JOURNAL OF SOCIAL SCIENCES DEVELOPMENT

www.jssd.org.pk   editor@jssd.org.pk

THE LINKAGES BETWEEN KNOWLEDGE HIDING & KNOWLEDGE SHARING VIA LMX & AGREEABLENESS: A MEDIATED MODERATED MODEL

Sajid Mushtaq[1], Sana Mukhtar[1] & Hafiz Muhammad Umair Nasir[1]

[1]Institute of Business Administration, Khwaja Fareed University of Engineering & Information Technology, Rahim Yar Khan, Pakistan

KEYWORDS	ABSTRACT
Knowledge Hiding, Knowledge Sharing, LMX, Agreeableness, COR, SET	The study will contribute to the knowledge hiding literature by providing interesting insights in trickledown effect of supervisor knowledge hiding on subordinate knowledge sharing behavior with the co-workers, while; here, LMX as mediator would extend literature of knowledge hiding. Drawing on SET & COR theory by using cross-sectional data collected over structured questionnaire from employees of TEVTA organization, the research will be a considerable addition in both knowledge hiding and knowledge sharing literature. It would also provide the considerable knowledge in OB studies where personality traits i.e., agreeableness as moderator will influence upon relationship of LMX and knowledge sharing by subordinate with coworkers. It argues that, the effects of supervisor knowledge hiding (predictor) not stop at subordinate end while it transmits (trickledown) in coworker and badly affect their social well-being (outcome). More interestingly, agreeableness will moderate relation of LMX & subordinate knowledge sharing behavior with co-workers while the COR will support to author's stance. In addition, theoretical and practical implications of the study are also a key point of the present research.
ARTICLE HISTORY	
	2024 Journal of Social Sciences Development
Corresponding Author	**Sana Mukhtar**
Email:	sanamukhtar617@gmail.com	

INTRODUCTION

Knowledge hiding is "an intentional attempt by an individual to withhold or conceal knowledge that has been requested by another person" (Yao, Zhao, Hud, & Zheng, 2023). A growing number of studies have been reported that knowledge hiding is negatively related to trust, psychological safety, thriving, creative and innovative individuals and team behaviors; and positively related with voluntary turnover intentions and reciprocal knowledge hiding (Connelly, Zweig, Webster & Trougakos, 2012; Bogilović, Černe & Škerlavaj, 2017). Although, the large number of efforts

done by organizations to minimize the negative consequences of knowledge hiding, employees are still unwilling to share their knowledge with the coworkers (Pradhan, Srivastava & Mishra, 2019). Knowledge hiding by employees can be judged by a survey statistic in the USA, which reported that 76% participants of said survey admitted that they once hid knowledge in some form or others (Connelly & Zweig, 2015). Consequently, we can also estimate the attempts of knowledge hiding by losses of 31.5 billion Dollar in Fortune 500 companies quoted from Babcock (2004) in (Wang & Noe, 2010).

In connection with knowledge hiding consequences, we can assess its negative outcomes by the cost of counterproductive behavior 1 trillion dollar while it is 120 billion dollars against theft and 4.2 billion dollar is the result of workplace violence with addition of more than 900-billion-dollar income loss due to fraudulent activities (Banks, Whelpley, Oh & Shin, 2012). Knowledge Hiding not only motivate employees towards counter work productive behavior (CWB) but also prevents them from making creative ideas. Despite efforts to enhance knowledge sharing in organizations, success has been elusive. It is becoming clear that in many instances employees are unwilling to share their knowledge even when organization practices are designed for this. Getting the click to line of knowledge hiding, current study is focusing on trickledown effects of top-down knowledge hiding (hereafter referred to as knowledge hiding by supervisors from subordinates with new lens of knowledge sharing by subordinates with coworkers in value of knowledge hiding by supervisor. Those low in agreeableness might be competitive & less inclined to share knowledge, potentially engaging in knowledge hiding. While, harmful moments of knowledge hiding with reciprocal lens already been studied a lot (Arain, Bhatti, Hameed & Fang, 2019; Arain, Hameed, Umrani, Khan & Sheikh, 2020; Butt, 2021; Guo, Cheng & Luo, 2020) but its trickledown effects are remained largely unexplored.

So far, to the best of our knowledge (Arain et al., 2019; Arain et al., 2020), two empirical studies have focused on KHSS and its detrimental consequences on subordinates' self-efficacy, supervisor directed trust, innovative work behavior & supervisor directed organizational citizenship behavior (SOCB) but trickle-down effects of top-down knowledge hiding on social well-being of coworkers via subordinates were inviting more research. knowledge hiding and knowledge sharing are look like two sides of the same coin; however, they are distinct, and thus, can be predicted by distinct factors (Connelly & Zweig, 2015). Specifically, Knowledge Hiding is primarily motivated by self-focused intentions, while knowledge sharing is primarily an outcome of pro-social intentions (Pan, Zhang, Teo & Lim, 2018). This is a two-way exchange process of benefits, resources and demands that is very important for an organization. High LMX quality is competitive advantage nowadays. The better leader-member exchange relationship between supervisor and subordinate, is source of higher productivity, motivation, job satisfaction and citizenship behavior of follower (Jawahar, Schreurs & Mohammed, 2018). On other end, low LMX quality has disadvantages like decrease in the citizenship behavior of subordinate and increase in the counterproductive behavior (Zhang, Wang & Shi, 2012).

Although, the LMX is studying since 40 years (Dulebohn, Bommer, Liden, Brouer & Ferris, 2012) with the different perspectives but the impact of LMX on knowledge sharing behavior (horizontal

knowledge sharing) need more attention of authors for making insights on how LMX can mediate the relationship of KHSS and KSS-Coworkers. The study will explore trickledown effect of KHSS on KSS-Coworkers over mediating role LMX quality. The individuals high in agreeableness are likely to engage in prosocial behaviors, including knowledge sharing, due to their cooperative & altruistic nature. This will explore potential moderating effect of agreeableness (personality trait) on LMX & KSS- Coworkers for exploring possible influence of personality traits i.e. (agreeableness) on such relation. Drawing on SET (Banks et al. 2014) offer new insights in organizational behavior and extend the knowledge of these behaviors with a new lens, where COR theory's impact on the agreeableness will assessed over empirical evidences. The interplay between LMX, agreeableness significantly impacts knowledge hiding and sharing behaviors. High-quality LMX relationships and high agreeableness both individually and collectively foster knowledge sharing and reduce knowledge hiding.

LITERATURE REVIEW

Knowledge Hiding (KHSS)

Knowledge Management is the key point in success of any organization while the employees of the organization are main stakeholders of successful knowledge management system. Although, organizations are widely spending the huge budgets to manage the knowledge and to ensure the effective knowledge sharing among employees but they still suffering for outcomes as desired. In modern world, organizations consider effective knowledge management is a kind of competitive advantage upon direct competitors (Arain et al., 2020). While, Ample researches been explored wider benefits of knowledge management and knowledge sharing (Andreeva & Kianto, 2012). It is very important to differentiate knowledge hiding from other similar constructs i.e., knowledge sharing. Knowledge hiding in not the opposite of knowledge sharing due to different motivations for both, because knowledge sharing motivates from some other factors, they are not motivators of knowledge sharing. In particular, when an individual decided to not share the knowledge, they are perhaps driven by the unawareness or lack of knowledge (Connelly et al. 2012). In the current study, dimensional divisions of Knowledge Hiding still based on its three-dimensional structure (evasive hiding, playing dumb & rationalized hiding) proposed by researchers (Černe et al., 2014; Connelly et al., 2019).

KHSS and LMS

LMX is studying in the organizational behaviors from more than four decades. A large number of studies have been done on leader-member exchange relation (Breevaart et al., 2015; Gottfredson et al., 2020). In work context, perceived LMX is represents the experienced relationship quality between supervisor and subordinate developed over time (Hanasono, 2017). LMX quality matters the more in personal relations of a supervisor and subordinate. The basic idea behind the LMX is, the supervisors form two groups. One with High LMX while the other with Low LMX (we can say in-group & out group). In-group members enjoy greater attention, favor and rewards as compared to out-group members. This is often motivated by the desire to help others, organizational culture, or reciprocal exchanges. Although, many theories argues that the superior behaves in a same way with all subordinates.

But, in fact, supervisors often act very differently with the different subordinates and developed contrasting kind of relations with them (Pradhan et al., 2019). Building on SET (Bierstedt & Blau, 1965) we argues that when a supervisor engage in knowledge hiding from his subordinate, LMX quality may affect and resultantly subordinate involves in some kind of unlike behaviors they are non-favorable for not only individual but for team & organization. Author continue with arguments, when an employee perceived low LMX with his supervisor then his behavior with his co-workers may affect and involves in avoiding from knowledge sharing with his co- workers. The knowledge hiding is negatively related with LMX because knowledge hiding by supervisor deplete resources of the subordinate.

H1:   The knowledge hiding by supervisors from subordinates is negatively associated with LMX

LMX and Knowledge Sharing with Co-workers

Since, knowledge sharing includes the sharing of specialized knowledge, information, expertise, unique skills, individual may needs to spend more time and energy to engage in such behaviors (Kim et al., 2018) and employee who has such kind of knowledge he perceived it as a competitive advantage upon co-workers and may decide to not share this knowledge with others to retain their competitive advantage (Cabrera & Cabrera, 2005). Besides, supervisor view in organization also very important in employee's willingness to share their knowledge (Srivastava et al., 2006). Ample researches and several scholars have explored the predictors of knowledge sharing and classified its antecedents into organizational & cultural characteristics, individual characteristics and motivational factors (Gagné et al., 2019). Some of them also investigated the supervisor role importance in promoting the knowledge sharing behavior of the subordinates (Connelly & Kevin Kelloway, 2003).

They investigated the role of age, gender and organizational tenure on perception of the employee toward knowledge sharing. In social exchange environment, when subordinate perceived that his supervisor hiding knowledge to him for staying competitive and superior, his LMX quality with his supervisor may affect (Low) and he motivate for staying competitive among his co-workers. In consequence, they start hiding the knowledge from his co-workers. We hypothesize as "Low LMX leads to less knowledge sharing by subordinate with his co-workers while High LMX motivate him toward knowledge sharing with co-workers on basis of SET. LMX theory posits that quality of relationship between leaders and their subordinates can influence various workplace outcomes, including knowledge behaviors to share knowledge due to a higher level of trust and support. We supposed knowledge hiding by supervisor as a predictor of the subordinate knowledge sharing with the co-workers.

H2: The Leader-Member Exchange is positively related with KSS-Coworkers

Mediating Role of Leader Member Exchange

Leader-member exchange was identified in literature nearly 4 decades ago (Saadah & Rijanti, 2022) and researches showed that the leader behaviors and perceptions are the antecedents of LMX quality including these are also the causes of variance in LMX (Dulebohn et al. 2012). When leader-member exchange theory firstly introduced, this theory was path breaking for two reasons.

First, it focuses on the separate dyadic relationships between leader and each follower. Secondly, it was based on the assumption that the leaders not behave in the same way with all their followers. LMX has a central role in Leadership and organizational studies (Gottfredson et al. 2020). It also been clarified through different studies (Martin et al., 2018) that the leaders develop the different quality relationships with their followers in their team. Here an important theoretical question concerns that how different relationships within a team affect the follower's work performance? In this linking, in organizational scenario, supervisors have much influence on subordinates and their work environment.

Therefore, relationship of supervisor and subordinate (LMX) matters more in specific environment where quality of LMX is the antecedent of subordinate organizational behavior and avoiding from knowledge sharing with co-workers could be the relative consequence of perceived LMX by the subordinate over exchanging process as defined in SET (Cook & Rice 2006). Although, it already been studied and empirically proved that the KHSS is negatively related with SOCB (Arain et al. (2018) and positively related with moral disengagement, subordinate silence (SS) (Arain et al. 2020). In addition, previous studies been explored positive relationship of negative supervisory behavior i.e. abusive supervision and subordinate silence (Khalid et al., 2018) but these studies did not examine or control potential mediators of the relationship they might be potential influencers of relation under specific environment or conditions. We get support here from SET and suppose that the Leader-Member Exchange mediates the relation of KHSS and KSS-Coworkers as when supervisor hide knowledge from his subordinate then LMX quality among them can be low and may a cause of deactivation of subordinate self-regulatory mechanism due to perceived exchange by subordinate, in result he displays negative work behavior i.e., avoid from knowledge sharing with the co-workers.

H3: The Leader-Member Exchange mediates the relation of KHSS and KSS-Coworkers

Moderating Role of Agreeableness

Agreeable individuals are considered to be sympathetic, kind, forgiving, courteous and tolerant in contrast to antagonistic disagreeable and uncaring individuals (McCrae & Costa, 2008). The agreeable people always ready to give help and seek cooperation in preference to competition (Liao & Chuang, 2004). Moreover, they would not like to make others to feel uncomfortable. The research has shown that the agreeable employees are less likely to participate in the aggression in working situations (Colbert et al., 2004). According to conservation of resources (COR) theory personality is an important asset that can play very important role to encountering threats and help the individuals to cope with the organizational challenges (Anasori et al., 2020). In addition, previous researches (Graziano et al., 2007; Medler-Liraz, 2020) shown that the agreeableness is most often used of the big five in relation to knowledge sharing. Agreeableness is a dimension of personality and more fluently use in organizational behavior studies like (Akbar & Akhtar, 2018; Bergh & Akrami, 2016).

It is probably best conceptualized as a general latent for summarize more specific tendencies and individual behaviors like kind, considerate, likeable, cooperative and helpful (Tobin, 2002). The researches explored that knowledge hiding as harmful for organizations (Serenko & Bontis, 2016),

it is expected that employees high on agreeableness are less likely engage in knowledge hiding behaviors as compared to workers low on agreeableness. It means that high agreeable employees share knowledge with others as compared to low agreeable employees as agreeable employees committed to show believed and offer help to others (Major et al., 2006). Drawing on COR and addressing research call of (Arain et al. 2020) we used agreeableness as potential moderator in LMX & KSS- Coworkers and proposed that agreeableness moderate said relation even on low LMX over hypothesizing:

H4: The agreeableness will moderate the relationship of the LMX quality and KSS-Coworkers.
H5: The agreeableness moderates the indirect relationship of KHSS & KSS-Coworkers via LMX.

Figure 1 Theoretical Framework
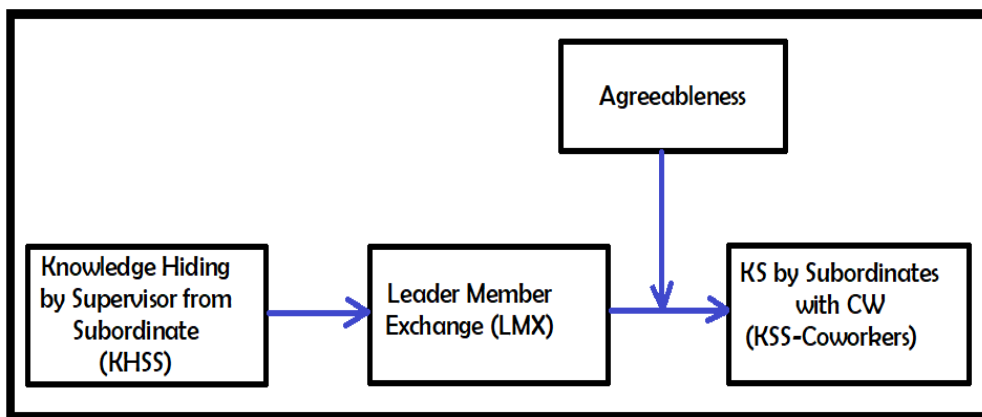
RESEARCH METHODOLOGY

Using random sampling technique and a supervisor-subordinate nesting design, author contacted the District Manager and Zonal Manager Offices of TEVTA organization in purpose with collecting information from respective offices and TEVTA institutes where three to five subordinates were reporting to one supervisor. After getting the consent from the District and Zonal offices author identify 4 District Offices, 1 Zonal Office and 63 training institutes from South Zone of TEVTA (out of three zones of TEVTA i.e., South, North and Central) for collecting the data. At second stage, 253 subordinates were contacted by the consent of their immediate supervisor and requested to respond to subordinate-related questionnaire, besides handing them a hard copy of questionnaire on their LMX Quality with their immediate supervisor, Knowledge Hiding to them by supervisor and their agreeableness level in specific situation. The researcher collected the data personally through visiting the work place of the samples. The questions included in the questionnaire for supervisor-related was Knowledge Sharing Behavior of Subordinate with the Co-Workers while data for LMX, Agreeableness and KHSS were collected from subordinates through subordinate-related questionnaire.

5-point Likert Scale was used for getting the responses from supervisors and subordinates in favor of KSS-Coworkers, LMX, KHSS and Agreeableness where were 1 mean Strongly Disagree and 5 mean Strongly Agree. However, 5 demographic variables were also the part of supervisor-related

and subordinate-related questionnaires including gender, employee status, education, age and job experience and all variables were obtained from subordinates over coding their supervisors on 5-point Likert scale developed were used 1-5 response options where 1 meant strongly disagree and 5 meant strongly agree. The 12 items scale developed by (Connelly et al. 2012) were used for measuring KHSS. The scale divided in 3 categories related to playing dumb, evasive knowledge hiding and rationalized knowledge hiding. 7 items scale was adopted from (Lee et al. 2018) for measuring KSS-Coworkers. For measuring leader-member exchange relationship quality among supervisor & subordinate 7 items scale was adopted (Hanasono, 2017). In purpose with measuring the agreeableness level of subordinates 9 items were used from the scale of 44 items on big five personality traits used by (Chiorri et al., 2015). Out of 9 items on agreeableness, there were 2 items reverse coded used to ensure fuller measurement of an opinion and to keep away respondents from answering to questions.

RESULTS & DISCUSSIONS

As outlined above, data were collected over distribution of hard copies of questionnaire among respondents. For analyzing the data as collected, IBM SPSS software was used. Overall correlation, regression, mediation, moderation, reliability analysis was done on the data for investigating the results in pursuance of the proposed hypothesis. Correlation analysis was used for checking the impact of independent variable on dependent variable or finding out any possible relation among both. Regression analysis was also conducted in purpose with checking that how much change in dependent variable occurs due to the effect of independent variable on it. Mediation analysis was conducted by using Baron and Kenny (1986) mediation analysis test. While moderation was also checked by run the PROCESS v3.5 for SPSS. Sobel test was used for checking the indirect impact of mediator i.e., LMX.

Table 1 Variables Reliability Test

Variables	Items	Reliability
1. KHSS	12	.707
2. LMX	07	.816
3. KSS-Coworkers	07	.890
4. Agreeableness	09	.825

Table 2 Correlation Analysis

		LMX	KSS Co Workers	AG	KHSS
LMX	Pearson	1	.268**	.256**	-.502**
	Sig. (2-tailed)		.000	.000	.000
	N	225	214	208	196
KSS Co Workers	Pearson	.268**	1	.215**	-.489**
	Sig. (2-tailed)	.000		.002	.000
	N	214	229	206	193
AG	Pearson	.256**	.215**	1	-.184*
	Sig. (2-tailed)	.000	.002		.011
	N	208	206	222	189

	Pearson	-.502**	-.489**	-.184*	1
KHSS	Sig. (2-tailed)	.000	.000	.011	
	N	196	193	189	210

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Correlation analysis in current study has used for verifying and assessing the proposed relation in outlined hypothesis so that it can verifies that the relation among variables as same as proposed or not. Typically, Pearson correct analysis used for calculating the correlation coefficient, as the most common method, to measure the dependence between two quantities or variables. The range of correlation values in from -1 to +1, where +1 shows the positive correlation and -1 shows the negative correlation among variables while the zero (0) shows the no relation. Similarly, the values in between -1.0 to -0.5 and table is given below:

In our study, there are 4 variables for which KHSS was used as independent variable, LMX used as Mediator, KSS-Coworkers used as outcome or dependent variable and Agreeableness was used as moderator. We suppose in form of hypothesis that KHSS affect the LMX quality of supervisor and subordinate which result the effect of LMX quality being perceived by the subordinate on his Knowledge Sharing behavior with co-workers. As, low LMX will motivate subordinates toward less knowledge sharing with the co-workers and high LMX will act as opposite direction. While, agreeableness will moderate the relation of LMX and KSS-Coworkers and the relation will weak in presence of high agreeableness while the relation of mediator and outcome will strong when agreeableness will low.

Table 3 Regression Analysis

	Square		Square	R2 E	R2 SC	F C	df1	df2	Sig. FC
1	.761a	.579	.577	.64863	.579	271.304	1	197	.000
2	.761b	.580	.575	.65007	.000	.128	1	196	.721

a. Predictors: (Constant), LMX
b. Predictors: (Constant), LMX, AG
c. Dependent Variable: KSS Co-Workers

Table 4 Regression Analysis (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	114.142	1	114.142	271.304	.000b
1	Residual	82.881	197	.421		
	Total	197.024	198			
	Regression	114.197	2	57.098	135.115	.000c
2	Residual	82.827	196	.423		
	Total	197.024	198			

a. Dependent Variable: KSS Co-Workers
b. Predictors: (Constant), LMX
c. Predictors: (Constant), LMX, AG

Mediation Analysis

A mediation analysis (in pursuance of hypothesis H3: LMX mediates relation of KHSS and KSS-Coworkers) was run on IBM SPSS by using PROCESS v3.5 macro-Preacher and Hayes. Model 4 of said process work as a mediation model as per Preacher and Hayes. Through mediation analysis, transmission role of LMX was found statistically significant transmission effect by said analysis & stated is according that there is negative indirect significant effect (P<0.05) on KHSS exists on KSS-Coworkers via LMX:

Table 5 Mediation Analysis

	Effects	SE	T	P	LLCI	ULCI
Direct Effect of X on Y	-.3822	.1362	-2.8059	.0056	-.6509	-.1135
Indirect Effect of X on Y	-.8722	.1271			-1.1220	-.6309

Moderation Analysis

For purpose with checking the moderating role of agreeableness in LMX and Knowledge Sharing by Supervisor from Subordinates, model 14 was used in PROCESS Macro v3.5 in SPSS. In pursuance of the Hypothesis 4: Agreeableness will moderate the relationship of LMX quality and KSS- Coworkers, as the relation will weaken on high agreeableness while it will be stronger on low agreeableness the analysis was conducted and reported as the H4 accepted with significant effect of agreeableness (P<0.05) as moderator on LMX & KSS-Coworkers as when agreeableness will high the relation among both will weaken and the relation will become stronger in presence of low agreeableness.

Table 6 Model Summary

Model	R	R-2	MSE	F	df1 1.000	df2	P
	.483	.233	.455	52.841		174.000	.000
	β	se	t	p	LLCI	ULCI	
constant	5.933	.479	12.398	.000	4.988	6.877	
KHSS	-.970	.133	-7.269	.000	-1.233	-.706	

Table 7 Model Summary

Model	R	R-sq	MSE	F 65.311	df1	df2	P
	.777	.604	.382		4.000	171.000	.000
	β	se	t	p	LLCI	ULCI	
Constant	3.147	.939	3.352	.001	1.293	5.000	
KHSS	-.293	.140	-2.086	.038	-.570	-.016	
LMX	.210	.258	.813	.417	-.300	.720	
AG	-.742	.292	-2.541	.012	-1.318	-.165	
Int_1	.283	.103	2.738	.007	.079	.487	

Table 8 Conditional Effects of Focal Predictor at Values of Moderator(s):

	AG	Effect	se	t	p	LLCI	ULCI
1.710		.694	.101	6.898	.000	.496	.893
2.334		.871	.071	12.288	.000	.731	1.011

| 2.958 | 1.047 | .091 | 11.541 | .000 | .868 | 1.226 |

Table 9 Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.293	.140	-2.086	.038	-.570	-.016

Table 10 Conditional indirect effects of X on Y: Indirect Effect

AG	Effect	SE	LLCI	ULCI
1.710	-.673	.161	-.991	-.362
2.334	-.844	.140	-1.125	-.575
2.958	-1.015	.148	-1.311	-.733

CONCLUSION

This study explored the trickledown effects of supervisor knowledge hiding upon the subordinate knowledge sharing with coworkers, emphasizing the moderating role of agreeableness and the mediating role of Leader-Member Exchange. The findings revealed that supervisor knowledge hiding significantly diminishes LMX quality, which negatively impacts subordinates' willingness to share knowledge with coworkers. High agreeableness amid subordinates allays these adverse effects, indicating that agreeable individuals are more resilient in keeping knowledge-sharing behaviors even in less favorable LMX contexts. Organizations should improve LMX quality by fostering transparent and supportive supervisor-subordinate relationships to enhance knowledge sharing. Training programs for supervisors on the detrimental effects of knowledge hiding and the importance of high-quality LMX are recommended. Personality assessments in team-building exercises can identify individuals with high agreeableness, pivotal in sustaining a concerted work environment. Regular feedback mechanisms be established to monitor and address knowledge-hiding behaviors promptly. However, study's findings are based on data from a single organization within a specific regional context, limiting generalizability. Future research should include a diverse sample and adopt longitudinal designs to validate these results. This research contributes to understanding knowledge hiding and sharing behaviors, highlighting significant roles of LMX quality & agreeableness.

REFERENCES

Akbar, F., & Akhtar, S. (2018). Relationship of LMX and Agreeableness with Emotional Exhaustion: A Mediated Moderated Model. *Current Psychology*, 37(4), 862–874.

Anasori, E., Bayighomog, Steven. W., & Tanova, C. (2020). Workplace bullying, psychological distress, resilience, mindfulness, and emotional exhaustion. *The Service Industries Journal*, 40(1–2), 65–89.

Andreeva, T., & Kianto, A. (2012). Does knowledge management really matter? Linking knowledge management practices, competitiveness and economic performance. *Journal of Knowledge Management*, 16(4), 617–636.

Arain, G. A., Bhatti, Z. A., Ashraf, N., & Fang, Y.-H. (2020). Top-Down Knowledge Hiding in Organizations: An Empirical Study of the Consequences of Supervisor Knowledge Hiding. *Journal of Business Ethics*, 164(3), 611–625.

Arain, G. A., Bhatti, Z. A., Hameed, I., & Fang, Y.-H. (2019). Top-down knowledge hiding and innovative work behavior (IWB): A three-way moderated-mediation analysis of self-efficacy and local/foreign status. *Journal of Knowledge Management*, 24(2), 127–149.

Arain, G. A., Hameed, I., Umrani, W. A., Khan, A. K., & Sheikh, A. Z. (2020). Consequences of Supervisor Knowledge Hiding in Organizations: A Multilevel Mediation Analysis. *Applied Psychology & Applications,* 12274.

Banks, G. C., Whelpley, C. E., Oh, I.-S., & Shin, K. (2012). (How) are emotionally exhausted employees harmful? *International Journal of Stress Management*, 19(3), 198–216.

Bergh, R., & Akrami, N. (2016). Are non-agreeable individuals prejudiced? Comparing different conceptualizations of agreeableness. *Personality and Individual Differences*, 101, 153–159.

Bierstedt, R., & Blau, P. M. (1965). Exchange and Power in Social Life. *American Sociological Review*, 30(5), 789.

Bogilović, S., Černe, M., & Škerlavaj, M. (2017). Hiding behind a mask? Cultural intelligence, knowledge hiding, and individual and team creativity. *European Journal of Work and Organizational Psychology*, 26(5), 710–723.

Breevaart, K., Bakker, A. B., Demerouti, E., & van den Heuvel, M. (2015). Leader-member exchange, work engagement, and job performance. *Journal of Managerial Psychology,* 30(7), 754–770.

Butt, A. S. (2021). Determinants of top-down knowledge hiding in firms: An individual-level perspective. *Asian Business & Management,* 20(2), 259–279.

Cabrera, E. F., & Cabrera, A. (2005). Fostering knowledge sharing through people management practices. *The International Journal of Human Resource Management*, 16(5), 720–735.

Černe, M., Nerstad, C. G. L., Dysvik, A., & Škerlavaj, M. (2014). What Goes Around Comes Around: Knowledge Hiding, Perceived Motivational Climate, and Creativity. *Academy of Management Journal*, 57(1), 172–192.

Chiorri, C., Bracco, F., Piccinno, T., Modafferi, C., & Battini, V. (2015). Psychometric Properties of a Revised Version of the Ten Item Personality Inventory. *European Journal of Psychological Assessment*, 31(2), 109–119.

Colbert, A. E., Mount, M. K., Harter, J. K., Witt, L. A., & Barrick, M. R. (2004). Interactive Effects of Personality and Perceptions of the Work Situation on Workplace Deviance. *Journal of Applied Psychology*, 89(4), 599–609.

Connelly, C. E., Černe, M., Dysvik, A., & Škerlavaj, M. (2019). Understanding knowledge hiding in organizations. *Journal of Organizational Behavior*, 40(7), 779–782.

Connelly, C. E., & Kevin Kelloway, E. (2003). Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal*, 24(5), 294–301.

Connelly, C. E., & Zweig, D. (2015). How perpetrators and targets construe knowledge hiding in organizations. *European Journal of Work and Organizational Psychology*, 24(3), 479–489.

Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations: Knowledge Hiding in Organizations. *Journal of Organizational Behavior,* 33(1), 64–88.

Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange: Integrating the Past With

an Eye Toward the Future. *Journal of Management, 38*(6), 1715–1759.

Gagné, M., Tian, A. W., Soo, C., Zhang, B., Ho, K. S. B., & Hosszu, K. (2019). Different motivations for knowledge sharing and hiding: The role of motivating work design. *Journal of Organizational Behavior, 40*(7), 783–799.

Gottfredson, R. K., Wright, S. L., & Heaphy, E. D. (2020). A critique of the Leader-Member Exchange construct: Back to square one. *The Leadership Quarterly, 31*(6), 101385.

Graziano, W. G., Habashi, M. M., Sheese, B. E., & Tobin, R. M. (2007). Agreeableness, empathy, and helping: A person × situation perspective. *Journal of Personality and Social Psychology, 93*(4), 583–599.

Guo, L., Cheng, K., & Luo, J. (2020). The effect of exploitative leadership on knowledge hiding: A conservation of resources perspective. *Leadership & Organization Development Journal, 42*(1), 83–98.

Hanasono, L. K. (2017). Leader-Member Exchange 7 Questionnaire (LMX-7): (Graen & Uhl-Blen, 1995). In D. L. Worthington & G. D. Bodie (Eds.), The Sourcebook of Listening Research (pp. 354–360). John Wiley & Sons, Inc.

Jawahar, I. M., Schreurs, B., & Mohammed, S. J. (2018). How and when LMX quality relates to counterproductive performance: A mediated moderation model. *Career Development International, 23*(6/7), 557–575.

Khalid, M., Bashir, S., Khan, A. K., & Abbas, N. (2018). When and how abusive supervision leads to knowledge hiding behaviors: An Islamic work ethics perspective. *Leadership & Organization Development Journal, 39*(6), 794–806.

Kim, S. L., Son, S. Y., & Yun, S. (2018). Abusive supervision and knowledge sharing: The moderating role of organizational tenure. *Personnel Review, 47*(1), 22–38.

Liao, H., & Chuang, A. (2004). A Multilevel Investigation of Factors Influencing Employee Service Performance and Customer Outcomes. *Academy of Management Journal, 19*.

Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of Applied Psychology, 91*(4), 927–935.

Martin, R., Thomas, G., Legood, A., & Dello Russo, S. (2018). Leader–member exchange (LMX) differentiation and work outcomes: Conceptual clarification and critical review. *Journal of Organizational Behavior, 39*(2), 151–168.

McCrae, R. R., & Costa, P. T. (2008). Empirical and Theoretical Status of the Five-Factor Model of Personality Traits. In G. Boyle, G. Matthews, & D. Saklofske, The SAGE Handbook of Personality Theory and Assessment: Volume 1—Personality Theories and Models (pp. 273–294). SAGE Publications Ltd.

Medler-Liraz, H. (2020). Customer incivility, rapport and tipping: The moderating role of agreeableness. *Journal of Services Marketing, 34*(7), 955–966.

Pan, W., Zhang, Q., Teo, T. S. H., & Lim, V. K. G. (2018). The dark triad and knowledge hiding. *International Journal of Information Management, 42*, 36–48.

Pradhan, S., Srivastava, A., & Mishra, D. K. (2019). Abusive supervision and knowledge hiding: The mediating role of psychological contract violation and supervisor directed aggression. *Journal of Knowledge Management, 24*(2), 216–234.

Saadah, N., & Rijanti, T. (2022). The Role of Knowledge Sharing , Leader-Member Exchange (LMX) on Organizational Ctizenship Behavior and Employee Performance: An Empirical Study on Public Health Center of Pati 1, Pati 2 and Trangkil in Central Java. 3(01).

Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: Antecedents and consequences of intra-organizational knowledge hiding. *Journal of Knowledge Management*, 20(6), 1199–1224.

Srivastava, A., Bartol, K. M., & Locke, E. A. (2006). Empowering Leadership in Management Teams: Effects on Knowledge Sharing, Efficacy, And Performance. *Academy of Management Journal*, 49(6), 1239–1251.

Tobin, R. M. (2002). Agreeableness: Dimension of Personality or Social Desirability Artifact? *Journal of Personality,* 70(5), 695–728.

Yao, G., Zhao, H., Hud, Y., & Zheng, X. (2023). Exploring knowledge sharing and hiding on employees' creative behaviors: A coopetition perspective. *Journal of Innovation & Knowledge*, 8 100447.

Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review*, 20(2), 115–131.

Zhang, Z., Wang, M., & Shi, J. (2012). Leader-Follower Congruence in Proactive Personality and Work Outcomes: The Mediating Role of Leader-Member Exchange. *Academy of Management Journal*, 55(1), 111–130.