



Assessing the Impact of Abusive Leadership on Knowledge Hiding Behavior: Workplace Ostracism and Psychological Ownership as the Underlying Mechanisms

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Abstract: This study aims to look into how abusive leadership contributes to knowledge-hiding behavior at work. The investigation also attempts to evaluate the moderating role of psychological ownership of knowledge and empirical evidence pertaining to the mediation path, notably workplace ostracism. To look into the stated hypotheses, cross sectional data using five point Likert scale was gathered. For addressing priming effect and minimize the possibility of CMB, the data was gathered at two different time intervals separated by a period of one month. Moreover, 298 valid as well as complete responses were evaluated to test the hypothesis using Smart PLS 4.0.9.8. The findings found a significant association between employees' knowledge-hiding behavior and abusive leadership. Moreover, workplace ostracism and psychological ownership of knowledge also were found to have significant influences on this relationship. This study adds greater value to the theory and literature on knowledge hiding by examining its linkage to abusive leadership in addition to assessing the role of psychological ownership of knowledge and workplace ostracism as moderator as mediator respectively. The underlying mechanism has not been well looked for in previous literature.

Keywords: Abusive leadership, Knowledge hiding behavior, Workplace ostracism, Psychological ownership of knowledge.

1. Introduction

To maintain their competitive advantage in the knowledge economy, businesses devote sufficient time and financial resources to learning novel things (Zhao et al., 2019). Since knowledge is invaluable and scarce, it becomes an asset for every organization in order to acquire and maintain a competitive advantage (Grant, 1991; Perry-Smith, 2006). The fact is that in today's highly competitive work environments, knowledge hiding is very common (Pradhan et al., 2019). When crucial knowledge is concealed, it can have significant consequences for organizations, including detrimental effects on employees (Cerne et al., 2014), project-related problems, and overall inefficiencies within the organization (Keilet al., 2014). A competitive advantage cannot be gained by an individual's knowledge alone. Therefore, knowledge assets can only be created through the exchange of information in the workplace (Swart, 2007). But some people are reluctant to impart their knowledge, and some even decide to keep information

hidden that is critical to the others (Pradhan et al. 2019; WAN et al., 2022). Organizations benefit greatly from collective knowledge sharing. Therefore, knowledge generation and sharing are critical for maintaining an advantage over rivals, especially in knowledge-intensive industries. Despite numerous initiatives by corporations to promote knowledge transfer, employees hide knowledge because they are afraid of losing their jobs, status or even career opportunities (Jha and Varkkey, 2018).

There is a common belief that individuals intentionally choose to keep knowledge hidden from other team members because several workplace factors serve as the catalyst for this behavior. Though organizations attempt to adopt such approaches that incentivize employees to share their skills among the coworkers (Cabrera et al., 2006), they cannot, however, be pressured against their choice to share their knowledge (Kelloway and Barling, 2000). Nonetheless, they may (and should) be urged and encouraged to do so. While earlier studies have looked at what encourages people to impart their knowledge to colleagues (Wittenbaum et al., 2004), the reluctance to knowledge transfer still persists (Pradhan et al., 2019). To understand, knowledge hiding is the planned effort of a person to hinder others who are trying to acquire knowledge (Connelly et al. (2012). Since knowledge hiding is comparatively a new concept, not much research in this regard is scarce to ascertain its extent (Isaac and Baral, 2018). The phrase "knowledge hiding" was basically devised by Connelly et al. (2012). They explained it to be a deliberate attempt by someone to hide information requested by someone else. Furthermore, the widespread practice of knowledge hiding hampers its transfer in various service organizations (Connelly et al., 2012).

Identifying the causes of knowledge hiding in individuals, particularly researchers, is therefore crucial. This will make it possible for businesses to create strategies that effectively deter such behavior. Over 1,700 readers were surveyed in 2006 by The Globe and Mail. Based on the survey results, it was found that approximately 76% people were involved in practice of hiding knowledge (Farooq and Sultana, 2021). In his study, Peng (2013) revealed that 46% of the respondents acknowledged for engaging at least once in knowledge hiding behavior. This implies that regardless of national culture or industry, knowledge hiding is a common issue that is very harmful to organizational success (Pradhan et al., 2019). As per Connelly et al. (2012), there is a broad spectrum of contextual factors that impact knowledge hiding, such as leadership approaches, organizational policies, compensation systems etc. One important factor influencing a person's decision to share knowledge at workplace is their social interactions with colleagues and superiors, in addition to is he treated at workplace.

There hasn't been sufficient research on how abusive leadership affects a worker's intention to hide knowledge (Srivastava et al., 2006). Furthermore; Islam et al. (2021) studied a moderation model to assess how abusive supervision affect knowledge hiding found a positive relationship between the two. Their study also suggested further inquiry for other moderating effects. According to Tepper's (2000) definition, leadership abuse is the degree to which employees believe their leaders consistently exhibit hostile behaviors. This behavior can infuriate the abused employee to the point where they contemplate seeking revenge by withholding vital information at work.

Using social exchange and conservation of resources theories, this study assess the effect of abusive leadership on knowledge hiding. SET state that human relationships rely on constructive and profitable exchanges and transactions. These exchanges follow a set of norms or principles that serve as the foundation for all exchange processes. Therefore, when a worker feels that their supervisor is abusive, the standards of exchange must take retaliatory action because they have been breached (Cropanzano and Mitchell, 2005). In order to retaliate against the abusive leadership, the resentful employee opts to hide crucial knowledge from coworkers. The COR theory states that these resources enable them to move through the workplace more skillfully. Possessions, time, social connections, skills, knowledge and personal qualities are all examples of resources that can assist individuals in managing stressful situations (Hobfoll et al., 2018). Conservation of Resources (COR) theory further states that, some resources, such as leadership, contribute to the acquisition of additional resources, such as employment or personal resources. This, resultantly affect on employees' behavior and attitude.

Although employees frequently hide knowledge, supervisors may be unaware of this practice, which could lead to flaws in the research system (Ahmad et al., 2022). Prior to this pioneering study, a few others have looked into people's "knowledge hiding" practices in a variety of situations (Huo et al., 2016; Geofroy and Evans, 2017). To date, a number of factors have been found to explain why certain employees hide knowledge as well as how to deal with this behavior (Ahmad et al., 2020). Academics have categorized these characteristics into four primary

categories. According to Demirkasimoglu (2016) and Peng (2013), the main categories include aspects related to individuals, jobs, organizations, and coworkers. However, there is still a need for further research to understand why individuals intentionally conceal knowledge in various situations. Connelly et al. (2012) also advocated for further studies to the factors causing “knowledge hiding” behaviors. Leadership style influences human behavior, including knowledge hiding (Tang et al., 2015).

According to Schaubroeck et al. (2013), when leaders exhibit inappropriate leadership styles, it affects organizational identification. This implies that workers do identify with those leaders and organizations. This indicates that discriminating and aggressive workplace behavior might cause individuals to feel isolated at work, a condition known as workplace ostracism (WO). One harmful workplace practice is ostracism, which can lead to depression, low morale, poor performance, cynicism, and mental health problems in workers (Kanwal et al., 2019). Ostracism at work has been connected to a number of behavioral and attitude impacts, including counterproductive work behavior (CWB) and employee deviant behaviors. Literature (Lian et al., 2014; Valle et al., 2019) reveals that ostracized individuals tend to blame either the organization or the leader for mistreatment. They might act in a way that hides knowledge as payback. Accordingly, this study also attempts to analyze workplace ostracism as a potential mediator to comprehend the relationship between two problematic work practices: abusive leadership and subordinates' tendencies to hide knowledge.

Recently, researchers have started looking at the reasons for and methods used by people for hiding knowledge. It has been noted with great concern that people employ territoriality to guard knowledge and claim a psychological ownership over it, that is one explanation. With respect to factors identified above, one individual related factor the psychological ownership of knowledge. In a study, Peng (2013) asserts that there are both direct and indirect effects of psychological ownership on behavior of knowledge hiding. Negative hidden effects of psychological ownership on knowledge hiding are poorly understood. In their study, Xia et al. (2019) looked at how psychological ownership affected the relationship between practice of knowledge hiding and knowledge leadership; they discovered that it greatly lessened the curvilinear tendency of the relationship. To proceed further, this study focuses to investigate of the moderating role of psychological ownership of knowledge as well. Furthermore, Riaz et al. (2019) studied a moderating mediated model on knowledge hiding and suggested for further inquiry. Following a thorough review of the literature on knowledge hiding, Oliveira et al. (2021) discovered that leadership is probably going to affect the adoption knowledge hiding behaviors. Thus, additional research is required to comprehend their link. In their study on knowledge hiding and ethical leadership, Koay and Lim (2021) found a negative relationship. They proposed that different types of leadership, such abusive leadership, might affect workers' propensity of hiding knowledge. Moreover, Ghani et al. (2020) investigated how abusive supervisor influences employees' knowledge-hiding. They emphasized the need for future research at the team level, as it is unclear whether individual knowledge hiding differs from knowledge hiding within a team in terms of causes and effects. Furthermore, Pradhan et al. (2019) did research in the Indian IT sector on abusive supervision-subordinate's knowledge-hiding linkage. Additionally, they looked into how psychological contract violations might act as a mediator. Their study found significant relationships and recommended further investigation into additional intervening variables within the same constructs. In a systematic literature review, Farooq and Sultana (2021) discovered a negative association among abusive leadership and knowledge hiding. They proposed empirical investigation of workplace ostracism in the said relationship.

With the aforementioned potential gaps in the literature, the current study examines the influence of abusive leadership on knowledge hiding. The concept of knowledge hiding is taken from the retaliatory behavior of individuals who feel victimized by leadership abuse. Instead of openly and directly retaliating, these individuals resort to covert and devious tactics to achieve their goals (Homans, 1983). Secondly, the study looks into workplace ostracism as a potential mediator because, the mechanism underlying this association is still not well understood (Pradhan et al., 2019). Furthermore, psychological ownership of knowledge is moderator in this study. The findings of the study have profound implications for the managers, research officers as well as assistants of the agriculture

and other sectors. Knowledge hiding is a phenomenon that is currently at its height in organizations and has drawn interest from researchers worldwide.

2. Literature Review

2.1 Abusive Leadership and Knowledge-Hiding Behavior

A valuable research has been published that emphasizes the significance of examining the aspects of leadership's negative behaviors at workplace. It promotes the idea of investigating destructive or abusive leadership behaviors (Krasikova et al., 2013). Leadership abuse is known as the subordinates' assessments of the degree to which their leaders exhibit persistently hostile behavior (Tepper, 2000). Abbas and Otto (2016) assert that the target's attitudes are influenced by the hierarchical position of the person who initiates workplace abuse. A number of unfavorable workplace outcomes have been linked to abusive leadership, according to research (Martinko et al., 2013). One of the consequences that harm organizational objectives is the subordinates' knowledge-hiding behavior (Pradhan et al., 2019). Arain et al. (2018) found that various factors influence the connection between hiding knowledge and abusive leadership, including mistrust. Knowledge hiding is a developing concept, with little studies identifying its characteristics (Baral, 2018). Although previous studies (Xue et al., 2011; Han et al., 2016) have provided strong evidence for the impact of functional leadership, for example transformational leadership on knowledge transfer or sharing, however, according to Khalid et al. (2018), they did not looked at the effects of toxic and dysfunctional leadership, such as abusive leadership, on detrimental work behaviors like knowledge hiding behavior.

The theory of social exchange (Blau, 1964) contends how abusive leadership predicts knowledge concealment, and provides theoretical justification for our claim. SET states that desire for a specific reward motivates human behavior. For instance, a worker who goes above and beyond the call of duty may expect recognition from the organization and any appropriate rewards (Gouldner, 1960). The norms of reciprocity establish how people should conduct themselves appropriately and guide social exchange. There are standards for both positive and negative reciprocity. Positive treatments result in favorable reactions, while negative treatments face negative reactions (Cropanzano and Mitchell, 2005). As a result, whenever an employee perceives that they are being treated unfairly, they may respond by behaving unfairly. Such subtle reciprocate behaviors, such as knowledge hiding, may be disguised as ignorance and may not lead to disciplinary action from leaders. When a worker feels that the leadership is abusive and is aware that seeking direct revenge is not a wise course of action, they may adopt such behavior. Thus we propose that:

H1. A positive and significant relationship exists between abusive leadership and knowledge hiding behavior.

2.2 Mediating Effect of Workplace Ostracism

The Leaders-Member Exchange Theory implies that the association between organizational leadership and their subordinates can vary in quality (Graen and Uhl-Bien, 1995). Superior relationships provide followers with greater levels of favorable treatment, practical resources, and socio-emotional support (Graen & Cashman, 1975). In these situations, followers respond positively to a leader's supportive actions by demonstrating loyalty, commitment to organization and fewer disruptive behaviors (Gerstner and Day, 1997). Although the positive role of leaders is valued, the service industry is dominated by unfavorable leadership behaviors, which result in unsatisfactory work outcomes (Ahmad, 2018). People who are ostracized frequently say that their relationship with their leader is poor. This is because leaders in such relationships tend to provide their subordinates with less support, trust, and attention (Bedi, 2021). A supervisor who consistently exhibits hostile behaviors is said to be engaging in abusive leadership (Tepper, 2000). Moreover, Ferris et al. (2017) found that when people are treated rudely, these actions may be red flags indicating a tumultuous relationship and an impending risk of ostracism and such disagreements with superiors can result in ostracism (Wu et al., 2015).

Abusive leadership conveys information about ostracism (Wang et al., 2021). Workplace ostracism is the feeling of someone that other workers in the company are ignoring or excluding those (Minei et al., 2018). Although, many antecedents related to ostracism at workplace have been examined in scholarly literature, there are other indicators that demand the attention of scholars but have not been covered (Ahmad et al., 2022). Schaubroeck et al. (2016) noted that abusive leadership has a negative relationship with peer respect. Furthermore, approximately 25% of individuals mistreat their colleagues when they witness their leaders engaging in similar behavior (Uskul and Over,

2017). Employees' psychological needs are not met when they feel alienated or ignored by coworkers or superiors resulting in development of emotional exhaustion and stress (Choi, 2020). The phenomenon of workplace ostracism can be identified by behaviors such as working alone, avoiding communication, and even denying the existence of others. It prevents ostracized individuals from engaging in social interactions with others (Luo et al., 2022). Ostracism is a particularly distressing experience (Erica et al., 2017), and one of its contributing factors is abusive leadership (Wang et al., 2021). According to Bedi (2021), workplace ostracism was found to have a strong correlation with abusive leadership. Furthermore, individuals who engage in ostracism and abusive leadership may jeopardize the psychological well-being of their victims.

The theory of resource conservation states that resources are essential for people to fulfill their basic needs (Wang et al., 2011). These resources may originate from within the individual or from other sources, including the social, cognitive, and physical domains. To lower the danger of resource loss, people put a lot of effort into acquiring and restoring these resources (Hobfoll, 1989; Hobfoll, 2002). The COR theory describes how workplace ostracism deprive individuals from necessary resources which they need (Leung et al., 2011). Due to such circumstances, people experience high stress levels, which may have adverse effects. Ostracized individuals are more inclined to desire to hold onto knowledge, which is a valuable resource, because ostracism deprives them of the resources that coworkers may provide.

Workplace ostracism is a common phenomenon that can lower employees' work engagement and organization's performance (Riaz et al., 2019). Literature review reveals that workplace ostracism might reduce pro-social behavior and increase unproductive behavior (Balliet & Ferris, 2013). Pradhan et al. (2019) studied a parallel mediation model for abusive leadership and employees' knowledge hiding behavior. Abusive leadership style was observed to have complementary effects on knowledge hiding. Riaz et al. (2019) developed a moderating mediated model. They discovered that workplace ostracism was a significant source of work stress, which led to knowledge hiding at work. Research has shown that certain leadership approaches contribute to toxic outcomes (Mathieu et al., 2014) and stress at workplaces (Skogstad et al., 2014). Studies, however, have not connected different leadership philosophies to workplace ostracism (Mathieu et al., 2014). Nonetheless, no research has examined mediation effect of workplace ostracism among abusive leadership and knowledge hiding association. The aim is to bridge this knowledge gap. Thus, we propose:

H2. Workplace ostracism has a mediating role between abusive leadership and knowledge hiding behavior.

2.3 The Psychological Ownership of Knowledge as Moderator

According to theory of psychological ownership, when someone invests resources and do effort to acquire something, having to share it causes them anguish, as a result, when someone creates and manages a valuable item such as knowledge, they may form a psychological attachment to it and try to hide it (Pierce et al., 2003). Ownership concepts i.e legal and psychological, differ. Legal ownership is recognized and protected by the law, while psychological ownership is related to personal psychology of ownership or possession of an object, which could be something physical or insubstantial e.g., task-related knowledge (Peng, 2013; Brown et al., 2014).

According to Brown's et al. (2005) Territorial theory, if some person has a strong psychological ownership to the information they generate, acquire, and oversee inside an organization, they are more likely to treat it as their own territory and exert control over it. The impact of psychological elements was governed by the complexity and distinctiveness of knowledge, according to Von der Trenck (2015). Andriessen (2004) defines knowledge as an intangible resource that exists in the brains of employees rather than within the company. Employees aspire to gain ownership of both tangible and intangible assets in the workplace, such as information, ideas, and goals. Psychological ownership of knowledge could help to elucidate why employees keep their knowledge hidden (Peng, 2013; Demir et al., 2021).

Knowledge hiding may be traced back to perceived psychological ownership of knowledge, according to researchers (Webster et al. 2008). This is to say that psychological ownership may be an outcome of basic human need to own, it is entrenched deeply in individuals from West (Pierce et al., 2003). According to Bhattacharya and Sharma (2019), territoriality mediates between psychological ownership and hiding of knowledge in the manufacturing and pharmaceutical sectors. One imperative cause of knowledge hiding is psychological ownership (von der Trenck, 2015). Several links between ownership, control, and learning were made by Buchem (2012) in

the perspective of web-based ePortfolios. It was discovered that having control over intangibles such as personal data, information or knowledge, was more closely related to a feeling of ownership than having control over tangible elements, like technical tools.

The key reason to examine abusive leadership style and knowledge hiding behavior in relation to psychological ownership of knowledge stems primarily from the notion that leadership style influences human behavior, including knowledge hiding (Tang et al., 2015). The study of Peng (2013) stated that knowledge hiding can be impacted both directly and indirectly by psychological ownership. Xia et al. (2019) examined how psychological ownership affected relationship among leadership and knowledge hiding; they found that it significantly mitigated the relationship's curvilinear trend. Researchers have recently begun to investigate why individuals hide their knowledge. The reason may be that they develop sentiments of psychological ownership over knowledge and use territoriality as a safeguard.

H3: Psychological ownership of knowledge moderates the indirect relationship among of abusive leadership and knowledge hiding behavior.

3.1 Research Approach

The current study utilized a questionnaire-based survey, that is widely used and popular research technique for efficiently gathering and analyzing data from a specific group.

3.2 Instrument Development

In the current study, Abusive leadership, knowledge hiding behavior, workplace ostracism and psychological ownership of knowledge were used as independent, dependent, mediating and the moderating variables. In the first section, the study's main objective and instructions for respondents were provided, including declarations of anonymity and confidentiality. Demographic information was included in the second part of the instrument. The final section explains the constituent elements of the selected variables.

3.3 Measures

For data collection, 34 items altogether, each on a five point Likert scale, were employed. The reason that Likert scale has become more and more popular in these kinds of studies is because it can measure a wide range of behaviors properly. The Likert scale is a tool that respondents can use to more precisely gauge the strength of their feelings or actions. This makes it possible to assess the factors under study—which can be difficult to measure directly—more precisely (Bryman, 2016). Moreover, it is simple to use and understand for both respondents and administrators. It takes less time to complete than high-point scales and produces higher response rates and better quality. It also reduces respondent frustration by providing them with sufficient options without overwhelming them (Babakus and Mangold, 1992). As a result, questionnaires were used to collect data for this investigation, which were adapted from previous studies. A fourteen-item scale (Mitchell and Ambrose (2007) was employed to measure abusive leadership. For measuring knowledge hiding, the study utilized a 12-item scale Connelly et al., (2012). For WPO 13-item scale (Ferris et al., 2008) was used. Moreover, for Psychological ownership of knowledge a 8- items scale (Allyn and Radosevich, 2006; Peng ,2013) was used.

3.4 Sample Size

Researchers from agriculture institutes who worked in the province of KPK, Pakistan were the participants of this study. From different research institutes in Pakistan's Khyber Pakhtunkhwa province, 298 valid responses were gathered. Of the sample, men made up 247 (82.89%) and women made up 51 (17.11%). The age range of the responders was 24 to 54. An organization's average employee tenure is 2.8 years. Every respondent was graduated or above. Respondents were comprised of various positions in the field of research including officers, assistants as well as managerial positions.

3.5 Procedure

Data was collected twice, with a four-week gap. The gap was given as according to Podsakoff et al. (2003), this reduces the chances of common method bias. Moreover, the two-wave approach is used in this investigation.

Firstly, the researchers made contact with the relevant human resource managers inside the organization and informed them about the study and the reason behind the collection of data. In addition to being guaranteed that their provided responses would be kept secret, the interested parties were provided the procedure for filling of questionnaires. The respondents scored the mediating variable i-e workplace ostracism, and the predictive variable i-e abusive leadership, using a five-point Likert. They also submitted basic demographic information. A total of 341 responses were received at Time Point 1. Four weeks later, we followed up with the same respondents to get feedback on knowledge-hiding practices and the moderator i-e psychological ownership of knowledge. After removing invalid responses, the sample size was 298 in total.

4. Results and Discussion

PLS-SEM was utilized in present study to analyze the data. PLS-SEM is preferred because it is best to estimate multifaceted models with manifold auxiliary variables, like moderators and mediators (Hair et al., 2014). The study first looked for CMB using AMOS and SPSS. Data was analyzed in two phase i-e analysis of the measurement and the structural models.

4.1. Common Method Bias

The two-wave data strategy for collection of data was used in the current study to gather and analyze data in order to address this issue. To measure the “VIF” values, collinearity test was performed and determined that all of them are less than the 3.3 threshold level. It confirmed no CMB in the model (Kock, 2015).

4.2 Measurement Model

In this model, the factor loadings, discriminant and convergent validity as well as the reliability of each of all variables were assessed. Table.1 shows that both Cronbach's alpha as well as composite reliability (CR) for all variables are higher than 0.70 indicating that construct reliability is good (Nunnally, 1978). The study looked at the factor loadings and it was discovered that all were higher than the cutoff value of 0.70. To evaluate the variables' convergent validity; AVE for all the constructs was calculated. All of the VIF values were found to be higher than 0.5 which confirmed the convergent validity for all the variables.

Table1: Construct's Reliability and Validity

Item	Factor Loadings	Cronbach's alpha	CR (rho_a)	Average Variance Extracted(AVE)
AL	0.952	0.994	0.996	0.930
KH	0.926	0.935	0.941	0.885
POK	0.822	0.977	0.998	0.845
WPO	0.974	0.983	0.988	0.898

To confirm discriminant validity, three different tests were evaluated. (a) The Fornell-Larcker Criterion (Table.2) results indicate all values in threshold limit (b) indicators' outer loading on the target constructs were checked. The findings validate the suitability of the measurements, as every item behaved as a reliable indicator for the corresponding latent variable (Ruiz et al., 2008) and (c) we looked at the correlations ratio, especially the HTMT values. The current study has attained discriminant validity, as indicated by all of the HTMT (table 3) scores being below 0.85 (Henseler et al., 2015).

Table 2: Discriminant Validity (Fornelllarcker)

Item	AL	KH	POK	WPO
AL	0.965			
KH	0.354	0.941		
POK	0.219	0.546	0.919	

WPO	0.563	0.463	0.140	0.948
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Table 3: HTMT Ratio

Item	AL	KH	POK	WPO
AL				
KH	0.362			
POK	0.209	0.542		
WPO	0.559	0.477	0.178	

4.3 Structural Model

Figure 1 shows the structural model for al; the exogenous, endogenous, mediating and moderating variables. Moreover the path coefficients are also shown. PLS-SEM evaluates the model fit utilizing collinearity (VIF) results, the direction as well as significance of the associations, R- Square values, effect size (f2), and SRMR results. VIF values of the focal constructs were less than 5.0, indicating that collinearity posed no concern (Table 4).

Table 4: VIF

Item	AL	KH	POK	WPO
AL		1.523		1.000
KH				
POK		1.058		
WPO		1.535		

The path coefficients determined by PLS indicate the link between the structural model's independent and dependent constructs. Moreover, it offers the endogenous constructs' coefficient of determination (R2) values. Path analysis is shown in Figure 2.

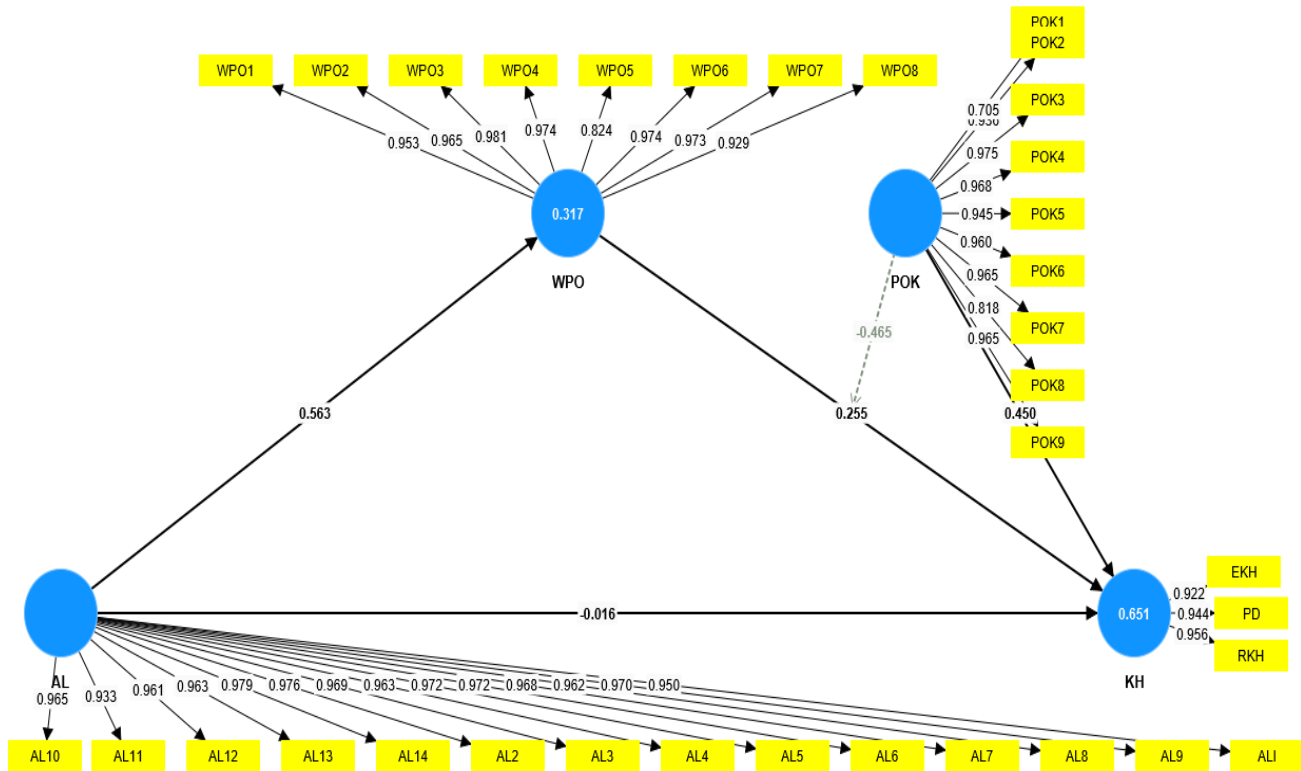


Figure.1 Measurement Model with Outer Loadings

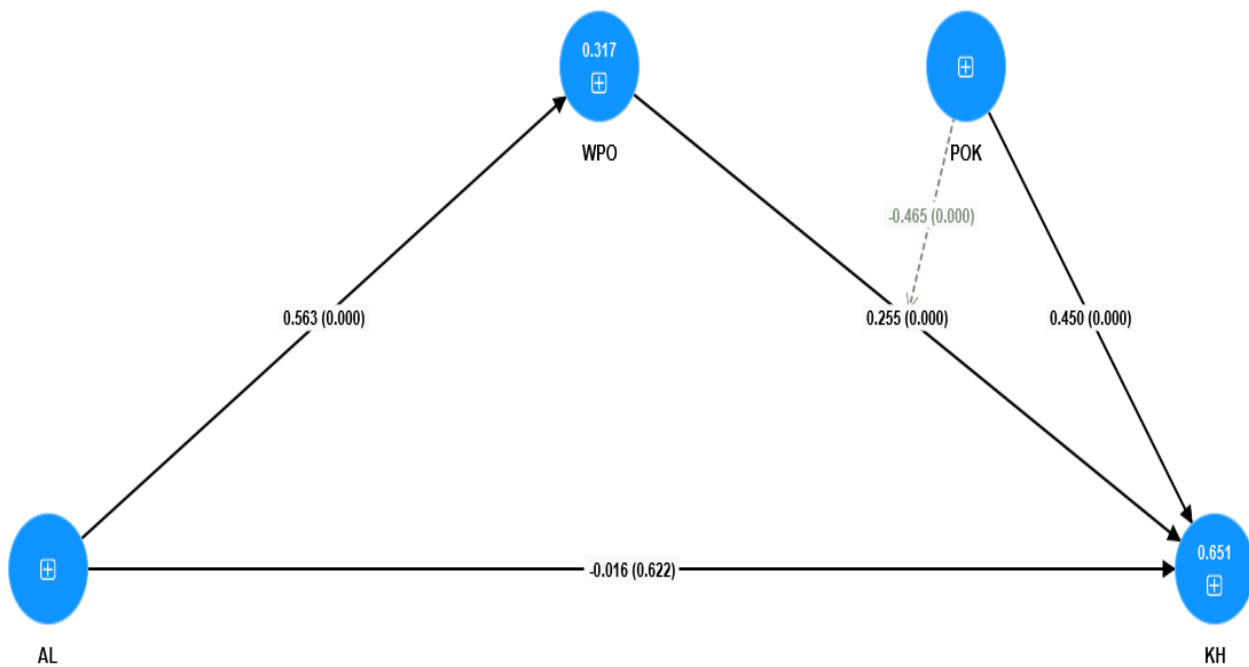


Figure.2 Structural Model with Path analysis

4.4 Mediation Analysis

The bootstrapping process, a nonparametric re-sampling method that places no emphasis on the normality of data distribution, was employed to test the mediation (Preacher and Hayes, 2008). The mediation analysis was carried out to assess the mediating role of workplace ostracism between abusive leadership and the knowledge hiding. The findings (table.5) indicate that abusive leadership has significant effect on knowledge hiding behavior ($\beta = 0.127$, $t = 4.276$, $p = 0.000$). Hence, H1 is accepted. These results are consistent with Pradhan et al. (2019) and Farooq and Sultana (2021) who established a positive and significant effect of abusive leadership on knowledge hiding. It is pertinent to highlight that with the addition of workplace ostracism as mediator, the direct effect turned to be insignificant ($\beta = 0.106$, $t = 0.493$, $p = 0.622$). However, table.5 revealed that indirect effect of abusive leadership on knowledge hiding behavior is still significant ($\beta = 0.143$, $t = 5.772$, $p = 0.000$), confirming that mediating influence exist. Hence, H2 is accepted. This reveals full mediation because after the inclusion of mediating variable, the effect becomes insignificant which means that all effect is causing by the mediator. One remarkable aspect of PLS is the advantage of providing precise indirect effect values. Furthermore, as demonstrated by Hair et al. (2014), the predictive ability of structure model is demonstrated through the R2 value, which shows the total variation in the dependent constructs that is explained by all of its related independent variables.

Table 5: Mediation Analysis Results

Total effect(AL→KH)			Direct effect(AL→KH)			Hypothesis	Indirect effect (AL on KH)				
Beta Value	T value	P value	Beta Value	T value	P value		Beta Value	SE	T value	P value	Bootstrap 95% confidence interval LCI UCI
0.127	4.276	0.000	0.016	0.493	0.622	AL→WPO→KH	0.143	0.025	5.771	0.000	0.99 0.196

4.5 Moderation Analysis

Moderation analysis was performed to evaluate the moderating role of psychological ownership of knowledge in the link between abusive leadership and knowledge hiding. This result in table.6 demonstrates how the moderating influence significantly affects the knowledge hiding behavior. The significance level of the moderating effect is 0.000, which is smaller than 0.05, and the path coefficient value is positive 0.465 with T statistics value of 16.30. The results confirmed that psychological ownership of knowledge in the said relationship. Since the values indicate a significant and positive association between the moderating and dependent variables. Hence, H3 is supported.

Table 6: Moderation Results

	Original sample	Sample mean	Standard deviation	T statistics	P values
POK -> KH	0.255	0.254	0.038	6.745	0.000
POK x WPO -> KH	0.465	0.466	0.029	16.300	0.000

The effect size (f^2) is displayed in Table.7; abusive leadership has a small effect (0.03), according to the recommendations of Cohen's (1988). Abusive leadership has a significant effect size i.e (0.46) on workplace ostracism; furthermore, workplace ostracism has a medium impact size i.e (0.11) on knowledge hiding). Psychological ownership of knowledge has a substantial effect size of 0.54 on knowledge hiding. In this relationship, the psychological ownership of knowledge moderator has an effect size of 0.56, which is likewise quite strong. Moreover, SRMR was 0.057, confirming model fit.

Table 7: Effect Size (f2)

	AL	KH	POK	WPO	POKxWPO
AL		0.03		0.464	
KH					
POK		0.547			
WPO		0.121			
POKxWPO		0.569			

4.6 Discussion

This study looked into the ways that abusive leadership influences employees' behavior of hiding knowledge through workplace ostracism. It also looked into how psychological ownership of knowledge moderates the indirect effect in the model above. Aside from the research of Khalid et al. (2018) and Pradhan et al. (2019), there is inadequate empirical data to support the study's focus variables' positive correlation. Hence, our findings support the hypothesis that abusive leadership positively influence subordinate's knowledge hiding behavior which previously confirmed by studies of Pradhan et al. (2019) and Farooq and Sultana (2021) who found a positive relationship between said variables. The social exchange theory also supports our findings which contend that when people experiences leadership abuse, they indulge in retaliatory behavior. The victim employee uses safe and covert retaliation strategies, including knowledge hiding, to prevent further harm. The results have been confirmed by the theories of knowledge ownership and COR. accordingly, people, who value their knowledge to be their resource would not waste it and would save this resource. Furthermore, employees who regard knowledge as their property also hide it. Because of the abuse they have experienced at the hands of their leadership, dissatisfied workers engage in such behaviors that offer them a sense of control to help them deal with their frustration (S.S and Brehm, 1981). Using discretion in one's work is one way to regain control. When confronted with abusive leadership, an employee may decide to hide or withhold something that the organization strongly values (like knowledge).

Examining the mediating pathway, our findings confirm that workplace ostracism considerably mediates the linkage between abusive leadership (AL) and knowledge hiding (KH). This is consistent with the research of farooq and sultana (2021), which discovered mediation effect of mistrust, in the association between abusive supervision and practices of knowledge hiding. Moreover, this study evaluated the moderating effect of psychological ownership of knowledge. It was confirmed through our findings that the indirect effect of on knowledge hiding was further increased with the inclusion of the moderator.

4.7 Contributions and Implications of the Study

There are numerous theoretical and managerial implications for the study's findings .First, as noted by Rafferty and Restubog (2011), abuse of leadership is a widespread problem in the workplace that negatively impacts the outputs and most crucially, the profitability of the organization. All knowledge-based industries are seriously at risk if knowledge hiding becomes common among their staff members due to the interpersonal animosity that exists between leaders and subordinates. Research institutions heavily depend on true knowledge; however, because of internal dispute that result in knowledge hiding, these institutes also might lose their competitive advantage. The findings of a study on abusive leadership, Afshan et al. (2022) advocated that undermining of subordinates by leadership must be discouraged by organizational systems. Leadership should be provided regular training.

Knowledge hiding as a reaction to abusive leadership may hinder innovation and creativity at work. It is quite difficult to entirely rid the workplace of this interpersonal annoyance (Pradhan and Jena, 2016), however, organizations may adopt very rigorous policies for this that will also convince the management that more efforts are required to put in place in order to make certain that people given respect and fair treatment at workplaces. Moreover, special leadership training sessions may be arranged to avoid exhibiting abusive behaviors, for example screaming at the employee and harsh criticism purposely assigning a challenging assignment in front of others, etc. Organizations could also think about providing therapy to its employees who are experiencing some hardship as a result of abusive leadership. Ownership of knowledge must not be used in negative sense; rather knowledge should

be disseminated for further enhancement.

5. Conclusion

This research empirically investigated the association between abusive leadership, knowledge hiding with workplace ostracism as mediator and psychological ownership of knowledge as moderator. Earlier research has placed more emphasis on sharing rather than hiding of knowledge. Our findings confirmed the entire three hypotheses. The indirect effects of the mediator, workplace ostracism were confirmed which helped explained the relationship between exogenous and endogenous variables. The moderating effect Psychological ownership of knowledge also is acts prominently in promoting culture of knowledge hiding behavior at workplace.

5.1 Limitations and Future Directions

Though the research significantly advances our knowledge of the specific leadership approach and knowledge hiding phenomenon, it is not without limitations. First of all, the study only employed single source and one method to collect the data that represents a chance of CMB. Although the suggestions provided by Podsakoff et al. (2003) were adhered to during the data collecting and analysis phases, precautions were nonetheless taken to offset the CMB risk however, researchers in future may use data received from different sources to improve the understanding on this concept. We also encourage future researchers to recognize additional individual and organizational characteristics, such as professional commitment, further investigation in mitigating the problem of knowledge hiding.

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