

Knowledge Hiding Through the Lens of Abusive Supervision, Moral Disengagement and Self-Efficacy

Hina Samdani (Corresponding author)

Bahria Business School, Bahria University, Islamabad, Pakistan
Email: hina@bahria.edu.pk

Nida Kamal

Bahria Business School, Bahria University, Islamabad, Pakistan
Email: nidakamal.buic@bahria.edu.pk

Zahra Saleem

Bahria Business School, Bahria University, Islamabad, Pakistan
Email: zahral.buic@bahria.edu.pk

Article History

Received: 20 Aug 2023 Revised: 17 Dec 2023 Accepted: 21 Dec 2023 Published: 31 Dec 2023

Abstract

In today's dynamic world, knowledge economy has become a driving factor for national socio-economic growth and overall development. The lynchpin of knowledge economy and ultimately that of national economy is creativity which has to be seen and realized through the prism of collaborative instead of standalone wisdom. This study focuses on identifying such factors that lead to knowledge hiding, and interpersonal factors that hinder knowledge hiding by facilitating knowledge sharing. The study analyses a mediated-moderated model by taking the mediation effect of moral disengagement between abusive supervision and knowledge hiding and analyzing knowledge self-efficacy as a moderator between moral disengagement and knowledge hiding. This has been achieved by grounding on social learning theory, social cognitive theory, and self-efficacy theory and targeting full-time faculty members working in HEIs of the public and private sector of Pakistan. By collecting data from 500 faculty members through proportionate random sampling, the analysis of the study has been carried out through empirically testing the hypothesis employing CFA and SEM, using AMOS software. The analysis revealed that Abusive supervision enhances evasive knowledge hiding, such that abusive supervision increases the moral disengagement of faculty in the HEIs and in turn increase the knowledge hiding behavior carried out by faculty. The moderation results revealed that knowledge self-efficacy is not able to reduce the impact of moral disengagement on knowledge hiding among faculty members in the Pakistani HEIs.

Keywords: Abusive supervision, moral disengagement, knowledge self-efficacy, tacit evasive knowledge hiding, higher education institutions (HEIs).

1. Introduction

1.1 Background of the Study

In today's challengingly dynamic world, the evolving notion of "knowledge-producing society" has revamped the social role of universities globally, due to the growing significance of knowledge and its management in organizations. In such a knowledge society, universities have turned out to be, economically as well as politically, highly significant as institutions, that are responsible for producing knowledge and transferring knowledge, and giving birth to a knowledgeable society. In the socio-economic growth and development of any country, the higher education sector is believed to play a pivotal and proactive role. To increase the collective creativity of the society, higher education institutes are believed to be the most dynamic and creative enterprises to improve and enhance human conditions by creating and disseminating knowledge (Georgiou et al., 2022). Being the heartbeat of such institutes, faculty is meant to ameliorate the condition of others and society at large through their knowledge contributions. All over the world, universities are striving hard and are uniquely positioning themselves to advance knowledge creation and management along with social and economic advancement, through their capabilities to generate creative responses to complex and ambiguous scenarios and questions. The same stands equally true for Pakistan. With the onset of the new millennium and in order to compete internationally, Pakistan needs to transform itself into a knowledge-producing society, fortified with capabilities to reduce knowledge hiding and seek avenues of growth for systematic and incremental progression (Sharma & Sharma, 2021). This is crucial since the knowledge-producing economy necessitates investment in creative research for which universities are needed to be radically redesigned and upgraded (Marginson & Yang, 2022).

1.2 Rationale of the study

The theoretical framework of this study has been designed with the aim to facilitate Higher Education Institutions of Pakistan to realize the challenges of knowledge hiding and identifying factors that lead towards knowledge hiding rather than sharing. Focusing on personal level factors which can play an important role in increasing knowledge hiding in presence of such counter-productive work behaviors since it is particularly important from the context of one of the underrepresented South Asian contexts, Pakistan (Ahmad, Shafique, & Kalyar, 2022). In the given context, in order to compete globally, higher education institutes of Pakistan need to emerge as hubs of collective, innovative, and interdisciplinary creative research excellence (HEC Vision 2025). With the intention to achieve this excellence, HEC of Pakistan has initiated an inspirational program "Vision 2025" to sustain as well as to initiate more quantitative and qualitative reforms in the higher education sector. This plan is initiated to align human resource and economic development platforms to generate a knowledge-producing economy (Humayon, Raza, Amir, Latif, & Umer Khan, 2018). To progress towards the development of a knowledge-producing

society, higher education institutes of Pakistan along with their partners in government and society should focus more on what is going on to give knowledge sharing their full attention in true spirits. In this regard, a lot needs to be highlighted and worked out to address the contexts identified above. (Muqadas et al., 2017). Being at the heart of knowledge creation, Pakistani higher education institutes need to supplement an environment that supports not only the individual rather collective creativity of human potential, by ensuring knowledge sharing (Naeem, Mirza, Ayyub, & Lodhi, 2017), which is towards a new and ambitious journey to comprehensively reform higher education in Pakistan and this will further facilitate and ensure that higher education institutes play their part in serving as an engine of socio-economic growth of Pakistan.

1.3 Gap Analysis

Literature supports that besides many organizational efforts to promote knowledge sharing employees often disengage from knowledge sharing (Zutshi et al. 2021). However, since knowledge sharing is significantly affected by a number of probable sharing barriers (Riege, 2005), at the organizational, technological, and individual levels so only a few of the initiatives have been found to be successful (Kukko, 2013; Riege, 2005). In this regard a remarkable, yet not fully explored, individual willingness factor is knowledge hiding (Connelly et al. 2012), which involves knowledge being concealed from others. So, the literature supports that this knowledge hiding factor needs to be further studied (Farooq & Sultana, 2021; Connelly et al. 2019; Geofroy & Evans, 2017), and decreasing tacit knowledge hiding is a problem which is needed to be further theoretically explored (Muramba et al. 2020). Therefore, knowledge hiding has been identified to be a key factor that needs to be addressed in the context of higher education institutes.

Conferring to the state-of-the-art literature contributed by different researchers and scholars in their landmark work, this study has made an attempt to identify various factors having a direct or indirect impact knowledge hiding as it is identified to be one of the most critical factors for organizational success (Connelly et al. 2019; Cerne et al. 2014; Connelly et al. 2012). Similarly in their work Ali and Sagsan (2021) proposed that future research could concentrate on focusing knowledge hiding from the perspective of tacit knowledge. Hence, keeping the above-mentioned gap in mind this study has focused on knowledge hiding from the angle of tacit knowledge and evasive form of knowledge hiding (Duan et al., 2022). Similarly, studies suggest that it is important to identify and address factors leading to the tacit form of knowledge hiding (Duan et al., 2022) and factors motivating the tacit form of knowledge sharing among university teachers (Yu & Zhou, 2015) and this study is designed to answer these gaps in the literature.

In the given context of research, the role of abusive supervision has been employed in order to empirically explore its effect on knowledge hiding of faculty members and to contribute significantly towards the literature of knowledge hiding as highlighted by Connelly et al. (2019). Farooq and Sultana (2021) also stressed empirically testing the relationship between abusive supervision and knowledge hiding. Furthermore, as suggested by Fehr,

Fulmer, and Keng-Highberger (2020), this study has quantitatively explored moral disengagement by focusing on certain targeted moral disengagement strategies, like attribution of blame and displacement of responsibility.

1.4 Theoretical Link of Main Concepts

Standing on the assumption of Coleman of analyzing individual as a part of a social system along with those proposed by Bandura regarding triadic, dynamic, and reciprocal nature of the relationship with environment and behaviors of an individual, this study aims to put forward a theoretically sound framework which integrates individual cognitive and organizational level behaviors. Social learning theory (SLT) which was later extended as social cognitive theory (SCT), has been comprehensively applied in the context of education, aggression, and psychology, predominantly in the context of modification in behavior (Bandura, 1989). It has been used as the theoretical groundwork in order to understand the practice of behavior modelling which is extensively employed in training programs for employees. In contemporary years, Bandura has redirected the focus of his work on the notion of self-efficacy in a wide range of contexts as well (Bandura, 1997). Thus, self-efficacy talks about belief of an individual in his/her capability to accomplish such behaviors which are indispensable to give rise to performance level (Bandura, 1977, 1986, 1997) and mirrors the self-assurance and self-confidence in the ability to have control over his/her own motivation, performance, manners, and social environment as well.

1.5 Significance and usefulness a of the Study

This study will hold great theoretical, applied and contextual significance. Theoretically this study will of great significance by enriching the nomological network of knowledge management and precisely knowledge hiding research and literature (Černe, Nerstad, Dysvik, & Škerlavaj, 2014; Connelly & Zweig, 2015; Connelly et al., 2012; Peng, 2013; Zhao et al., 2016) from the perspective of leadership and faculty at higher education institutes. Most importantly, this study is proposed to play an important and significant role by highlighting the useful impact of Social Learning, Social Cognition, and Self-efficacy Theory in the knowledge hiding literature. This study intends to integrate the individual as well as organizational level behaviors by theorizing upon these three theories at macro and meso level in a single framework and is expected to theoretically contribute and extend the work done on prospective mediators and moderators of the knowledge hiding and collective creativity relationship.

In this study, section 2 will discuss the literature available on the subject and link the variables to generate testable hypotheses. Section 3 will further present the results and analysis of the empirically tested data followed by section 4 reflecting the discussion and implications of the study.

2. Literature Review and Hypothesis Development

Organizations today are confronted with challenges in terms of knowledge management which are critical to enhance knowledge sharing for organizational competitiveness (Thuan, 2020; Cerne et al., 2014). However, despite multiple positive effects of knowledge sharing many employees do hide their knowledge from their colleagues (Zakaria & Bashir, 2020; Connelly et al., 2019; Samdani et al., 2019; Connelly et al., 2012) which poses a rampant challenge to analyze knowledge hiding (Zakaria & Bashir, 2020). Thus, this study is focused on integrating a range of factors, behaviors, and outcomes in a theoretical framework by theorizing upon social learning and cognitive and self-efficacy theory to analyze from a perspective that is more integrated and complete .

2.1 Knowledge Hiding

Knowledge hiding has been acknowledged as an increasingly emerging area of research among practitioners and scholars (Zutshi et al 2021; Cerne et al., 2014; Connelly & Zweig, 2015; Peng, 2013). It is an organizational phenomenon, that may be common in the workplace, but has been successful in attracting the attention of the researchers just a decade ago (Xiao & Cooke, 2019). Knowledge largely incorporates all sorts of information as well as know-how relevant and pertinent to various activities performed by the organizational members (Bartol & Srivastava, 2002). The research carried out in the area of creativity in recent times, profoundly talks about the ways in which knowledge sharing plays its role in endorsing an impact on the creative behaviors of the individuals (Connelly et al., 2012). This highlights the need to boost and encourage organizations and to motivate individuals to ensure knowledge sharing (Perry-Smith, 2006). This is important as knowledge sharing is the fundamental tool to give rise to such processes that are creative in nature.

Furthermore, sometimes the knowledge they share is of such nature that it may turn out to be the basis of their evaluation or at times the co-workers are not trusted by them with whom they are expected to ensure sharing of knowledge. Adding more to it, a number of situational aspects also lead towards knowledge hiding as compared to knowledge sharing (Wang & Noe, 2010). For instance, in cases where knowledge is complex in nature or the requested knowledge is not task-related or the organization is lacking a culture of knowledge sharing which is necessary to encourage and inspire sharing of knowledge among employees (Cerne et al., 2014).

Through critically analyzing and synthesizing the available literature on knowledge hiding it has been inferred that the major factors which induce hiding of knowledge encompass organizational factors and relationships, individual behaviors along with the type of or content of knowledge (Bogilovic Cerne & Skerlavaj, 2017; Connelly et al., 2012; Peng, 2013; Zhao et al., 2016). Furthermore, when individuals invest time and effort in order to understand something complex then in such a scenario, they will be reluctant to share their knowledge (Zhao, Liu, Li, & Yu, 2019). Despite many researches, the literature on the link of abusive supervision impacting the knowledge hiding behavior is scarce specifically in

the academic sector that needs to be further explored (Anand et al., 2023). It is also mainly dependent upon the supervisors' destructive behavior that the employees engage in knowledge hiding (Offergelt & Venz, 2023).

2.1.1 Evasive Hiding

The evasive hiding dimension highlights that the hider does not provide other party with the required information and end up in deceiving others. Here the knowledge hider makes a promise that he/she will supplement the required knowledge or will make available the comprehensive prospective answers to the questions asked. However, in reality, the hider does not have any intention to provide the information or to answer the questions under consideration (Connelly et al., 2012).

2.1.2 Evasive Tacit Knowledge Hiding

As discussed earlier evasive knowledge hiding refers to deception as it signifies a situation where the knowledge hider is the one who provides incomplete, partial, or incorrect information to the target (Connelly et al., 2012). This form of knowledge hiding has been adopted in the context of this study because by nature academia is quite specific as well as complex due to the continuous advancements in the knowledge and the dire need to find the solutions to such newly arising problems (Zutshi et al., 2021; Antes and Mumford, 2011). However, the studies done so far did not examine the impact of the tacit or explicit form of knowledge in the given context of knowledge hiding (Hernaus et al., 2019).

2.2 *Abusive Supervision, Moral Disengagement and Knowledge Hiding*

In any organization, supervisors, heads and their leaders are the key personnel who take decisions and are classified as agents, whose actions and the manners in which they behave is a significant factor in determining and influencing the number of resources an individual invests in sharing of knowledge in their organization, for the advancement of collective creativity (Deichmann, Moser, & van den Ende, 2021; Liu, Keller, & Bartlett, 2021; Rudawska, 2020; Wang & Hu, 2020; Men et al., 2020). A lot of literature talks about the behavior of the leaders and the knowledge sharing of the employees and in most cases, literature advocated a positive association between the behavior of the leader as well as knowledge sharing (Lei, Gui, & Le, 2021; Muhammed & Zaim, 2020; Kim & Park, 2020; Kremer, Villamor, & Aguinis, 2019; Park & Kim, 2018; Matic, Cabrilo, Grubic-Nesic, & Milic, 2017). Therefore, this study is focused towards understating the role abusive supervision plays in leading towards knowledge hiding in order to address research gaps about examining abusive supervision as an interpersonal antecedent of knowledge hiding (Farooq & Sulatana, 2021; Ayub et al., 2021; Connelly et al., 2019; Khalid et al., 2018; Zhao & Xia, 2017; Ladan & Nordin, 2017).

Tepper (2000), in his landmark study, defined abusive supervision as perceptions of employees regarding the degree to which they perceive their supervisor to be engaged in the persistent display of not only verbal but also non-verbal conduct of hostile nature. Such

abusive actions may comprise verbal bouts, public ridicule, coercion, sabotage, non-contingent punishment, and coercion displayed by the supervisor toward their employees (Tepper, 2007; Tepper, Duffy, Hoobler, & Ensley, 2004). Fundamental facets of Tepper's (2000) explanation of abusive supervision take account of the subjective nature of the behavior of abusive supervisors since each employee will have a different view about their supervisor's abusive nature. Secondly, abusive supervision is also displayed by the perpetuated display of aggression from those having power and the intentional and persistent nature of the ill-treatment and exploitation (Tepper, 2007). Mitchell and Ambrose (2007) suggest that an abusive form of supervision will result in increasing the negative behavior of the employees more precisely workplace deviance, and will result in relocating their anger towards their organization. However, other researchers have also suggested that males and females both respond differently in order to cope with abusive supervision at the workplace (Koay & Lim, 2023).

Work behaviors that are counterproductive in nature are not bound to take place automatically (He, Peng, Zhao & Estay, 2019). The knowledge hiding behaviors of the employees are also a consequence of the abusive behaviors of the supervisors (Offergelt & Venz, 2023). The notion of moral disengagement is grounded in Bandura's (1986) landmark work "Social Cognitive Theory". This theory theorizes that individuals are found to be agents of their own conduct as well as behavior. Individuals envision their own actions and base on their personal standings regarding moral standards they evaluate their behaviors. By rationalizing upon a number of explanations rather than just one. It has been proposed that an individual with high moral disengagement will employ a number of cognitive mechanisms in order to justify their unethical way of behaving even before actually indulging in such an unethical manner and are expected to indulge in knowledge hiding behavior (Ayub et al., 2021; He et al., 2019).

Critical analysis of the past studies has played an important role in establishing that moral disengagement acts as a significant mediator in explaining the relationship between leadership aspects as well as unethical work behaviors (Koay, & Lim, 2021; Hsieh et al., 2020; Moore et al., 2012). In the same way, many studies proved that moral disengagement has a significant positive relationship with workplace harassment as well as unethical behaviors (Koay & Lim, 2021; Newman et al., 2020; Valle et al., 2019; Zhang et al., 2018; Beaudoin et al., 2015). Furthermore, there are a number of studies that proved that moral disengagement has a significant positive relationship with workplace harassment as well as unethical behaviors. Since knowledge hiding can be categorized as unethical behavior and consequently individuals involved in such a behavior may experience some sense of guilt due to violation of their internal moral standards and values. As identified by Zhao and Xia (2019) that nurses found to be morally disengaged were more inclined to hide knowledge from their coworkers.

H₁: Abusive supervision has a significant positive relationship with tacit evasive hiding in HEIs of Pakistan.

H2: Moral disengagement mediates the relationship between abusive supervision and tacit evasive hiding in HEIs of Pakistan.

2.3 Knowledge Self Efficacy, Moral Disengagement and Knowledge Hiding

Self-efficacy or competence is referred to as the judgment of an individual in terms of his/her capability regarding organizing and executing a plan of action vital for accomplishing a given level of performance and attaining the objectives (Ormrod, 2006; Bandura, 1986). In other words, it is the belief of an individual in his/her competence (Singh et al., 2019; Chen, Gully & Eden, 2001) and these beliefs are the contributing factor behind how individuals think, feel and behave (Bandura, 1995).

It is supported in literature that employees high in knowledge self-efficacy will be confident to find solutions to job-related issues (Constant, Sproull, & Kiesler, 1996) along with the improvement in work-related efficiency. This is further supported by research done in the domain of knowledge self-efficacy and reflects that it is generally manifested in individuals who have a belief that the knowledge they possess can lead towards solving problems at the job and can enhance the work efficacy (Stajkovic & Luthans, 2003). Employees who have a belief regarding their ability to contribute towards enhancing the performance and creativity of their organization by sharing of knowledge will end up in developing positive approaches and intentions in terms of knowledge sharing (Tan & Noor, 2013) and will be reluctant to engage in knowledge hiding behavior. However, conversely, if an individual develops a feeling that he/she lacks the required knowledge to contribute resultantly, he/she will be less inclined to share knowledge with others since they assume that their contribution will not leave a positive effect (Chen, Chuang, & Chen, 2012). Furthermore, Ngoc-Hoi (2021) in his study highlighted the role knowledge self-efficacy can play in buttressing knowledge sharing by helping students in building up their confidence in knowledge self-efficacy. This can be done by strengthening the belief that the knowledge they possess and share with others is useful and credible as well as well related particularly when the ideas are well received through discussions.

In the scenario of knowledge sharing with others, self-efficacious employees have an ability to inspire as well as influence their given context in an active manner, satisfactorily (Judge & Bono, 2001; Bandura, 1997). Furthermore, grounded on self-efficacy theory, it has been identified that the judgments regarding the capabilities of an individual to contribute towards the overall performance of his/her organization positively affects his/her knowledge sharing attitudes (Bock & Kim, 2002). Adding more, Cai, Yang, and Shi (2021), Nguyen et al. (2019), and Zhao et al. (2016) focused on knowledge self-efficacy as an intrinsic motivator that has been employed to interpret knowledge sharing behaviors of individuals. Similarly, many other studies examined and proposed that knowledge self-efficacy is one of the fundamental determinants of knowledge sharing that play an important role in impacting organizational innovation (Nguyen, 2020b; Nguyen et al., 2019c). Nevertheless, besides the greater emphasis that has been laid on motivational

factors leading to knowledge sharing rather than knowledge hiding, there are a number of limitations in the existing literature with regard to exploring knowledge self-efficacy (Nguyen & Malik, 2020) particularly in academia (Yasir & Majid, 2017).

H3: There is a significant positive relationship between the moral disengagement of employees and tacit evasive hiding in HEIs of Pakistan.

H4: Knowledge self-efficacy moderates the relationship between moral disengagement and tacit evasive hiding.

The framework of the study is shown in Figure 1.

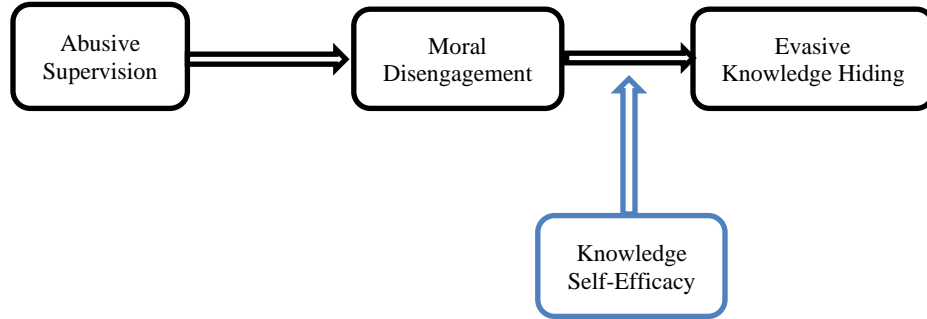


Figure 1: Study Framework

3. Research Methodology

Aligned with the Positivists philosophy, this study believes that a reliable instrument to gather data is needed to produce absolute truth for the given inquiry which will further lead to the discovery of universal laws governing the social world. Since this study falls under the positivist paradigm, so it employs a deductive approach. This study uses a survey strategy, which would consist of collecting data using a questionnaire and then reconfirming the results in the given sector. It incorporates collecting data by using an adapted questionnaire incorporating structured questions and then analyzing and interpreting the outcomes of this work by employing empirical hypotheses testing.

3.1 Population and Data Collection

With regard to the population, this study focused on faculty members in public and private universities of Pakistan. The data is presented based on different regions of Pakistan which include AJK, Balochistan, Federal, Gilgit Baltistan, Khyber Pakhtunkuwa (KPK), Punjab, and Sindh. In the context of this study, out of various probability sampling techniques which are used in research to collect data, random sampling technique has been employed in order to gather data from the given population of faculty members since the total population is finite. In order to increase the generalizability as well as reliability of the

result of the study total sample size obtained for this study is 500. The samples have been drawn randomly corresponding to the proportion or weightage of faculty in total population inline to the region wise representation. The data has been gathered through a self-administered structured questionnaire based on the instruments mentioned below.

3.2 Instrument

In the given study, the instrument employed for the data collection has been established on a multi-item questionnaire. In order to measure the role of abusive supervision, Mitchell and Ambrose (2007) active and passive scale of abusive supervision has been adapted which is operationalized from Tepper's (2000) abusive supervision scale (Tepper, 2000). In this regard, five items of active abusive supervision and seven items of passive abusive supervision scales, as operationalized from the study of Mitchell and Ambrose (2007), have been adapted to measure the given variable. Moral disengagement has been assessed by employing an instrument proposed by Moore et al. (2012) based on the work of Detert et al. (2008). Tacit form of evasive knowledge hiding has been measured by adapting scales of tacit knowledge sharing as proposed by Bock et al. (2005) and knowledge hiding scale proposed by Connelly et al. (2012). For operationalizing knowledge self-efficacy, a knowledge self-efficacy scale developed by Lin et al. (2009), Lin (2007), Compeau and Higgins (1995) has been used.

3.3 Analysis Technique and Time Horizon

The analysis of the study has been carried out by empirically testing the outcomes of this study. So, in the given research, for analyzing the collected data, two statistically different software have been employed; Statistical Package for Social Sciences (SPSS) and Analysis Moment of Structures (AMOS). With intention to address the research questions by analyzing the hypotheses of this study, covariance-based SEM is preferred for this study as; the assumptions of the given statistical analysis are quite clear and testable which makes it easy to understand and comprehend. It provides model fit indices as well as individual parameters of variables simultaneously, to estimate the tests. It allows comparing means, variances, and regression coefficients simultaneously across multiple groups. It further leads towards developing measurement and confirmatory factor analysis models to eliminate errors in order to provide with such estimated relationships between latent variables which encompass less level of measurement error. It also supplements with a framework of unified nature which facilitates in fitting numerous linear models by employing flexible, and powerful software

Since this research was restricted to a specific given time frame and with the intention of answer research questions of the study, data was gathered at a given period, resulting in a cross-sectional time horizon study.

4. Data Analysis and Results

4.1 Demographic Analysis

The attributes of the respondents according to the data collected is given in Frequency Table 1 below:

Table 1: Demographic Statistics (N = 500)

Gender / Age / Edu.	Frequency	Percentage (%)
Male	310	62
Female	190	38
Age Group		
20-25	41	8.2
26-35	206	41.2
36-45	210	42.0
Over 46	43	8.6
Qualification		
Bachelors	17	3.4
Masters	304	60.8
Doctorate	145	29.0
Post Doc	34	6.8
Years of Service		
0-5 Years	178	35.6
6-10 Year	194	38.8
11-15 Years	78	15.6
15 and above Years	50	10.0
Position		
Lecturer	184	36.8
Assistant Professor	201	40.2
Associate Professor	93	18.6
Professor	22	4.4
University Type		
Public Sector	265	53.0
Private Sector	235	47.0
Region		
Federal Capital	95	19.0
Punjab	180	36.0
Sindh	120	24.0
Gilgit Baltistan	2	0.4
Baluchistan	17	3.4
AJK	10	2.0
KPK	76	15.2

4.2 Descriptive Statistics

Table 2: Descriptive Statistics (N = 500)

Variable	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis		Std. Err
EKH	1.00	5.00	4.43	1.10	.090	.110	-1.105	.220
AS	1.00	5.00	3.96	.88	-.028	.110	-.668	.220
MD	1.00	5.00	3.81	1.04	-.103	.110	-.952	.220
KSE	2.00	5.00	3.76	.95	-.313	.110	-1.129	.220

Table 2 above explains the descriptive statistics of the variables of this study against which data has been collected. The minimum value for each variable of the study ranges from 1.00 to 1.10, while on the other hand maximum statistics of the variables range from 4.80 to 5.00. Similarly, the mean value of collective creativity is found to be 3.40, while for evasive tacit knowledge hiding the value is 3.43. Adding more, the table reflects the mean statistics of abusive supervision is 3.26, moral disengagement 3.21, workplace ostracism 3.62, and intra-competition is 3.39. Furthermore, affective commitment has a mean value of 3.21, and last but not the least the mean values of knowledge sharing self-efficacy is 3.76. The standard deviation (SD) of the variables of the study is found to range from .61 to be the minimum and 1.10 to be the maximum value.

4.3 Scale Validity

Scale validity has been assessed through convergent as well as discriminant validity tests.

Table 3: Validity Test

Variable	CR	AVE	MSV	ASV
EKH	0.913	0.637	0.331	0.047
MD	0.858	0.602	0.247	0.095
AS	0.847	0.581	0.225	0.059
KSE	0.814	0.567	0.247	0.072

Discriminant validity measures the degree to which two different measures of a construct are required to be theoretically and in reality, unrelated to each other (Campbell & Fiske, 1959). In other words, it ensures that concept-wise each latent variable is quite different with respect to other latent variables. The model of any study is proved to have a good discriminant validity if the AVE exceeds the value of MSV and ASV. The results of discriminant validity for this study are shown in Table 8 above, and are in line with Fornell and Larcker (1981) criteria. The CR values as presented above were found to be higher than the AVE values of all constructs.

4.4 Reliability - Cronbach's Alpha

Cronbach Alpha is commonly known as a measure of internal consistency and is the most widely and commonly used approach in social sciences.

Table 4: Cronbach's Alpha

Variable	Cronbach's Alpha	No. of Items	Acceptable Range
Evasive Tacit Knowledge Hiding	.903	7	Excellent
Moral Disengagement	.857	4	Very Good
Abusive Supervision	.862	11	Very Good
Knowledge self-efficacy	.830	4	Very Good

Cronbach Alpha is commonly known as a measure of degree of internal consistency and is the most widely and commonly cited approach in social sciences. It facilitates in identifying inter-item consistency and reliability and how closely items of a variable are related to each other in a group in order to measure latent constructs. or this research as reflected in Table 4 above, reliability of 7 items of evasive tacit knowledge hiding was .903. Furthermore, 4 items of moral disengagement had a reliability value of about .857, for 12 items of abusive supervision it was .813 and for 4 items of knowledge sharing self-efficacy it was .830. This reflects that all the observed variables of this study provide a good measurement of their corresponding constructs and further this high internal consistency further supports the strong validity of the construct as well.

4.5 Correlation Analysis

Pearson correlation matrix of the variables of the given study is in Table 5 below:

Table 5: Pearson Correlation Matrix

		I	II	III	IV
I	EKH	.798			
II	MD	.556**	.775		
III	AS	.428**	.460**	.762	
IV	KSE	-.586**	-.572**	-.460**	.748

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

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

Note: Square roots of the AVE are in bold diagonal value.

The Pearson correlation method has been used to test the linearity of the given data of this study and it forms the basis for many more advanced statistical analyses such as regression, factor analysis, and structural equation modelling. The correlation reflects the strength of the relationship that exists among various variables of the study or in other words, it

presents the statistical relationship that exists between variables. The analysis of the values of coefficient of correlation that exists among various variables of the study reflects a moderate correlation among the majority of the variables of the study since the values are found to fall in the range of +.4 to+.5, while for knowledge sharing self-efficacy its -.4.

4.6 Measurement Model

4.6.1 Confirmatory Factor Analysis

CFA plays an important role in testing and identifying how well the data fits any given hypothesized measurement model either based on landmark theory or analytical research which have been done. Since CFA is used to confirm as well as to trim the constructs and items in a measurement model and fundamentally it is an important first step before moving towards developing of a structural equation model. In this regard the model fitness values of the hypothesized model are presented in Table 6 below:

Table 6: Model Fit Summary

Fitness Values	<i>P</i>	CMIN/DF	RMSEA	CFI	TLI	PGFI	PNFI
Default Model	.000	2.331	.026	.965	.963	.819	.904

All these goodness of fit or SEM indices confirm and prove an adequate fit to the data of this study. The indices selected include absolute fit indices such as CMIN/DF which is the ratio of chi-square to the degree of freedom value of the hypothesized model and is obtained from the maximum likelihood statistic of the model. The value is 2.331 which is aligned with the acceptable value as advocated by Alavi et al. (2020). The absolute fit indices RMSAE, which is the root mean square error of approximation with a value of .026 which indicates an excellent model fit value (Hu & Bentler, 1999). In case of incremental fit indices, CFI, the confirmatory factor index, its value is .965, which indicates a good fit as advocated by Byrne (2010). The other one is TLI and its value is .963 and is within model acceptance index criteria as supported by Hu and Bentler (1999). The Parsimonious fit indices PGFI and PNFI have values of .819 and .904 respectively. Last but not least all these model fit indices are within the threshold level and within the acceptable range meet the cut-off value criteria as suggested by Robert (2000) and Hair et al. (2006). All these goodness of fit or SEM indices confirm and prove an adequate fit to the data of this study.

4.6.2 Structural Model

The given structural model basically represents the theory that depicts the way in terms of how constructs are related to other constructs in a given model. Thus, the structural model leads towards estimating the various relationships between latent variables, and besides individual paths it is able to test the overall model in an appropriate manner.

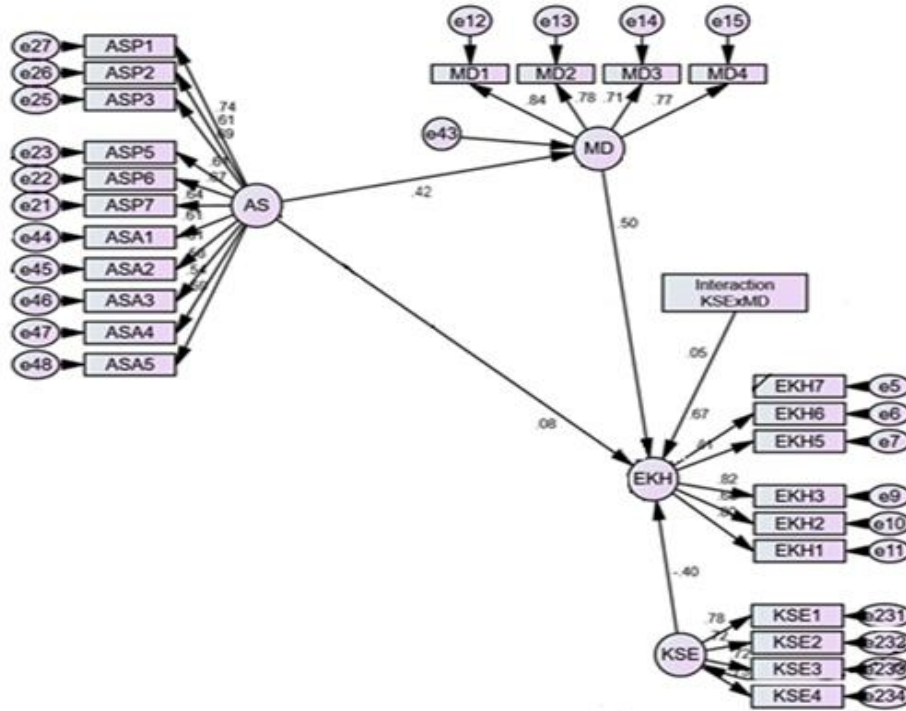


Figure 2: Structural Model

The model fitness values of the structural model are given in Table 7 below:

Table 7: Structural Model Fit Summary

Fitness Values	<i>p</i>	CMIN/DF	RMSEA	CFI	TLI	PGFI	PNFI
Default Model	.000	2.270	.048	.953	.906	.812	.829

The model fit summary in Table 7 above, of the structural model presents various model fit indices implied in this study. These indices include absolute fit indices such as CMIN/DF which is the ratio of chi-square to the degree of freedom value of hypothesized model. The value is 2.270 which is aligned with the acceptable value as advocated by Alavi et al, (2020). The other absolute fit indices RMSAE, which is the root mean square error of approximation with a value of .048 which indicates an excellent model fit value. With

reference to incremental fit indices CFI, the confirmatory factor index, its value is .953 which indicates a good fit. The other incremental fit indices are TLI and its value is .906. The Parsimonious fit indices PGFI and PNFI have values of .812 and .829 respectively. All these model fit indices are within the threshold level and within the acceptable range, all indices meet the cut-off value criteria as suggested by Robert (2000) and Hair et al. (2006).

4.7 SEM Analysis

4.7.1 Results Hypothesis 1 and 2

The first hypothesis H1 is about understanding the direct relationship that is found to exist among abusive supervision and tacit evasive knowledge hiding while H2 is about understanding the mediating effect of moral disengagement and abusive supervision and tacit evasive knowledge hiding. In this regard, the first standardized direct effect is analyzed and then standardized indirect effect is given in order to identify the significance of the mediator in the given causal relationship. The outcomes of the mediating effect of the given causal correlation are shown in Table 8 below:

Table 8: Results (H1 and H2)

Particular Relationship	Results		
	Beta	SE	P
Path 1a: Direct AS → EKH	.079	.023	.003
Path 1b: Indirect AS → MD → EKH	.212	.020	.002
Mediating effect	Partial mediation		

*AS Abusive Supervision EKH Evasive Knowledge Hiding MD Moral Disengagement

Interpretation of Table 8 above reveals that path a has a significant beta coefficient value of .079. Furthermore, the total mediating effect of moral disengagement between abusive supervision and tacit evasive knowledge hiding is .212 at a significance level of .002. This indirect effect resultant of abusive supervision on evasive knowledge hiding that passes through moral disengagement reflects partial mediation of moral disengagement. Hypotheses 1a and 1b have been tested and the analysis of the results of the given hypotheses reflect that abusive supervision leads to tacit evasive hiding among faculty members and this cause-and-effect relationship is further intervened by the presence of moral disengagement. Primarily, when faculty members are exposed to abusive supervision, they are subject to active or direct verbal targeting of their supervisor or head and passive or indirect targeting by not getting the due credit for the task done. Such a

manner is proved to end up in developing a hiding behavior, which results in tacit knowledge hiding where faculty members start to hide their knowledge acquired through experience and know-how over a period. The results of the hypothesis of this study are found to be aligned with the study of Pradhan et al. (2019), Ghani et al. (2020) Ayub et al. (2021) carried out in a different context. Furthermore, aligned with social learning and social cognitive theory, analysis of the study reflects that abusive supervision results in setting an immoral role model that leads the faculty members towards learning and acquiring such beliefs that make them follow personal interests without giving any regard to the well-being of other colleagues is appropriate and justified (Anand et al., 2023; Liu et al., 2017) due to moral disengagement of individuals. Consequently, faculty members get inclined towards devoting more focus to their personal interests rather than the collective interest of others and as a result, they end up in hiding knowledge from their colleagues. In the same perspective this study reveals that when heads at higher education institutes are identified to be abusive, this gives rise to a normative context where individuals learn a behavior of putting their interests first which gives rise to knowledge hiding rather than knowledge sharing.

4.7.2 Hypothesis 3

The third hypothesis is about proving the significant positive association that exists between moral disengagement of employees and tacit evasive hiding. In this context, the beta coefficient value is found to be .501 and is shown in Table 10. These statistics reveal that the given relationship is statistically significant at .000 significance level. The above statistical values further reveal that if moral disengagement is increased by one unit, then the tacit evasive knowledge hiding will increase by .501 units. In short, moral disengagement is proved to have a significantly positive effect on tacit evasive knowledge hiding behavior among faculty members.

Table 9: Results (H3)

Particular Relationship	Results		
	Beta	SE	P
Path a Direct MD → EKH	.501	.047	.000
Result	Significant relationship		

* MD Moral Disengagement EKH Evasive Knowledge Hiding

The outcome of the hypothesis 4 of this study reflect that as hypothesized moral disengagement is proved to have a significant positive effect on the tacit evasive hiding, as addressed earlier, and are found to be in accordance with the results of the work carried out by Zhao et al. (2016) and Zhao and Xia (2019). Thus, this study confirms that moral disengagement leads to knowledge hiding behavior of faculty members, specifically as in

the given context of tacit evasive knowledge hiding. Since evasive hiding implies some element of deception and therefore faculty members hiding knowledge generally develop some feelings of guilt regarding their behavior. But in the presence of moral disengagement, the scenario turns out to be different. With the intention to support the analysis through an argument made by Bandura et al. (2001), the reason behind given behavior is that moral disengagement plays its part by alleviating the sense of self-accusation or guilt by invalidating an individual’s moral self-regulation function. Or in other words, moral disengagement of such faculty members is identified to play an active role as a secondary cognitive process that leads to momentarily obscuring their moral rules at personal level. As a consequence, when required knowledge is asked from faculty members, moral disengagement tends to rationalize their knowledge hiding behavior, making it easy for them to justify and validate such a behavior without developing any sense of guilt or burden for themselves as they justify their behavior by placing the blame on the behavior of others.

4.7.3 Hypothesis 4

The fifth hypothesis has been tested to confirm that knowledge self-efficacy moderates the relationship between moral disengagement and tacit evasive hiding. The outcome of the moderating effect as presented in the Table 10 below:

Table 10: Results (H4)

Particular	Relationship	Results		
		Beta	SE	P
Causal sequence				
Path a: Direct	MD → EKH	.501	.047	.000
Path b: Interaction	MD → EKH ↑ KSE	.054	.033	.095
Moderating effect		Moderation disconfirmed		

* MD Moral Disengagement EKH Evasive Knowledge Hiding KSE Knowledge Self-efficacy

In-line with the relationship that exists between moral disengagement and evasive tacit knowledge hiding, analysis reveals a beta coefficient value of .501, and this value is statistically significant at .000 significance level and is shown in Table 10 above.

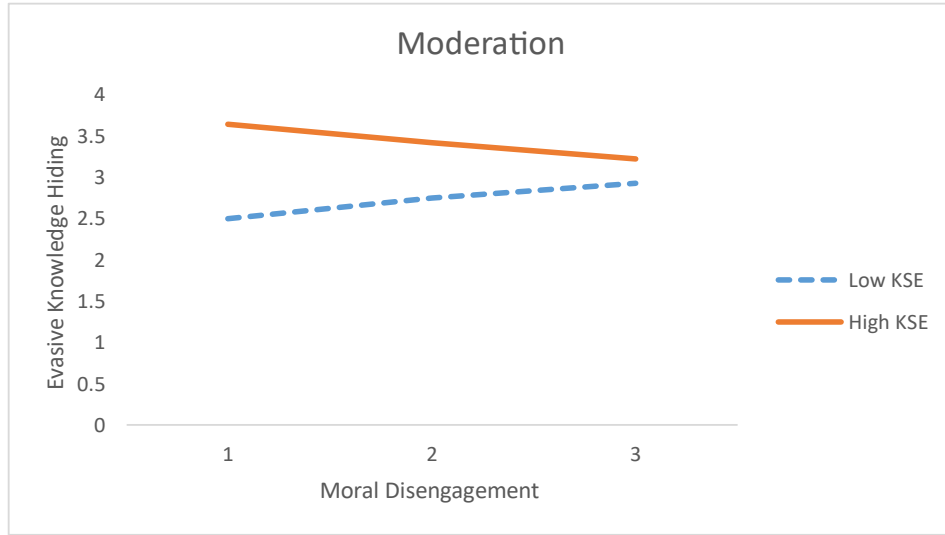


Figure 2: Moderation Graph of Knowledge Self-Efficacy between Moral Disengagement and Evasive Tacit Knowledge Hiding

As per the analysis of the results and the moderation graph reflected above, the beta coefficient value of the moderating relationship with the interaction term is reduced to .068 and is also found to be insignificant. According to these insignificant moderation results the moderation of knowledge self-efficacy among the relationship between moral disengagement and evasive tacit knowledge hiding is disconfirmed since it is not found to attenuate the given relationship, in the given context of the study. The relationship that exists between moral disengagement and evasive tacit knowledge hiding is not weakened in presence of knowledge self-efficacy as proposed in the given context of this study.

5. Discussion and Implications

5.1 Hypothesis 1 & 2

In the given context of a developing economy and in lieu of various challenges being faced, in Pakistan the need of the time is to make research a collective as well as a creative effort, having the potential to identify all sorts of developmental needs in light of developmental priorities which could lead higher education institutes towards identifying solutions to problems faced by society at large. In this regard, knowledge hiding has been identified to be one of the factors that hinder organizational success and is still prevalent in organizations besides organizational investments in facilitating knowledge sharing and is proved to negatively affect innovative abilities, creativity, and interpersonal relations (Xiong et al., 2021; Khoreva, & Wechtler, 2020; Anand et al., 2020; Jiang et al., 2019; Connelly et al., 2019; Wang et al., 2019; Zhu et al., 2019; Khalid et al., 2018; Rhee & Choi, 2017; Cerne et al., 2014). Hence, besides a lot of attention that has been paid in order to

identify knowledge sharing among employees, still little is known about the knowledge hiding behaviors of academicians in higher education institutes and a lot needs to be explored (Hernaus et al., 2019). Therefore, with the aim of answering the questions and objectives of this research setting regarding reduction of knowledge hiding in the higher education sector in Pakistan, the given study first attempts to understand and empirically examine the evasive dimension of knowledge hiding particularly from the viewpoint of the tacit form of knowledge and the different driving factors channeling it. This is important since knowledge hiding has been identified and advocated at various platforms as one of those most critical factors which are hindering higher education institutes in developing and nurturing the notion of collective organizational success among faculty.

5.2 Hypothesis 3

In continuation of the above analysis, the results of hypothesis 3 of the study reflect that as hypothesized moral disengagement is proved to have a significantly positive effect on tacit evasive hiding, as addressed earlier, and are further aligned with the results of the studies carried out by Zhao et al. (2016) and Zhao and Xia (2019). Thus, this study confirms that moral disengagement leads to knowledge hiding behavior of faculty members, specifically as in the context of tacit evasive knowledge hiding as proposed in the study. Since evasive hiding implies some element of deception and therefore faculty members hiding knowledge generally develop some feelings of guilt regarding their behavior. But in the presence of moral disengagement, the scenario turns out to be different. With the intention to support the analysis through an argument made by Bandura et al. (2001), the reason behind given behavior is that moral disengagement plays its part by alleviating the sense of self-accusation or guilt by invalidating an individual's moral self-regulation function. Or in other words, moral disengagement of such faculty members is identified to play an active role as a secondary cognitive process that leads to momentarily obscuring their moral rules. As a consequence, when required knowledge is asked from faculty members, moral disengagement tends to rationalize their knowledge hiding behavior, making it easy for them to justify and validate such a behavior without developing any sense of guilt or burden for themselves as they justify their behavior by placing the blame on the behavior of others.

5.3 Hypothesis 4

Taking the discussion further, the results of hypothesis 4 is not aligned with what has been hypothesized. In the context of the study, the relationship between moral disengagement and tacit form of evasive hiding is not found to be moderated by the knowledge self-efficacy of faculty members. Although it was proposed that those faculty members who believe in their competency, as well as the usefulness of their knowledge, are found to be more inclined towards sharing of knowledge with their colleagues even if they are found to morally disengage. However, as in the framework of this study, the proposed moderation of knowledge self-efficacy is disconfirmed. Knowledge self-efficacy has not been able to play a significant part in buffering and channelizing the morally disengaged faculty

members towards sharing of knowledge and thus reducing knowledge hiding among colleagues in the Pakistani higher education setting. The probable reason for such a behavior may be that when faculty members get morally disengaged their moral self-regulation function gets invalidated. This cognitive reframing facilitates them in justifying and protecting them from feelings of discomfort while hiding knowledge from other faculty members. In the given scenario moral disengagement becomes a far more critical individual trait or characteristic as compared to attenuating effect of knowledge self-efficacy. As a consequence, the moderation of knowledge self-efficacy is not confirmed in the given context of this study.

5.4 Implications & Future Research

5.4.1 Theoretical Implications

In terms of advancing knowledge management theory and practice, this study has contributed towards enriching literature in the area of knowledge management by exploring different negative intra-organizational knowledge-based behavior as extensive part of existing research is focused on positive forms of knowledge-based behavior like knowledge sharing and has neglected negative form of knowledge-based behavior, most importantly knowledge hiding (Pan et al., 2018). This is important that various knowledge management systems and networks are prevalent in organizational settings yet in order to work well it is critical to understand and explore the reasons regarding knowledge hiding behaviors of employees. Adding more to knowledge hiding literature, this study has investigated different interpersonal antecedents related to knowledge hiding as this is the area lacking in knowledge hiding research (Zhao et al., 2016). The rationale is that in daily work life employees inevitably make contact with each other which gives rise to interaction cues that ultimately lead towards providing social context information and this further influences the way individuals adapt or deal with the information. By engaging the role played by moderation of knowledge sharing self-efficacy between moral disengagement and tacit form of evasive knowledge hiding, this study has explored how certain motivators have a key influence on employee knowledge sharing as well as knowledge hiding attitudes and intentions. The said study has confirmed that knowledge self-efficacy diminishes knowledge hiding behavior by endorsing an individual's self-confidence as well as effectiveness in terms of tacit knowledge possessed by him/her.

5.4.2 Practical Implications

In short, faculty members when get morally disengaged then even if they are knowledge self-efficacious i.e., they believe in their competence and ability to not only share knowledge but also have the confidence in the unique knowledge they possess as well as its worth and significance for others, will still refrain from sharing their knowledge acquired through experience and know-how. Instead, will be indulged in hiding of their knowledge from their colleagues when required.

Aligned with the empirical findings of this research work, in order to minimize knowledge hiding by reducing abusive supervision and workplace ostracism, organizational policies should try to intrinsically motivate employees to share knowledge among colleagues and develop trust, especially in jobs where knowledge takes birth, particularly in higher education institutes. In this regard as proposed in the discussion, universities can promote meaningful relationships at the workplace by establishing informal communities of practice for formal and informal interactions among colleagues. This shall incorporate faculty members from various departments of the university on the basis of their expertise, like-mindedness, hobbies, etc. (Anand & Hassan, 2019). Then with the support of this approach issues faced by faculty can be resolved by taking advantage of the expert area of the faculty as per their knowledge mapping. In this regard, a number of faculty members can be appointed even, in order to find solutions to explicitly work-related issues of the faculty during specified working hours. This will lead employees towards knowing each other and will help to minimize their personal differences as well and they will develop trust among each other and will work collectively for the benefit of the institute, leaving behind their personal preferences. Another important implication for institutes is to adopt training as a tool to moderate and buffer the negative impacts of abusive supervision and workplace ostracism as well. Findings of the said study further reflect that abusive leadership and workplace ostracism lead towards knowledge hiding particularly for knowledge that has been acquired due to experience and expertise. So, training shall be designed in a way that contributes towards encouraging employees to develop leadership skills, relational skills with colleagues along with controlling mechanisms like emotional suppression and anger management as well. Furthermore, departmental heads and deans need to identify why and when their employees hide knowledge. This necessitates

talking with employees not only on a formal platform rather on an informal one too as reflected by results as well where employees start hiding knowledge from each other due to silent treatment of their departmental heads. This can be done by organizing fortnightly informal sessions where at least departmental faculty can get together over a cup of coffee or tea, and this will provide them with an opportunity to express themselves. This will ultimately move towards mitigating negative feelings about each other but may also lead to develop a nurturing work environment where employees promote negotiation, mediation, and clarity seeking among their colleagues and subordinates.

5.4.3 Future Research

The current study focuses only on a couple of intra-personal factors affecting knowledge hiding. More future research needs to be done in order to extend the understanding of all such positive and negative factors that can enhance or reduce knowledge hiding in organizations particularly in academia like, understanding and exploring the role of micro-aggression in terms of knowledge hiding will be interesting. In this regard, future research needs to be directed not only towards antecedents but also towards exploring various other

consequences of knowledge hiding at the level of the requestor, hider, and a work unit or even for an organization at multi or cross-level, which may be positive or negative. Furthermore, targeted research is needed to identify factors of personal, interpersonal, and organizational level having an influence in an individual's decision regarding hiding of knowledge at longitudinal level with respect to the performance of an individual or team or the organization in order to understand the causality and interrelationships to capture the dynamic interactive process. In the given context, researchers may focus on exploring the role of power differentials, interpersonal justice, etc. Finally, age is another important variable which may be incorporated in future studies. This is important since there is a probability that as the seniority and age increases this will lead to enhanced knowledge hiding since senior employees possess more of tacit form of knowledge which they might be not willing to share with others.

Research Funding

The authors received no research grant or funds for this research study.

REFERENCES

- Humayon, A.A., Raza, S., Amir, H., Latif, A., & Umer Khan, T. (2018). Awareness and Acceptance of Pakistan's Vision 2025 Challenges among University Employees. *European Online Journal of Natural and Social Sciences: Proceedings*, 7(1), 1-11.
- Ahmad, B., Shafique, I., & Kalyar, M. N. (2022). A moderated mediation model of the association between coworker social undermining and knowledge hiding. *VINE Journal of Information and Knowledge Management Systems*, 52(5), 763-778.
- Alavi, M., Visentin, D. C., Thapa, D. K., Hunt, G. E., Watson, R., & Cleary, M. (2020). Chi-square for model fit in confirmatory factor analysis. *Journal of Advanced Nursing*, 76(9), 2209-2211.
- Ali, S. H. and Sagsan, M. (2021). The Moderating Effect of Ethical Leadership between Psychological Ownership of Knowledge and Knowledge Hiding: An Empirical Study on the Public Universities in Northern Iraq. *Revista Argentina de Clínica Psicológica*, 30(2), 178.
- Anand, A., Centobelli, P., & Cerchione, R. (2020). Why should I share knowledge with others? A review-based framework on events leading to knowledge hiding. *Journal of Organizational Change Management*, 33(2), 379-399.
- Anand, A., Dalmasso, A., Hungund, S., Centobelli, P., Cerchione, R., & Dumazert, J. P. (2023). Abusive Supervision Effects on Employee Knowledge Hiding Behavior in Academia. *Journal of the Knowledge Economy*, 1-27.

- Anand, P., & Hassan, Y. (2019). Knowledge hiding in organizations: everything that managers need to know. *Development and Learning in Organizations: An International Journal*, 33(6),12-15.
- Antes, A.L. & Mumford, M.D. (2011). Making sense of academic misconduct, in Burke, R.J., Tomlinson, E.C. and Cooper, C.L. (Eds), *Crime and Corruption in Organizations: Why It Occurs and What to Do about It*, Gower, Farnham, 215-248.
- Ayub, A., Ajmal, T., Iqbal, S., Ghazanfar, S., Anwaar, M., & Ishaq, M. (2021). Abusive supervision and knowledge hiding in service organizations: exploring the boundary conditions. *International Journal of Conflict Management*, 32(5), 725-746.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ, 1986(23-28).
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behaviour and Human Decision Processes*, 50(2), 248-287.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. A. Bandura, ed. *Self-Efficacy in Changing Societies*. New York: Cambridge University.
- Bandura, A. (1997). Self-efficacy: The exercise of control. 1997. Knowledge is necessary but insufficient to change behavior.[BoFe91].
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64-76.
- Beaudoin, C. A., Cianci, A. M., & Tsakumis, G. T. (2015). The impact of CFOs' incentives and earnings management ethics on their financial reporting decisions: The mediating role of moral disengagement. *Journal of Business Ethics*, 128(3), 505-518.
- Bock, G., & Kim, Y. (2002). Determinants of the individual's knowledge sharing behavior: The theory of reasoned action perspective. Paper presented at the Proceedings of the Pacific-Asia Conference on Information System (PACIS), Meiji University, Tokyo, Japan.
- Bock, G.-W., Zmud, R. W., Kim, Y.-G., & Lee, J.-N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, socialpsychological forces, and organizational climate. *MIS Quarterly*, 87-111.
- 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.

- Byrne, B. M. (2010). Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate applications series). New York: Taylor & Francis Group, 396, 7384.
- Cai, Y., Yang, Y., & Shi, W. (2021). A predictive model of the knowledge-sharing intentions of social Q&A community members: A regression tree approach. *International Journal of Human-Computer Interaction*, 38(4), 324-338.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81-105.
- Černe, M., Nerstad, C. G., 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.
- Chen, S.-S., Chuang, Y.-W., & Chen, P.-Y. (2012). Behavioral intention formation in knowledge sharing: Examining the roles of KMS quality, KMS self-efficacy, and organizational climate. *Knowledge-Based Systems*, 31, 106-118.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62-83.
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 189-211.
- 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., & 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. *Journal of Organizational Behavior*, 33(1), 64-88.
- Constant, D., Sproull, L., & Kiesler, S. (1996). The kindness of strangers: The usefulness of electronic weak ties for technical advice. *Organization Science*, 7(2), 119-135.
- Deichmann, D., Moser, C., & van den Ende, J. (2021). Talk, talk, talk: Exploring idea conversations and the micro-level foundations of knowledge sharing for innovation. *Innovation*, 23(3), 287-313.
- Detert, J. R., Treviño, L. K., & Sweitzer, V. L. (2008). Moral disengagement in ethical decision making: a study of antecedents and outcomes. *Journal of Applied Psychology*, 93(2), 374-391.
- Duan, Y., Yang, M., Huang, L., Chin, T., Fiano, F., de Nuccio, E., & Zhou, L. (2022). Unveiling the impacts of explicit vs. tacit knowledge hiding on innovation quality: The moderating role of knowledge flow within a firm. *Journal of Business Research*, 139, 1489-1500.

- Farooq, R., & Sultana, A. (2021). Abusive supervision and its relationship with knowledge hiding: the mediating role of distrust. *International Journal of Innovation Science*, 13(5), 709-731.
- Fehr, R., Fulmleer, A., & Keng-Highberger, F. T. (2020). How do employees react to leaders' unethical behavior? The role of moral disengagement. *Personnel Psychology*, 73(1), 73-93.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Geofroy, Z., & Evans, M. M. (2017). Are Emotionally Intelligent Employees Less Likely to Hide Their Knowledge? *Knowledge and Process Management*, 24(2), 81-95.
- Georgiou, H., Turney, A., Matruglio, E., Jones, P., Gardiner, P., & Edwards-Groves, C. (2022). Creativity in Higher Education: A Qualitative Analysis of Experts' Views in Three Disciplines. *Education Sciences*, 12(3), 154.
- Ghani, U., Zhai, X., Spector, J. M., Chen, N. S., Lin, L., Ding, D., & Usman, M. (2020). Knowledge hiding in higher education: Role of interactional justice and professional commitment. *Higher Education*, 79(2), 325-344.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. (2006). *Multivariate data analysis*. Pearson Education, Uppersaddle River.
- He, P., Peng, Z., Zhao, H., & Estay, C. (2019). How and when compulsory citizenship behavior leads to employee silence: a moderated mediation model based on moral disengagement and supervisor-subordinate guanxi views. *Journal of Business Ethics*, 155(1), 259-274.
- Hernaus, T., Cerne, M., Connelly, C., Vokic, N. P., & Škerlavaj, M. (2019). Evasive knowledge hiding in academia: when competitive individuals are asked to collaborate. *Journal of Knowledge Management*, 23(4), 597-618.
- Hsieh, H. H., Hsu, H. H., Kao, K. Y., & Wang, C. C. (2020). Ethical leadership and employee unethical pro-organizational behavior: a moderated mediation model of moral disengagement and coworker ethical behavior. *Leadership & Organization Development Journal*, 41(6), 799-812.
- 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.
- Jiang, W., Gu, Q., & Tang, T. L. P. (2019). Do victims of supervisor bullying suffer from poor creativity? Social cognitive and social comparison perspectives. *Journal of Business Ethics*, 157(3), 865-884

- Judge, T. A., & Bono, J. E. (2001). Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: A meta-analysis. *Journal of Applied Psychology, 86*(1), 80.
- Khalid, M., Bashir, S., Khan, A. K., & Abbas, N. (2018). When and how abusive supervision leads to knowledge hiding behaviors. *Leadership & Organization Development Journal, 39*(6), 794-806.
- Khoreva, V., & Wechtler, H. (2020). Exploring the consequences of knowledge hiding: an agency theory perspective. *Journal of Managerial Psychology, 35*(2), 71-84
- Kim, E. J., & Park, S. (2020). Transformational leadership, knowledge sharing, organizational climate and learning: an empirical study. *Leadership & Organization Development Journal, 41* (6), 761-775.
- Koay, K. Y., & Lim, P. K. (2021). Ethical leadership and knowledge hiding: testing the mediating and moderating mechanisms. *Journal of Knowledge Management, 26*(3), 574-591.
- Koay, K. Y., & Lim, P. K. (2023). Abusive supervision and knowledge hiding: The moderated mediation role of overall justice and gender. *Global Business and Organizational Excellence, 42*(2), 16-28.
- Kremer, H., Villamor, I., & Aguinis, H. (2019). Innovation leadership: Best-practice recommendations for promoting employee creativity, voice, and knowledge sharing. *Business Horizons, 62*(1), 65-74.
- Kukko, M. (2013). Knowledge sharing barriers in organic growth: A case study from a software company. *The Journal of High Technology Management Research, 24*(1), 18-29.
- Ladan, S., Nordin, N. B., & Belal, H. M. (2017). Does knowledge based psychological ownership matter? Transformational leadership and knowledge hiding: A proposed framework. *Journal of Business and Retail Management Research, 11*(4), 60-67
- Lei, H., Gui, L., & Le, P. B. (2021). Linking transformational leadership and frugal innovation: the mediating role of tacit and explicit knowledge sharing. *Journal of Knowledge Management, 25*(7), 1832-1852.
- Lin, C.-P. (2007). To share or not to share: Modeling tacit knowledge sharing, its mediators and antecedents. *Journal of Business Ethics, 70*(4), 411-428.
- Lin, M. J. J., Hung, S. W., & Chen, C. J. (2009). Fostering the determinants of knowledge sharing in professional virtual communities. *Computers in Human Behavior, 25*(4), 929-939.
- Liu, Y., Keller, R. T., & Bartlett, K. R. (2021). Initiative climate, psychological safety and knowledge sharing as predictors of team creativity: A multilevel study of research and development project teams. *Creativity and Innovation Management, 30*, 498– 510.

- Matić, D., Cabrilo, S., Grubić-Nešić, L., & Milić, B. (2017). Investigating the impact of organizational climate, motivational drivers, and empowering leadership on knowledge sharing. *Knowledge Management Research & Practice, 15*(3), 431-446.
- Marginson, S., & Yang, L. (2022). Individual and collective outcomes of higher education: A comparison of Anglo-American and Chinese approaches. *Globalisation, Societies and Education, 20*(1), 1-31.
- Men, C., Fong, P. S., Huo, W., Zhong, J., Jia, R., & Luo, J. (2020). Ethical leadership and knowledge hiding: a moderated mediation model of psychological safety and mastery climate. *Journal of Business Ethics, 166*(3), 461-472.
- Mitchell, M. S., & Ambrose, M. L. (2007). Abusive supervision and workplace deviance and the moderating effects of negative reciprocity beliefs. *Journal of Applied Psychology, 92*(4), 1159-1168.
- 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.
- Muhammed, S., & Zaim, H. (2020). Peer knowledge sharing and organizational performance: the role of leadership support and knowledge management success. *Journal of Knowledge Management, 24*(10), 2455-2489.
- Muqadas, F., Rehman, M., Aslam, U., & Ur-Rahman, U.-. (2017). Exploring the challenges, trends and issues for knowledge sharing: A study on employees in public sector universities. *VINE Journal of Information and Knowledge Management Systems, 47*(1), 2-15.
- Murumba, J. W., Kwanya, T., Maina, J. C., & Wangamati, A. S. (2020). Tacit knowledge management at universities in Kenya. *Online Journal of Applied Knowledge Management (OJAKM), 8*(1), 117-146.
- Naeem, A., Mirza, N. H., Ayyub, R. M., & Lodhi, R. N. (2017). HRM practices and faculty's knowledge sharing behaviour: mediation of affective commitment and affect-based trust. *Studies in Higher Education, 44* (3), 1-14.
- Newman, A., Le, H., North-Samardzic, A., & Cohen, M. (2020). Moral disengagement at work: A review and research agenda. *Journal of Business Ethics, 167*(3), 535-570.
- Ngoc-Hoi, V. (2021). Augmenting student engagement through the use of social media: the role of knowledge sharing behavior and knowledge sharing self-efficacy. *Interactive Learning Environments, 31*(7), 4021-4033.
- Nguyen, T. M. (2020a). Do extrinsic motivation and organisational culture additively strengthen intrinsic motivation in online knowledge sharing? An empirical study. *VINE Journal of Information and Knowledge Management Systems, 50*(1), 75- 93.

- Nguyen, T. M. (2020b). Four-dimensional model: a literature review in online organisational knowledge sharing. *VINE Journal of Information and Knowledge Management Systems*, 51(1), 109-138.
- Nguyen, T. M., & Malik, A. (2020). Cognitive processes, rewards and online knowledge sharing behavior: the moderating effect of organisational innovation. *Journal of Knowledge Management*, 24(6), 1241-1261.
- Nguyen, T. M., Nham, T. P., Froese, F. J., & Malik, A. (2019). Motivation and knowledge sharing: a meta-analysis of main and moderating effects. *Journal of Knowledge Management*, 23(5), 998-1016.
- Nguyen, T. M., Nham, P. T., & Hoang, V. N. (2019). The theory of planned behavior and knowledge sharing: A systematic review and meta-analytic structural equation modelling. *VINE Journal of Information and Knowledge Management Systems*, 49(1), 76-94.
- Offergelt, F., & Venz, L. (2023). The joint effects of supervisor knowledge hiding, abusive supervision, and employee political skill on employee knowledge hiding behaviors. *Journal of Knowledge Management*, 27(5), 1209-1227.
- Ormrod, J. E. (2006). *Essentials of educational psychology* (Vol. 1). Prentice Hall.
- Pan, W., Zhang, Q., Teo, T. S., & Lim, V. K. (2018). The dark triad and knowledge hiding. *International Journal of Information Management*, 42, 36-48.
- Park, S., & Kim, E. J. (2018). Fostering organizational learning through leadership and knowledge sharing. *Journal of Knowledge Management*, 22(6), 1408-1423.
- Peng, H. (2013). Why and when do people hide knowledge? *Journal of Knowledge Management*, 17(3), 398-415.
- Perry-Smith, J. E. (2006). Social yet creative: The role of social relationships in facilitating individual creativity. *Academy of Management Journal*, 49(1), 85-101.
- Rhee, Y. W., & Choi, J. N. (2017). Knowledge management behavior and individual creativity: Goal orientations as antecedents and in-group social status as moderating contingency. *Journal of Organizational Behavior*, 38(6), 813-832.
- 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.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18-35.
- Robèrt, K. H. (2000). Tools and concepts for sustainable development, how do they relate to a general framework for sustainable development, and to each other? *Journal of Cleaner Production*, 8(3), 243-254.

- Rudawska, A. (2020). Knowledge Sharing and Creativity: Individual and Organizational Perspective. In *Contemporary Challenges in Cooperation and Competition in the Age of Industry 4.0* (pp. 107-121). Springer, Cham.
- Samdani, H., Ali, B., & Kamal, N. (2019). Knowledge hiding and creativity in higher education institutes: Understanding the contingent role of perceived supervisory support. *Global Social Sciences Review, 4*(4), 341-349.
- Sharma, M. K., & Sharma, R. C. (2021). Innovation framework for excellence in higher education institutions. *Global Journal of Flexible Systems Management, 22*(2), 141- 155.
- Singh, S. K. (2019). Territoriality, task performance, and workplace deviance: Empirical evidence on role of knowledge hiding. *Journal of Business Research, 97*, 10-19.
- Stajkovic, A. D., & Luthans, F. (2003). Social cognitive theory and self-efficacy: Implications for motivation theory and practice. *Motivation and work Behavior, 126*-140.
- Tan, C. N. L., & Md. Noor, S. (2013). Knowledge management enablers, knowledge sharing and research collaboration: a study of knowledge management at research universities in Malaysia. *Asian Journal of Technology Innovation, 21*(2), 251-276.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal, 43*(2), 178-190.
- Tepper, B. J. (2007). Abusive supervision in work organizations: Review, synthesis, and research agenda. *Journal of Management, 33*(3), 261-289.
- Tepper, B. J., Duffy, M. K., Hoobler, J., & Ensley, M. D. (2004). Moderators of the relationships between coworkers' organizational citizenship behavior and fellow employees' attitudes. *Journal of Applied Psychology, 89*(3), 455-465.
- Thuan, L. C. (2020). The role of supervisor knowledge sharing behavior in stimulating subordinate creativity. *VINE Journal of Information and Knowledge Management Systems, 50*(4), 597-613.
- 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), 299-312.
- Wang, J., Cheng, G. H. L., Chen, T., & Leung, K. (2019). Team creativity/innovation in culturally diverse teams: A meta-analysis. *Journal of Organizational Behavior, 40*(6), 693-708.
- Wang, C., & Hu, Q. (2020). Knowledge sharing in supply chain networks: Effects of collaborative innovation activities and capability on innovation performance. *Technovation, 94*, 102010.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human Resource Management Review, 20*(2), 115-131.

- Xiao, M., & Cooke, F. L. (2019). Why and when knowledge hiding in the workplace is harmful: a review of the literature and directions for future research in the Chinese context. *Asia Pacific Journal of Human Resources, 57*(4), 470-502.
- Xiong, C., Chang, V., Scuotto, V., Shi, Y. and Paoloni, N. (2021). The social-psychological approach in understanding knowledge hiding within international R&D teams: an inductive analysis. *Journal of Business Research, 128*(C), 799-811.
- Yasir, M., & Majid, A. (2017). Nexus of knowledge-management enablers, trust and knowledge-sharing in research universities. *Journal of Applied Research in Higher Education, 9*(3), 424-438.
- Yu, D., & Zhou, R. (2015). Tacit knowledge sharing modes of university teachers from the perspectives of psychological risk and value. *International Journal of Higher Education, 4*(2), 214.
- Zakariya, R., & Bashir, S. (2021). Can knowledge hiding promote creativity among IT professionals. *VINE Journal of Information and Knowledge Management Systems, 51*(5), 693-712.
- Zhang, P., Li, S., Liu, W., Han, Y., & Muhammad, N. A. (2018). Exploring the role of moral disengagement in the link between perceived narcissistic supervision and employees' organizational deviance: A moderated mediation model. *Asian Journal of Social Psychology, 21*(4), 223-236.
- Zhao, H., Liu, W., Li, J., & Yu, X. (2019). Leader–member exchange, organizational identification, and knowledge hiding: The moderating role of relative leader–member exchange. *Journal of Organizational Behavior, 40*(7), 834-848.
- Zhao, H., & Xia, Q. (2017). An examination of the curvilinear relationship between workplace ostracism and knowledge hoarding. *Management Decision, 55*(2), 331- 346.
- Zhao, H., & Xia, Q. (2019). Nurses' negative affective states, moral disengagement, and knowledge hiding: the moderating role of ethical leadership. *Journal of Nursing Management, 27*(2), 357-370.
- Zhao, H., Xia, Q., He, P., Sheard, G., & Wan, P. (2016). Workplace ostracism and knowledge hiding in service organizations. *International Journal of Hospitality Management, 59*, 84-94.
- Zhu, Y., Chen, T., Wang, M., Jin, Y., & Wang, Y. (2019). Rivals or allies: How performance- prove goal orientation influences knowledge hiding. *Journal of Organizational Behavior, 40*(7), 849-868.
- Zutshi, A., Creed, A., Bhattacharya, A., Bavik, A., Sohal, A., & Bavik, Y. L. (2021). Demystifying knowledge hiding in academic roles in higher education. *Journal of Business Research, 137*, 206-221.