience, interactivity and enthusiasm toward task accomplishment. Whereas, lower LMX relationships are associated with increased KHB (Tao, 2025). Hence,

Hypothesis 1: Leader Member Exchange is negatively associated with Knowledge Hiding Behavior.

Mediating role of moral disengagement

Moral disengagement is a self-regulatory cognitive process that allows individuals to violate their moral principles and engage in unethical behavior without experiencing guilt (Ogunfowora et al., 2023). Prior research suggests that fairness in the workplace and ethical leadership reduce unethical behavior by limiting employees' tendency toward moral disengagement. Employees are less likely to morally disengage when leaders establish differentiated relationships based on legitimate rather than illegitimate factors (Al-Atwi et al., 2022).

LMX is an inevitable occurrence in workplaces and described as a positive relationship between supervisors and employees (Assefa et al., 2024). A study by Sobral and Furtado (2024) opines that high LMX is characterized by an effective and trustworthy relationship in which leaders and members exchange knowledge and ideas. Ogunfowora et al. (2021) found that employees with low LMX are more likely to

engage in counterproductive acts such as moral disengagement. Building on Social Exchange Theory, Valle et al. (2019) established that employees in low LMX relationships are more likely to morally disengage (Bandura, 1986, 1999).

This study positions MD as a key intervening mechanism underlying the relationship between LMX and KHB. Knowledge hiding behavior refers to the deliberate withholding of requested information from a colleague or employer (Sun et al., 2022). Previous research consistently shows that MD is associated with unethical employee behaviors, impairs operational efficiency and promotes knowledge hiding (Serenko & Abubakar, 2023; Erkutlu & Chafra, 2023). Collectively, these findings suggest that MD undermines the trust necessary for effective LMX relationships. Whereas, high quality LMX fosters inclusivity, reduces MD and consequently decreases knowledge hiding (Al-Atwi et al., 2022; Al Hawamdeh & Al Hawamdeh, 2025). Hence,

Hypothesis 2: Moral Disengagement mediates the relationship between Leader Member Exchange and Knowledge Hiding Behavior

Moderating role of equity sensitivity

Equity sensitivity is the individual difference in how employees appraise fairness of their effort to reward proportion (Palmer, 2022). This concept serves as an important boundary condition in workplace exchanges. Villegas and Larena (2021) found that the impact of LMX depends on this trait. Particularly, employees with high ES experience more favorable outcomes in high quality LMX relationships than their peers. Contrariwise, low ES overrides positive reciprocation and maintains higher levels of MD despite supportive leadership (Erkutlu & Chafra, 2023).

When employees experience inequity, they are more likely to engage in counterproductive work behaviors (Asadullah et al., 2023). However, high ES serves as a mechanism that emphasizes sustaining rapport. It explains a context in which employees value fairness and treat their relationship with their leader as a

valuable social asset that needs to be maintained (Xu et al., 2023).

This research posits that ES moderates the relationship between LMX and MD, as individuals with high ES monitor fairness and ethical adherence closely (Chen et al., 2023). They are highly responsive to the quality of their relationship with leadership. Employees with high quality LMX perceive greater organizational support through trust and inclusivity (Hassaan, 2024). In response, they feel a strong obligation to reciprocate with ethical behavior, thereby reducing MD (Liao et al., 2024). Hence,

Hypothesis 3: Equity Sensitivity moderates the negative relationship between Leader Member Exchange and Moral Disengagement in a way that the negative relationship will be stronger when Equity Sensitivity is high than low.

Indirect effect of Leader Member Exchange on Knowledge Hiding Behavior via Moral Disengagement

This study proposes a moderated mediation model (Preacher et al., 2007) to examine the conditional indirect effect of LMX on KHB via MD. It is posited that ES functions as a critical psychological boundary condition. Employees with high ES feels strongly obligated to reciprocate high quality LMX with ethical conduct (Zhang, 2025). Therefore, ES acts as a buffer that further supports the reduction of MD in response to positive leadership.

As a result, this leads to a more pronounced decrease in KHB compared to employees with low ES. Thus, the indirect negative relationship between LMX and knowledge hiding is stronger when ES is high. Hence,

Hypothesis 4: The indirect effect of LMX on Knowledge Hiding Behavior via Moral Disengagement is moderated by Equity sensitivity, such that the indirect negative relationship will be stronger in case of high Equity Sensitivity than low.

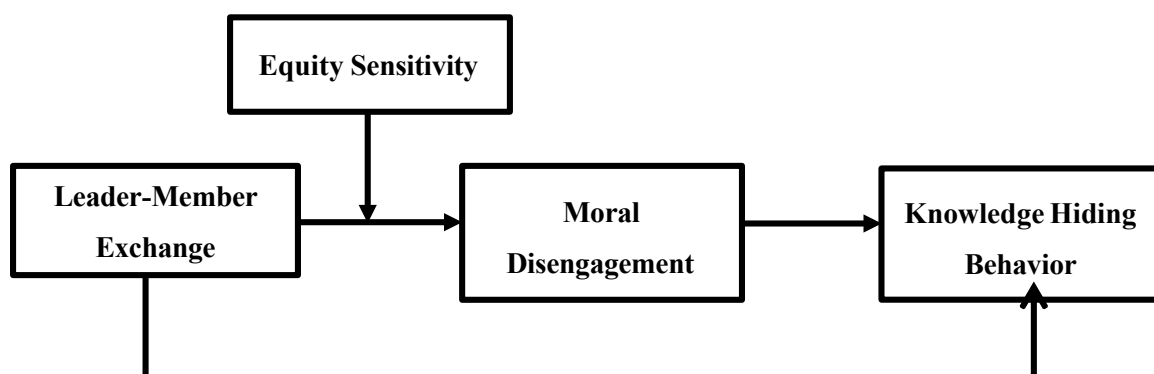


Figure 1: Theoretical Framework (By the authors)

Materials and Methods Sample and Procedure

Current study employed a quantitative research design to examine the relationship between LMX and KHB using ES and MD as the moderating and mediating variables. Statistical analyses were conducted to test the proposed moderation and mediation effects (Ge, 2023). Primary data were collected through a closed ended survey questionnaire from 523 employees in Pakistan's

telecommunication sector.

The required sample size was determined using F-test and G*Power (Version 3.1.9.4) developed by Faul et al. (2009). Based on a medium effect size and three predictors, minimum sample required was 257 participants. The final sample comprised 523 participants. A post hoc power analysis yielded a statistical power of 0.91, exceeding the recommended threshold of 0.80 (Cohen, 1992) and confirming adequacy of the sample.

A non-probability convenience sampling technique was adopted (Stratton, 2023). To reduce Common Method Bias (CMB), data were collected using a three wave time lagged design with a minimum seven-day interval between waves, following Podsakoff et al. (2012). The first wave collected demographic

information, LMX, and ES. Second wave measured MD and the third measured KHB. Although time lagged designs commonly experience respondent attrition, the response rate was consistent with previous studies (Fallman et al., 2019). The table below summarizes the respondents' characteristics.

Table:1 Respondent Characteristics

Variable	Frequency	Percentage
Gender		
Male	359	68.6
Female	164	31.4
Marital status		
Single	217	41.5
Married	306	58.5
Age (in years)		
18-25	101	19.3
26-33	217	41.5
34-41	179	34.2
42 and above	26	5
Qualification		
Less than 16 years	30	5.7
BS/16 years	415	79.3
MS/M.Phil-18 years	78	14.9
Experience in years		
Less than 1 year	68	13
1-3 years	193	36.9
4-6 years	178	34
7-9 years	54	10.3
10-12 years	30	5.7
N = 523		

Instruments

A Likert scale (five point) closed ended questionnaire was used to collect primary data from participants (Rokeman, 2024). The survey was adopted and distributed in English. The study was conducted among employees in Pakistan's telecommunication industry where English is commonly understood as supported by earlier study (Fatima et al., 2024).

Leader-member exchange

Graen and Uhl-Bien's (1995) 7-item scale was used to measure LMX. A sample item is, "How well does your leader understand your job problems and needs?" The Cronbach's alpha was 0.88.

Equity sensitivity

Equity Sensitivity instrument was first developed by Huseman et al. (1985, 1987) and later modified and used in numerous studies (Bing et al., 2009; Davison & Bing, 2008). ES was measured using a 10 item. A sample item is, "In any organization I might work for, it would be important for me to give to the organization." The Cronbach's alpha was 0.92.

Moral disengagement

Moral disengagement was measured using 8-item scale developed by Moore et al. (2012) and most commonly used measure of MD (Pechorro et al., 2024). A sample item is "It is okay to spread rumors to defend those you care about." The Cronbach's alpha was 0.86.

Knowledge hiding behavior

Knowledge hiding behavior was measured using the 12-item scale developed by Connelly et al. (2012) and adopted by Han et al. (2021). A sample item is "I agreed to assist him/her but had no intention of doing so." The Cronbach's alpha was 0.92.

Data analysis

Data were analyzed using SPSS Version 21 and AMOS (Rahman & Mukhtadir, 2021). Before hypotheses testing, data were examined for linearity, normality and multi-collinearity to ensure valid analyses. Correlation analysis was conducted to obtain mean, standard deviation, Cronbach's alpha, and significance values (Koli, 2024). Moderated mediation analysis estimated unstandardized β , standard error, and 95% confidence intervals. PROCESS Macro was used to examine conditional indirect effect between independent and dependent variables through

moderating and mediating factors (Sürücü et al., 2023). Finally, a graphical illustration based on bootstrap estimates within the 95% confidence interval was presented.

Confirmatory Factor Analysis

Following the recommendations of Anderson and Gerbing (1988), Confirmatory Factor Analysis (CFA) was conducted to assess whether responses matched hypothesized four-factor model. The results of CFA are provided in Table 2. Comparing the results of four-factor model, it yielded better fit indexes, $\chi^2 = 620.23$, $df = 623$, $\chi^2/df = 1.00$, $p < .05$, CFI = 0.99, TLI = 0.99, IFI = 0.99, RMSEA = 0.01, all of which are in the acceptable range of model fitness criteria (Hair et al., 2014). The standardized root mean square residual (SRMR) value for four-factor model is 0.04, which is lower than cutoff value of .08, thus indicating a good fit (Hu & Bentler, 1999).

TABLE 2| Confirmatory factor analysis

Model	χ^2	df	χ^2/df	CFI	TLI	IFI	SRMR	RMSEA
Hypothesized four factors Model (LMX, MD, KHB and ES)	620	623	1.00	0.99	0.99	0.99	0.04	0.01

N = 523

Results

Correlation Analysis

Table 3 outlines results related to descriptive statistics, average variance extracted (AVE), maximum shared variance (MSV), Composite reliabilities and correlations among the variables of this study. Prior to examining correlations, an analysis of variance (ANOVA)

test was done to check variance in KHB and MD due to demographic variables i.e. gender, marital status, age, qualification and work experience. The results of ANOVA for all demographic variables were non-significant. Therefore, demographics related to respondents were not included in further analyses except the correlation analysis.

TABLE 3| Reliabilities, convergent and discriminant validity, descriptive statistics and inter-correlations.

S.N	Variable	M	SD	AVE	MSV	CR	1	2	3	4	5	6	7	8
1	LMX	3.10	.87	0.51	0.25	.88	-							
2	MD	3.37	.77	0.56	0.26	.86	-.22**							
3	KHB	3.30	.82	0.52	0.27	.92	-.45**	.46**						
4	ES	3.01	.91	0.54	0.13	.92	.13**	-.29**	-.33**					
5	Gender	-	-	-	-	-	-.003	.008	.016	.022				
6	Marital Sts	-	-	-	-	-	.036	-.036	-.048	.050	.302**			
7	Age	-	-	-	-	-	.003	-.005	.037	.002	.011	.284*		
8	Qual	-	-	-	-	-	-.050	.060	.001	.014	.000	.017	.021	
9	Exp	-	-	-	-	-	.009	-.040	-.004	-.053	-.014	.007	-.029	-.093*

N = 523; * $p < 0.05$, ** $p < 0.01$, LMX, ES, MD, KHB, M, mean; SD, standard deviation; AVE, average variance extracted; MSV, maximum shared variance; CR, composite reliability.

Hypotheses Testing

Table 4 summarizes the results for direct, mediation, moderation and moderated mediation hypotheses. Proposed conceptual framework was tested using PROCESS Macro Model 7 (Hayes, 2017). For H1, LMX had a significant negative relationship with KHB ($\beta = -0.34$, $p = 0.01$, $SE = 0.03$, 95% CI [-0.42, -0.28]). Therefore, H1 is accepted.

For H2, LMX was negatively related to MD ($\beta = -0.17$, $p = 0.01$, $SE = 0.04$, 95% CI [-0.24, -0.10]), while MD was positively related to KHB ($\beta = 0.40$, $p = 0.01$, $SE = 0.04$, 95% CI [0.33, 0.48]). Indirect effect of LMX on KHB through MD was significant ($\beta = -0.07$, $p = 0.01$, $SE = 0.02$, 95% CI [-0.12, -0.05]), with the confidence interval excluding zero. Hence, H2 is accepted.

For H3, interaction effect was significant ($\beta = -0.13$, $p = 0.01$, $SE = 0.04$, 95% CI [-0.21, -0.05]). At low ES, conditional effect was not significant (effect = -0.02, 95% CI [-0.06, 0.01]), whereas at high ES it was significant (effect = -0.12, 95% CI [-0.19, -0.07]), indicating that ES strengthened the negative relationship between LMX and MD (Figure 2). Therefore, H3 is accepted.

For H4, conditional indirect effect was insignificant at low ES (effect = -0.02, 95% CI [-0.06, 0.01]) but significant at high ES (effect = -0.12, 95% CI [-0.19, -0.07]). Indirect effect was -0.05 (95% CI [-0.09, -0.02]), and the index of moderated mediation excluded zero, confirming a significant conditional indirect effect of LMX on KHB through MD at high ES. Hence, H4 is accepted.

FIGURE:2 Equity Sensitivity strengthens the negative relationship between LMX and MD.

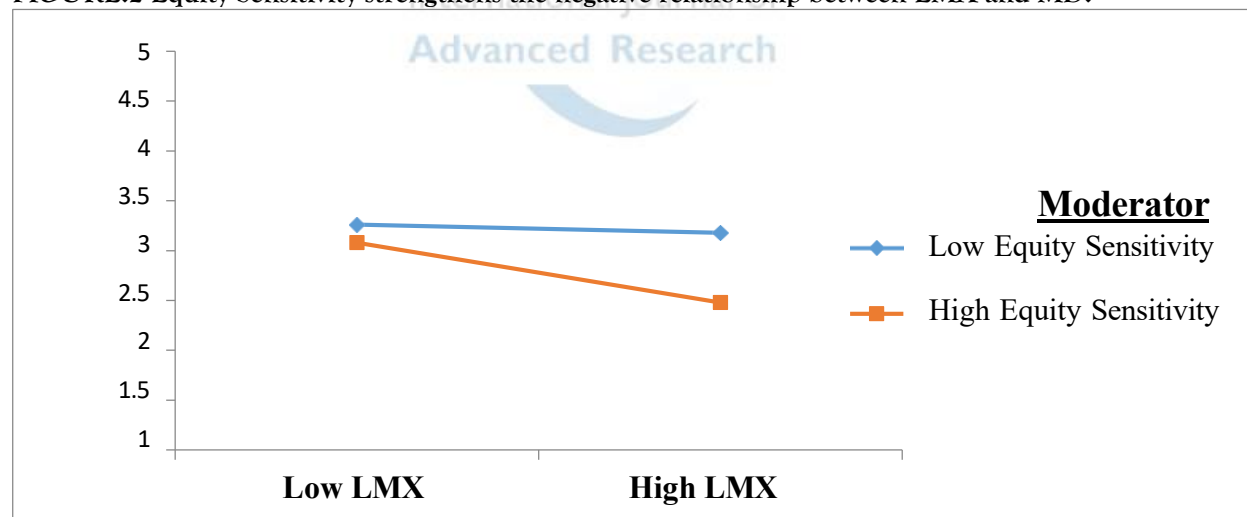


Table 4: Moderated Mediation Analysis

	Unstandardized β	S.E	LL95%CI	Equity Sensitivity UL95% CI
Mediating Variable Model				
LMX→ MD	-.17**	.04	-.24	-.10
ES → MD	-.22**	.04	-.29	-.15
LMX x EQ → MD	-.13**	.04	-.21	-.05
Dependent Variable Model				
LMX→ KHB	-.34**	.03	-.42	-.28
MD → KHB	.40**	.04	.33	.48
Indirect Effect				
LMX →MD → KHB	-.07**	.02	-.12	-.05

Conditional indirect effect (s) of LMX on KHB through MD at values of ES, ± 1 SD from Mean

Conditional Effects of Moderator at M ± 1 SD (Slope Test)	Effect	Boot S.E	Boot LL95%CI	Boot UL95% CI
ES Low -1 SD (-.91)	-.02	.02	-.06	.01
ES High +1 SD (.91)	-.12	.03	-.19	-.07
Index of Moderated Mediation	-.05	.02	-.09	-.02

N = 523, Model 7 results, Bootstrap = 5000, 95% CI. *p < 0.05, **p < 0.01.

Discussion:

The mediating mechanism is a key theoretical contribution demonstrating that leadership influences unethical behavior through moral reasoning not merely through motivation or relationships. It explains how relational experiences are translated into behavioral outcomes. It also responds to recent research calls to explain how leadership affects unethical behaviors in knowledge-based workplaces.

ES significantly moderates the relationship between LMX and MD. The negative relationship between LMX and MD is stronger among employees with high ES than those with low ES. Individuals with high ES are more responsive to reciprocity and fairness, making them more likely to reciprocate high quality LMX with ethical behavior and lower MD. In contrast, employees with low ES are less influenced by reciprocity and view favorable leader behavior as an entitlement.

These findings support prior research showing that fairness orientation shapes employees' responses to leaders (Zhang, 2025) and demonstrate that the moral influence of leadership depends on employees' equity orientation.

Findings also reveal a significant conditional indirect effect of LMX on KHB through MD. This indirect effect is stronger among employees with high ES, indicating that high quality LMX is more effective in reducing knowledge hiding when employees value fairness. By integrating Social Exchange Theory with personality traits, moderated mediation model establishes ES as a key boundary condition. It shows that leadership

effectiveness depends on both relational quality and employees' dispositional orientation.

These findings are particularly relevant to Pakistan's telecommunication industry where knowledge is a strategic asset in a highly competitive and technology-driven environment (Waseem et al., 2025). High quality LMX reduces MD and knowledge hiding by fostering ethical leader to employee relationships. However, its effectiveness is limited among employees with low ES. Therefore, leadership initiatives should be complemented with HR practices that consider personality traits such as recruiting equity-sensitive individuals.

Theoretical Implications

This study offers four theoretical contributions. First, it extends the LMX literature by demonstrating its role in reducing KHB through MD. It highlights that high quality relational resources help prevent knowledge hiding that is consistent with Social Exchange Theory (He et al., 2025).

Second, it contributes to MD literature by showing that moral disengagement is shaped by leadership relationships and high quality LMX promotes adherence to moral principles and reducing MD.

Third, the study advances knowledge hiding literature by identifying ES as a key boundary condition. It demonstrates that the effectiveness of relational interventions depends on employees' fairness preferences.

Finally, it responds to calls for more evidence from emerging economies. By providing cross-cultural evidence from Pakistan's telecommunication sector, it supports the

generalizability of LMX and ethical behavior frameworks across diverse cultural contexts.

Managerial and Practical Implications

The findings provide important implications for HR practitioners in knowledge driven sectors such as telecommunications. Since high quality LMX reduces MD and KHB, organizations should invest in relational leadership development. Leaders should be trained to demonstrate integrity, fairness and respect. In addition, incorporating relational competencies into leadership evaluations can help foster knowledge-sharing climates.

Given the mediating role of MD, organizations should implement ethics training to reduce the rationalization of unethical behavior. Such training should address mechanisms such as responsibility dilution and euphemistic labelling (Jeong, 2022). HR practices should also consider ES by assessing fairness orientation during recruitment and employee development. More structured interventions should be adopted for employees with low ES (Wang et al., 2022). Finally, organizations should promote psychological safety by encouraging open communication, formalizing knowledge sharing and rewarding collaboration. These practices can reduce MD and strengthen knowledge-sharing behavior (Zhang et al., 2025).

Limitations and Future Research Directions

Despite its theoretical and practical contributions, this study has several limitations. Although the three wave time lagged design reduced Common Method Bias (CMB), the use of self-reported data may still introduce perception bias and social desirability. Future studies should use multisource data including supervisor or peer ratings of KHB and MD.

Second, use of convenience sampling in Pakistan's telecommunication sector limits generalizability, necessitating replication across industries such as manufacturing, education and healthcare.

Third, the parsimonious model included only MD as the mediator and ES as the moderator. Future research should incorporate additional

mediators (e.g., organizational justice, psychological safety, emotional exhaustion, and trust in leadership) and moderators (e.g., conscientiousness, neuroticism, Machiavellianism and moral identity).

Fourth, longitudinal, experimental or quasi-experimental designs could better establish causal relationships.

Finally, comparative studies across individualistic and collectivist, high-power distance cultures are needed to examine the generalizability of relationships among LMX, MD and KHB.

Conclusion:

In today's competitive and innovation-driven economy, managing intellectual capital has become strategically important. Nevertheless, knowledge hiding remains a major challenge, particularly in the telecommunications industry. Drawing on Social Exchange Theory, this study examines how LMX, MD and ES influence knowledge hiding behavior among employees in Pakistan's telecommunication sector.

The findings show that high quality LMX reduces KHB directly and indirectly by reducing MD. This indirect effect is stronger among employees with high ES. The study integrates leadership, moral cognizance and personality disposition into a unified framework. It also provides empirical evidence from Pakistan thereby extending the applicability of leadership and knowledge management theories.

Practically, the findings suggest that organizations should strengthen relational leadership while fostering ethical and fairness oriented work environments. High quality LMX cultivates a supportive organizational culture that promotes knowledge sharing, organizational learning and long-term competitiveness.

REFERENCES

- Afshan, G., Umar Farooq Sahibzada, Rani, H. and Ghulam Muhammad Kundi (2023). Supervisors' knowledge hiding and knowledge-based trust: from the lens of social impact theory. *Aslib Journal of Information Management*, [online] 74(2)

- Ahmad, R., Nawaz, M.R., Ishaq, M.I., Khan, M.M. and Ashraf, H.A., 2023. Social exchange theory: Systematic review and future directions. *Frontiers in psychology*, 13.
- Al Hawamdeh, N. and Al Hawamdeh, T.A., 2025. Linking leaders' knowledge-hiding and employees' work engagement: the moderating role of organizations citizenship behavior . *VINE Journal of Information and Knowledge Management Systems*.
- Al-Atwi, A.A., Alshaibani, E., Bakir, A., Shoaib, H.M. and Dahlan, M. (2022). A multilevel investigation of leader-member exchange differentiation's consequences: A moral disengagement perspective. *Frontiers in Psychology*, 13.
- Amber, Q., Qazi, A.B., Javaid, N., Khan, I.A. and Ahmad, M. (2021). Knowledge sharing in public organizations in Pakistan: leaders' ethical role and psychological capital of employees. *Information Discovery and Delivery*, ahead-of-print.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), 411.
- Asadullah, M., Rehman, K., Khan, N., Hashim, S. and Ullah, S., 2023. Mediating Effect of Organizational Virtuousness in Relationship between Ethical Leadership and Knowledge Hiding: Evidence from Higher Educational Institutions of Punjab, Pakistan. *Al-Qanṭara*, 9(4).
- Assefa, Y., Moges, B.T., Tilwani, S.A. and Shah, M.A. (2024). The mediating role of leader- member exchange (LMX) in the structural relationship between organizational justice and employee voice behavior in higher education. *Heliyon*, [online] 10(4).
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986(23-28), 2.
- Bandura, A. (1999). Social cognitive theory: An agentic perspective. *Asian journal of social psychology*, 2(1), 21-41.
- Bennouna, A., Boughaba, A., Djabou, S., & Mouda, M. (2025). Enhancing Workplace Well-being: Unveiling the Dynamics of Leader-Member Exchange and Worker Safety Behavior Through Psychological Safety and Job Satisfaction. *Safety and Health at Work*, 16(1), 36-45.
- Bing, M. N., Davison, H. K., Garner, B. L., Ammeter, A. P., & Novicevic, M. M. (2009). Employee relations with their organization: The multidimensionality of the equity sensitivity construct. *International Journal of Management*, 26(3), 436.
- Cohen, J. (1992). Statistical power analysis. *Current directions in psychological science*, 1(3), 98- 101.
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations. *Journal of organizational behavior*, 33(1), 64-88.
- Cristache, N., Croitoru, G. and Florea, N.V. (2025). The influence of knowledge management on innovation and organizational performance. *Journal of Innovation & Knowledge*, [online] 10(5).
- Davison, H. K., & Bing, M. N. (2008). The multidimensionality of the equity sensitivity construct: Integrating separate benevolence and entitlement dimensions for enhanced construct measurement. *Journal of Managerial Issues*, 131-150.
- Erkutlu, H. and Chafra, J., 2023. Leader moral disengagement and follower knowledge hiding. A moderated mediation model of follower Machiavellianism and trust in the leader. *Journal of Economic and Administrative Sciences*, 39(2).
- F. Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review*, 26(2).

- Fallman, S. L., Jutengren, G., & Dellve, L. (2019). The impact of restricted decision-making autonomy on health care managers' health and work performance. *Journal of nursing management*, 27(4).
- Fatima, A., Ahmad, K., & Tahir, F. (2024). The Impact of Digital Marketing on Pakistan's Telecom Industry Profitability. *Journal of Business and Management Research*, 3(1).
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*, 41(4).
- Ge, X., 2023. Experimentally manipulating mediating processes: Why and how to examine mediation using statistical moderation analyses. *Journal of Experimental Social Psychology*, 109.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly*, 6(2), 219- 247.
- Guo, Y., Chen, L., Song, L.J. and Zheng, X. (2021). How LMX Differentiation Attenuates the Influence of Ethical Leadership on Workplace Deviance: The Mediating Role of Psychological Empowerment. *Frontiers in Psychology*, [online] 12.
- Gusmerotti, N.M., Todaro, N.M., Tosi, D. and Testa, F., 2023. Green work climate, work meaningfulness and supervisor environmental priority: A social exchange perspective on employees' eco-initiatives. *Journal of Cleaner Production*, 415.
- Hayes, A. F., Montoya, A. K., & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: PROCESS versus structural equation modeling. *Australasian Marketing Journal*, 25(1), 76-81.
- He, P., Zhou, H., Zhou, Q., Liu, X., & Xu, Z. (2025). From Harmful Acts to Helping Hands: When and How Employee Deceptive Knowledge Hiding Promotes Workplace Helping Behavior. *Journal of Organizational Behavior*, 46(9), 1247-1264.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1985). Test for individual perceptions of job equity: Some preliminary findings. *Perceptual and Motor Skills*, 61(3_suppl).
- Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1987). A new perspective on equity theory: The equity sensitivity construct. *Academy of management Review*, 12(2), 222-234.
- Jaffar, F.M., 2020. *Impact of organiztional culture on knowledge conversion and organizational performance in telecom sector of Balochistan* (Doctoral dissertation, Dissertation for Ph. D. in Business Administration, Selinus University, Bologna, Italy).
- Jeong, R. (2022). *Development of The Moral Disengagement and Bullying Scale* (Master's thesis, Northern Illinois University).
- Jo, H. and Shin, D. (2025). The impact of recognition, fairness, and leadership on employee outcomes: A large-scale multi-group analysis. *PLoS ONE*, [online] 20(1), pp.e0312951-e0312951. doi:https://doi.org/10.1371/journal.pone..

- Jonker, N.C., Timmerman, M.E. and Jong, P.J. (2022). The reward and punishment responsivity and motivation questionnaire (RPRM-Q): A stimulus-independent self-report measure of reward and punishment sensitivity that differentiates between responsivity and motivation. *Frontiers in Psychology*, [online] 13.
- Kamal, N., Samdani, H., Mehmood, M.A. and Janjua, Q.R., 2022. IMPACT OF KNOWLEDGE PRACTICES ON INNOVATION: THE ROLE OF EMPLOYEES' INTENTION TO STAY AND RECOGNITION.
- Koli, M.R.S., 2024. Enhancing Research Validity: A Comprehensive Examination of Scaling, Correlation, and Hypothesis Testing. *IIP: International Multidisciplinary Research Journal*, 1(Issue-II (Oct-Dec)), pp.9-9.
- Kumar, C., Garg, N., Talukdar, A. and Ganguly, A. (2025). Performance motivation and knowledge hiding: exploring the role of moral disengagement in education sector. *Journal of Knowledge Management*, [online] 29(4).
- Liang, Q. and Yin, F., 2024. Empirical Study on the Relationship between Leader-Member Exchange, Employee Trust, and Team Knowledge Sharing. *Sustainability* (2071-1050), 16(18).
- Liao, G., Li, M., Li, Y. and Yin, J., 2024. How does knowledge hiding play a role in the relationship between leader-member exchange differentiation and employee creativity? A cross-level model. *Journal of Knowledge Management*, 28(1).
- Liu, Y., Fang, Y., Hu, L., Chen, N., Li, X. and Cai, Y. (2024). Inclusive leadership and employee workplace well-being: the role of vigor and supervisor developmental feedback. *BMC Psychology*, [online] 12(1).
- Moore, C., Detert, J. R., Klebe Treviño, L., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel psychology*, 65(1), 1-48.
- Ogunfowora, B., Maerz, A., & Varty, C. T. (2021). How do leaders foster morally courageous behavior in employees? Leader role modeling, moral ownership, and felt obligation. *Journal of Organizational Behavior*, 42(4).
- Ogunfowora, B.T., Nguyen, V.Q., Steel, P. and Hwang, C.C., 2023. A meta-analytic investigation of the antecedents, theoretical correlates, and consequences of moral disengagement at work. *Journal of Applied Psychology*, 107(5).
- Palmer, S. N. (2022). *Equity sensitivity and work outcomes: a meta-analysis* (Doctoral dissertation, Saint Louis University).
- Pechorro, P., Bonfá-Araujo, B., Simões, M. R., Nunes, C., & DeLisi, M. (2024). Propensity to morally disengage scale: Psychometric properties and measurement invariance among a Portuguese sample. *Deviant Behavior*, 45(9).
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63(1).
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate behavioral research*, 42(1).
- Rahman, A. and Muktadir, M.G., 2021. SPSS: An imperative quantitative data analysis tool for social science research. *International Journal of Research and Innovation in Social Science*, 5(10).
- Rokeman, N.R.M., 2024. Likert measurement scale in education and social sciences: explored and explained. *EDUCATUM Journal of Social Sciences*, 10(1).

- Serenko, A. and Abubakar, A.M., 2023. Antecedents and consequences of knowledge sabotage in the Turkish telecommunication and retail sectors. *Journal of Knowledge Management*, 27(5).
- Sharif, S., Tongkachok, K., Akbar, M., Iqbal, K. and Lodhi, R.N., 2024. Transformational leadership and innovative work behavior in three-star hotels: mediating role of leader-member exchange, knowledge sharing and voice behavior. *VINE Journal of Information and Knowledge Management Systems*, 54(1), pp.1-21.
- Sobral, F., & Furtado, L. (2024). LMX. In *Elgar Encyclopedia of Organizational Psychology* (pp. 377-381). Edward Elgar Publishing.
- Stratton, S.J., 2023. Population sampling: Probability and non-probability techniques. *Prehospital and Disaster Medicine*, 38(2).
- Sun, Y., Ayub, A., Fatima, T., Aslam, H. D., & Bahoo, S. (2022). The knowledge hiding loop: exploring the boundary conditions. *Kybernetes*, 51(11).
- Sürücü, L., Şeşen, H. and Maslakçı, A., 2023. *Regression, mediation/moderation, and structural equation modeling with SPSS, AMOS, and PROCESS Macro*. Livre de Lyon.
- Tanko, S., & Kwarteng, A. H. (2025). Leader-turn-follower: an opportunity for cooperation or sabotage? *Strategy & Leadership*.
- Tano, A. Y., Manu, F. A., Osei-Frimpong, K., & Darbi, W. P. K. (2023). Leader-member exchange and organizational citizenship behaviour: The moderator effects of subordinates' horizontal collectivism orientation and team-member exchange. *International Journal of Cross Cultural Management*, 23(3).
- Tao, J., 2025. A Study on the Impact of Employee Work Engagement on Turnover Intention: The Mediating Role of LMX and the Moderating Role of Leadership Support. *AU- GSB E-Journal*, 18(1), p.226.
- Valle, M., Kacmar, K. M., Zivnuska, S., & Harting, T. (2019). Abusive supervision, leader-member exchange, and moral disengagement: A moderated-mediation model of organizational deviance. *The Journal of social psychology*, 159(3).
- Veetikazhi, R., Kamalanabhan, T.J., Malhotra, P., Arora, R. and Mueller, A. (2020). Unethical employee behavior: a review and typology. *The International Journal of Human Resource Management*, [online] 33(10).
- VILLEGAS, J. R. A., & LARENA, C. S. EQUITY SENSITIVITY, LEADER-MEMBER EXCHANGE, AND ORGANIZATIONAL COMMITMENT IN THE SOUTHERN CAMPUSES OF CEBU TECHNOLOGICAL UNIVERSITY.
- Vuchkovski, D., Zalaznik, M., Mitreğa, M. and Pfajfar, G. (2023). A look at the future of work: The digital transformation of teams from conventional to virtual. *Journal of Business Research*, [online] 163.
- Wagner, B., & Koob, C. (2022). The relationship between leader-member exchange and work engagement in social work: A mediation analysis of job resources. *Heliyon*, 8(1).
- Wallenburg, C.M. and Handfield, R., 2022. Social exchange theory. In *Handbook of theories for purchasing, supply chain and management research*. Edward Elgar Publishing.
- Wang, H., Jiao, R. and Li, F., 2022. Research on the effect of narcissistic leadership on employee job embeddedness. *Frontiers in Psychology*, 13, p.927529.

Waseem, M.T., Farooq, M.S. and Rehman, A.A. (2025). Analyzing Challenges Faced By the Telecom Industry in Pakistan and Their Impact on Growth. *ResearchGate*.

Wen, J., Zheng, J. and Ma, R. (2022). Impact of Knowledge Hiding Behaviors on Workplace Invincibility: Mediating Role of Psychological Contract Breach. *Frontiers in Psychology*, [online] 12, pp.809683–809683.

Xu, G., Huang, Y. and Huang, S.S., 2023. Informational justice and employee knowledge hiding behaviors: Mediation of organizational identification and moderation of justice sensitivity. *Heliyon*, 9(4).

Xu, S., Wang, Y.C. and Ma, E., 2022. A workplace-driven model on the formation of OCB-C: perspectives of social exchange theory and agency theory. *International Journal of Contemporary Hospitality Management*, 34(7), pp.2684-2703.

Zhang, L. (2025). The multi-level paths from age diversity to organizational citizenship behaviors: could leader/team-member exchange be answers that benefit the paths? *Frontiers in Psychology*, 16, 1413940.

Zhang, Y., Fan, S., Hui, H., Zhang, N., Li, J., Liao, L., Ke, C., Zhang, D., Su, S., Song, Z. and Zhang, Y., 2025. Privacy protection for open sharing of psychiatric and behavioral research data: ethical considerations and recommendations. *Alpha Psychiatry*, 26(1).