Volume and Issues Obtainable at Center for Sustainability Research and Consultancy

Journal of Business and Social Review in Emerging Economies

ISSN: 2519-089X (E): 2519-0326

Volume 6: Issue 2 June 2020

Journal homepage: www.publishing.globalcsrc.org/jbsee**The Empirical Investigation of Knowledge Hiding and In-role Behavior**¹Arshad Ali Khan, ²Muhammad Tufail, ³Hazrat Bilal¹PhD Scholar, Institute of Business Studies and Leadership, Abdul Wali Khan University, Mardan Pakistan, arshad.khan@uswat.edu.pk²Assistant Professor, Institute of Business Studies and Leadership, Abdul Wali Khan University, Mardan Pakistan,tufail@awkum.edu.pk³Assistant Professor, Center for Management and Commerce, University of Swat, Pakistan, hbilal@uswat.edu.pk**ARTICLE DETAILS****History***Revised format: May 2019
Available Online: June 2020***Keywords***Knowledge Hiding, In-role Behavior, Knowledge Management Private Sector Universities***JEL Classification***M1, M31***ABSTRACT**

This research was intended to investigate the connection between Knowledge Hiding and In-role Behavior. The relationship between independent and dependent variables was calculated by the Pearson correlation and simple regression analysis. The data was randomly collected through a self-administered questionnaire from 129 staff working in private sector universities. This was a cross-sectional analysis and the findings showed that Knowledge Hiding negatively affect the in-role behavior of employees ($r = 41.6$, $\beta = -.645$, $t = 9.51$, $p < 0.005$). The results of this study suggested that universities need to focus on the Knowledge Hiding Behavior of employees in order to achieve their objectives and improve quality.

© 2020 The authors, under a Creative Commons Attribution-NonCommercial 4.0

Corresponding author's email address: arshad.khan@uswat.edu.pk

Recommended citation: Khan, A.A., Tufail, M., and Bilal, H. (2020). The Empirical Investigation of Knowledge Hiding and In-role Behavior. *Journal of Business and Social Review in Emerging Economies*, 6(2), 577-585

1. Introduction

Knowledge can be obtained and disseminated in many ways but in general, knowledge is the information, skills and experience an individual have with in organisation (Serban & Luan, 2002), which is considered the most valuable resource by an organization for gaining and sustaining competitive advantages (Bock, Zmud, Kim, & Lee, 2005) and innovation (Xie, Fang, Zeng, & Huo, 2016). These advantages can be achieved through sharing of knowledge, which is the transfer of information and expertise, sharing suggestions and ideas with each other within organisation (Bartol & Srivastava, 2002). Hence, The knowledge-sharing behavioural theories express that every organisation should encourage knowledge sharing and its spread among their employees in order to empower individual employees to take precise decisions for long term sustainability of their organisation (Dong, Bartol, Zhang, & Li, 2017; Kim & Park, 2017). Thus, in organisations much attention has been given to why and when people share their knowledge, while little attention has been paid to why and when individuals hide their

knowledge (Peng, 2013). Knowledge Hiding is the withholding of knowledge and concealing of information (Connelly, Zweig, Webster, & Trougakos, 2012), which becomes a key risk to the achievements of an individual and organisation goals (Černe, Nerstad, Dysvik, & Škerlavaj, 2014).

The term In-role Behaviour was introduced by Katz (1964) and is also known as core-task behaviour or task performance behaviour (Rotundo & Sackett, 2002). It is the behaviour required by an employee to performed his/her duty and job (Williams & Anderson, 1991). According to Katz (1964) In-role Behaviour is an important component of employees' work and usually shown in an employees' job description which is compensated in the shape of formal salary system of an organisation. In-role or task performance behaviour is mandatory to accomplish a specific job.

Knowledge Hiding is a type of incivility at work and is a worldwide issue (Arshad & Ismail, 2018). Most of the studies conducted on Knowledge Hiding at work and performance are US based (Connelly et al., 2012; Gkoulalas-Divanis & Verykios, 2009; Nemeth & Cook, 2005). Therefore, the aim of this research is to empirically assess the effect of Knowledge Hiding and In-role Behaviour.

2. Problem Statement

Previously many studies have been conducted in the area of knowledge sharing especially in academic and professional fields in developed countries (Alavi & Leidner, 2001; Endres & Chowdhury, 2019; Škerlavaj, Connelly, Černe, & Dysvik, 2018). Regardless of the vitality of the phenomenon, there is still a very limited quantitative research available assessing Knowledge Hiding behaviour in an organisation particularly in Sector the Universities. Researchers have suggested that further research is needed to be carried out in the area of Knowledge Hiding in different settings (Connelly & Zweig, 2015; Peng, 2013; Xiao & Cooke, 2018). Worldwide organisations spend huge efforts and expenses on encouraging and developing a knowledge management system to discourage Knowledge Hiding and encourage knowledge transfer (Bock et al., 2005; Wang & Noe, 2010), but still many employees within organisations avoid to share their knowledge and try to conceal knowledge from co-workers and involve themselves in Knowledge Hiding (Connelly & Zweig, 2015; Connelly et al., 2012). As organisations expect their employees to share their knowledge with co-workers (Kuvaas, Buch, & Dysvik, 2012) but still some employees try to hide their knowledge (Connelly et al., 2012) which adversely affect interpersonal relations and creativity (Černe et al., 2014). Due to these harmful effects of Knowledge Hiding, researchers need to further explore employees involved in Knowledge Hiding (Škerlavaj et al., 2018) and hence to fill such a gap, this study will be conducted to further explore the Knowledge Hiding phenomenon amongst the administrative employees working in the private sector Universities of Khyber Pakhtunkhwa.

3. Research Purpose

After a detailed study of previous literature, it was found that most of the work on Knowledge Hiding and employees' work behavior has been conducted in the developed countries; therefore, there is a gap to fulfill by conducting a study on this phenomenon in the developing countries like Pakistan. The main purpose of this research will be to investigate the main aspects of Knowledge Hiding and employees' work behavior that is in role behavior; will be followed by determining the relationship between dependent and independent variables.

4. Research Objectives

The objectives of the study in hand are to analyse the Knowledge Hiding behaviour impact on the In-role Behaviour of staff working in the private sector universities of Khyber Pakhtunkhwa.

5. Literature

Knowledge refers to the ideas, information, values, observations and expertise relevant to a specific task or job performed by employees within an organisation (Alavi & Leidner, 2001; Bartol & Srivastava,

2002; Connelly et al., 2012; Davenport & Prusak, 1998). Hiding is concealing or covering something from sharing. So, Knowledge Hiding (KH) is an individual's or group's deliberate attempt to conceal or withhold information which is requested by another person or group (Černe et al., 2014; Connelly et al., 2012). Knowledge Hiding by peers, managers and subordinates represents a major threat to not only an individual's but also organisation's performance (Peng, 2013). It strictly bars innovation within an organisation due to which the growth, competitiveness and employees' creativity are damaged in both short and long run (Baer, 2012; Janssen, Krol, Schielen, Hoekstra, & de Kok, 2010).

Knowledge Hiding is considered the absence of knowledge sharing (Connelly et al., 2012). Mainly three strategies are used by employees to hide their knowledge from their peers, co-workers and managers. The first one is playing dumb starter in which the employee hides his/her knowledge by pretending that he/ she is ignorant of the desired knowledge. The second is the Evasive Knowledge Hiding strategy, where an employee provides intentionally incorrect information or makes a false promise for providing complete information in future. The third is rationalised Knowledge Hiding strategy, where a hider provides rationalised justification such as confidentiality of information.

Regardless of the importance of Knowledge Hiding phenomenon, still a very narrow empirical research is available and hence Knowledge Hiding has been recognised as an area for conducting further research (Černe et al., 2014; Connelly & Zweig, 2015; Connelly et al., 2012). Moreover, further research is needed in order to understand the dynamics of Knowledge Hiding in different organisational settings (Connelly et al., 2012). In the light of this, it is vital to investigate the Knowledge Hiding phenomenon in relationship to various organisational factors so as to effectively analyse the Knowledge Hiding behaviour of employees within an organisation.

The In-role Behaviour is the behaviour associated with formal job description such as tasks, duties and responsibilities (Becker & Kernan, 2003; Williams & Anderson, 1991). In-role Behaviour output is important to any job and is characterised as those officially required outcomes and behaviours which directly serve the goals of the organisation (Motowidlo & Van Scotter, 1994). In-role Behaviour is reflected in the particular work outcomes and deliverables as well as their quality and quantity (Koopmans et al., 2011).

Existing research suggests that Knowledge Hiding evokes mistrust amongst the targets of Knowledge Hiding and that Knowledge Hiding reciprocates the same behaviour towards the perpetrators (Demirkasimoglu, 2016; Singh, 2019). In literature, Knowledge Hiding and In-role Behaviour performance can be seen from the perspective of Social Exchange Theory. According to exchange theory (Blau, 1964) and norm reciprocity (Whatley, Webster, Smith, & Rhodes, 1999) exchange is a voluntary response of an employee that is driven by the desired benefits and usually arises from the interaction of two parties. The reciprocity norm states that employees repay in kind what another had performed. It means that employees will respond favourably to each other by returning benefits for benefits, responding with either indifference or hostility (Cropanzano & Mitchell, 2005; Gouldner, 1960). This means that when employees feel that they are being treated in a good way then they will also respond in the same way with a good treatment. In the same way, when it is felt that they are not treated positively then they will also reciprocate the same. Therefore, on the basis of this we hypothesise that:

Hypothesis: There is a negative relationship between Knowledge Hiding and in- role Behavior

6. Research Methodology

A deductive approach will be used to investigate the problem statement being developed in this proposal. A deductive approach is a procedure by which hypothesis or hypotheses are developed on the basis of prevailing theory and framing a research strategy to examine the hypothesis (Wilson, 2014). Deductive approach is the most useful model to test the hypotheses of the research study (Sekaran & Bougie, 2013).

7. Measures

The following adapted scales (Five Point Likert Scale) were used for gathering data collection from respondents.

- a) Knowledge Hiding was assessed by Connelly et al. (2012)
- b) In-role Behaviour construct was examined through scale originated by Goodman and Svyantek (1999)

8. Research Strategy

This research is a cross sectional study and a quantitative data was collected through survey techniques. A survey technique is the most suitable technique for collecting data from a wide range of correspondence (Bell, Bryman, & Harley, 2018; Saunders, Lewis, & Thornhill, 2009). A quantitative approach seeks to establish, confirm or validate association between variables and to extract generalisations which contribute to theory (Leedy & Ormrod, 2001). The purpose of the quantitative research is to add to the understanding of Knowledge Hiding phenomenon among the staff specifically by enquiring the relationship between Knowledge Hiding and In-role Behaviour.

9. Data Collection

For this study the unused and fresh data was collected through primary sources while to check whether the primary research is correct and is according to the desired results of the variables, a secondary source of information is also used.

Population and Sampling

The target population of this study was the administrative staff working at different level of organisation hierarchy that is from junior to senior level at the private sector universities of Khyber Pakhtunkhwa. Random sampling techniques were applied. In random sampling process each individual has an equal probability of being selected, which reduces the chances of biasness in data analysis (Moore, McCabe, Duckworth, & Sclove, 2003).

10. Data Analysis

The Demographic information consisting of gender, marital status, experience and qualification wise statistics of the respondents are portrayed in the following Table1.

11. Conclusion and Recommendations

In the light of the findings of the current study gender difference in attitude towards mathematics is declining in grade nine students in Pakistan. But still there is need to explore gender differences regarding mathematics classes. Avoidance was an upward question in mathematics education (Ashcraft & Moore, 2009). There is need to find out difference regarding ability level of secondary level students attitude and other factors like giving feedback in mathematics (e.g. Batool, 2020b). Students' self-efficacy and self-regulation is also a matter of consideration in students' mathematics achievement (e.g. Batool, 2020a; Batool, Noureen & Ayuob, 2019; Habiba, Batool, & Ayesha, 2020). At upper school and university level this type of survey might be conducted to see a clear picture of gender differences regarding the attitude towards mathematics. Both Girls and Boys (Students) feel mathematics as a boring subject so there is a need to introduce new teaching techniques in mathematics learning. Students problems related to their memory or other health issue should also be explored because these variables may also affect attitudes (Batool, Habiba & Saeed, 2019).

Table 1: Demographics Information of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	105	81.4	81.4	81.4
	Female	24	18.6	18.6	100.0

Marital Status	Single	62	48.1	48.4	48.4
	Married	66	51.2	51.6	100.0
Experience	Less than 1 year	18	14.0	14.0	14.0
	1 to 5 years	41	31.8	31.8	45.7
	6 to 10 years	18	14.0	14.0	59.7
	10 to 15 year	35	27.1	27.1	86.8
	More than 15 years	17	13.2	13.2	100.0
Qualification	Bachelor	24	18.6	18.6	18.6
	Master	46	35.7	35.7	54.3
	MS	51	39.5	39.5	93.8
	PhD	8	6.2	6.2	100.0

Descriptive Data Analysis of Knowledge Hiding and In-role Behavior

The following Table 2 indicates that the highest average is 3.06 of the Knowledge Hiding which is an independent variable in the test model and mean 1.91 refers to the in-role behavior which is the criterion variable in this analysis.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
KH*	129	1.83	4.25	3.06	.571
IRB**	129	1.00	3.56	1.91	.590

*KH: Knowledge Hiding, **IRB: In-role Behaviour

The alpha value of Cronbach's test was used to assess the reliability of the scales. Both scales were reliable and the findings can be seen in Table 3.

Table 3: Reliability Statistics

Variable Name	Cronbach's Alpha	Cronbach's Alpha
KH	0.794	12
IRB	0.886	09

Hypothesis Testing

Correlation

As shown in the Table 3, there is a strong association ($r = -0.645$, $p = 0.000$) between Knowledge Hiding and in-role behavior. It is worth mentioning that the responses to Knowledge Hiding are highly correlated with the in-role behavior.

Table 3: Descriptive Statistics and Correlation analysis

	Mean	Std. Deviation	Correlation IRB
KH	3.06	.572	-.645
IRB	1.91	.591	1

To check and know the intensity of the association between Knowledge Hiding and In-role Behaviour, the value of Regression, F and Coefficient are estimated as shown in Table 4.

Table:4 Model Summary, F statistics and Coefficients

Model	R	R ²	Change Statistics			Std. Coefficients		
			R ² Change	F Change	Sig. Change	F	Beta	t
1	.645	.416	.416	90.410	.000		-.645	9.51

The regression analysis shows in the table above that Knowledge Hiding is negatively effecting In-role Behavior that explains 41.6 percent ($R^2=0.416$) of variation in In-role Behavior of staff with a Beta value of $-.645$ having a significant value of 0.000 and t value of -9.51 . R square of 41.6 per cent indicates that the hypothesis of the study is true and acknowledged.

In order to further check the normality of the data in the Model distribution, the following histograms have been established which clearly demonstrate that the dependent variables do not contradict the

normality assumption as the figures represent the symmetrical bell curve and therefore fulfill the normality assumption. The below Figure 1 is the histogram of Knowledge Hiding and In-role Behavior.

Figure 1: Regression Standardized Residual of KH and IRB

The principle of linearity applies to the direct (straight line) relation between dependent and independent variable (Tabachnick, Fidell, & Ullman, 2007). Linearity of results was evaluated through distributed plots with uniform residues in both contingent and independent variables. The linear association is formed by a straight line or a curvilinear one, and thus the connection is generally created (Pallant & Manual, 2010). The linearity in a data model is shown in the following P-P plot Figure 2 for information hiding and in-role behavior can be seen in the figures below, which seem to have not compromised the principle of normality found in Histogram. This support linear negative relationships being hypothesized in this study.

Figure 2: Normal Probability Plot of Regression Standardized Residual of KS and IRB

12. Discussion

The present research study was carried out to address the gap in the relations between Knowledge Hiding Behavior of employees and in-role behavior performance. On the basis of 129 sample of different level of staff, this study empirically explores the Knowledge Hiding and in-role behavior. Our results indicate a negative and significant relationship ($r = -0.416$, $\beta = -0.645$, $t = 9.51$, $p < 0.005$). As from the previous findings of Singh (2019) also reveal a negative and significant relationship between Knowledge Hiding and in-role performance ($\beta = -0.208$; $t = 2.876$, $p < 0.004$).

13. Implications

This research will add to the existing knowledge regarding Knowledge Hiding and its impact on employees' work behavior in developing countries like Pakistan specifically the province of Khyber Pakhtunkhwa. Most of the previous studies were carried out on Knowledge Hiding and employees' work behavior in the developed countries (Connelly et al., 2012; Goldberg, 1993; Pan, Zhang, Teo, & Lim, 2018; Parks-Leduc, Feldman, & Bardi, 2015; Peng, 2013; Porter, Bigley, & Steers, 2003; Škerlavaj et al., 2018) but not as much of attention has been paid to it in developing countries like Pakistan. Study of the relationship between dependent and independent variable is a further extension and contribution to the research model. This research study is also being significant because of its robustness of testing the effect of all the stated variables. Therefore, it is an essential input to the present literature of Knowledge, and employees' work behavior particularly in the context of Pakistan.

As universities are knowledge-based organizations and knowledge management is one of the backbones of such organizations. The university authorities and the Higher Education Commission are recommended to develop policies that encourage the sharing of knowledge behavior and discourage the hiding of knowledge. Our findings point out that Knowledge Hiding Behavior of employees adversely affects the performance of employees and hence the universities cannot achieve their desired objectives. Therefore, the university management needs to effectively use their employees' potential by focusing and formulating policies to improve the knowledge management system and discouraging Knowledge Hiding Behavior. Such policies will allow them to improve the quality of services and performance.

14. Limitations and Future Research Recommendations

The research was a cross-sectional analysis based on a particular period in time, the differences in relationships over time were neglected, and a longitudinal study would thus be performed over accommodate all variance over time in order to generalize the findings. In addition, a future study to cover other related variables with in-role behavior such as extra role behavior, and counterproductive work behavior in relation to Knowledge Hiding shall also be conducted. In addition, the present study gathered data from staff of private owned universities located within developing countries. It is therefore recommended that a comparative study be conducted on the development of private and public universities

15. Conclusion

This study's main purpose was to examine the connection between Knowledge Hiding and in-role behavior. The study data were randomly collected from 129 respondents and was measured by Pearson Correlation and Simple Regression. The findings of our research and previous studies in developing countries have supported the hypothesis that there is a significant negative relationship between Knowledge Hiding and In-role Behaviour of employees working in private sector universities.

References

- Alavi, M., & Leidner, D. E. (2001). Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS quarterly*, 107-136.
- Arshad, R., & Ismail, I. R. (2018). Workplace incivility and knowledge hiding behavior: does personality matter? *Journal of Organizational Effectiveness: People and Performance*, 5(3), 278-288.
- Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations. *Academy of Management Journal*, 55(5), 1102-1119.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64-76.
- Becker, T. E., & Kernan, M. C. (2003). Matching commitment to supervisors and organizations to in-role and extra-role performance. *Human performance*, 16(4), 327-348.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*: Oxford university press.
- Blau, P. (1964). *Exchange and Power in Social Life* Wiley New York Google Scholar.

- 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, social-psychological forces, and organizational climate. *MIS quarterly*, 87-111.
- 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.
- 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.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6), 874-900.
- Davenport, T. H., & Prusak, L. (1998). *Working knowledge: How organizations manage what they know*: Harvard Business Press.
- Demirkasimoglu, N. (2016). Knowledge Hiding in Academia: Is Personality a Key Factor? *International Journal of Higher Education*, 5(1), 128-140.
- Dong, Y., Bartol, K. M., Zhang, Z. X., & Li, C. (2017). Enhancing employee creativity via individual skill development and team knowledge sharing: Influences of dual-focused transformational leadership. *Journal of Organizational Behavior*, 38(3), 439-458.
- Endres, M. L., & Chowdhury, S. (2019). Team and Individual Interactions With Reciprocity in Individual Knowledge Sharing *Effective Knowledge Management Systems in Modern Society* (pp. 123-145): IGI Global.
- Gkoulalas-Divanis, A., & Verykios, V. S. (2009). Hiding sensitive knowledge without side effects. *Knowledge and Information Systems*, 20(3), 263-299.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American psychologist*, 48(1), 26.
- Goodman, S. A., & Svyantek, D. J. (1999). Person–organization fit and contextual performance: Do shared values matter. *Journal of vocational behavior*, 55(2), 254-275.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American sociological review*, 161-178.
- Janssen, J., Krol, M. S., Schielen, R. M. J., Hoekstra, A. Y., & de Kok, J.-L. (2010). Assessment of uncertainties in expert knowledge, illustrated in fuzzy rule-based models. *Ecological Modelling*, 221(9), 1245-1251.
- Katz, D. (1964). The motivational basis of organizational behavior. *Behavioral science*, 9(2), 131-146.
- Kim, W., & Park, J. (2017). Examining structural relationships between work engagement, organizational procedural justice, knowledge sharing, and innovative work behavior for sustainable organizations. *Sustainability*, 9(2), 205.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet Henrica, C., & van der Beek, A. J. (2011). Conceptual frameworks of individual work performance: a systematic review. *Journal of occupational and environmental medicine*, 53(8), 856-866.
- Kuvaas, B., Buch, R., & Dysvik, A. (2012). Perceived training intensity and knowledge sharing: Sharing for intrinsic and prosocial reasons. *Human Resource Management*, 51(2), 167-187.
- Leedy, P., & Ormrod, J. (2001). Practical research: Planning and research. *Upper Saddle*.
- Moore, D. S., McCabe, G. P., Duckworth, W. M., & Sclove, S. L. (2003). *The practice of business statistics*: Freeman New York, NY.
- Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task performance should be distinguished from contextual performance. *Journal of Applied psychology*, 79(4), 475.
- Nemeth, C., & Cook, R. (2005). Hiding in plain sight: what Koppel et al. tell us about healthcare IT. *Journal of Biomedical Informatics*, 38(4), 262-263.
- Pallant, J., & Manual, S. S. (2010). A step by step guide to data analysis using SPSS. *Berkshire UK: McGraw-Hill Education*.
- 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.

- Parks-Leduc, L., Feldman, G., & Bardi, A. (2015). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review*, 19(1), 3-29.
- Peng, H. (2013). Why and when do people hide knowledge? *Journal of knowledge management*, 17(3), 398-415.
- Porter, L. W., Bigley, G. A., & Steers, R. M. (2003). Motivation and work behavior.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of applied psychology*, 87(1), 66.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research methods for business students*: Pearson education.
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A Skill Building Approach*. New Jersey: John Willey and Sons: Inc.
- Serban, A. M., & Luan, J. (2002). Overview of knowledge management. *New Directions for Institutional Research*, 2002(113), 5-16.
- Singh, S. K. (2019). Territoriality, task performance, and workplace deviance: Empirical evidence on role of knowledge hiding. *Journal of Business Research*, 97, 10-19.
- Škerlavaj, M., Connelly, C. E., Cerne, M., & Dysvik, A. (2018). Tell me if you can: time pressure, prosocial motivation, perspective taking, and knowledge hiding. *Journal of knowledge management*.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5): Pearson Boston, MA.
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: A review and directions for future research. *Human resource management review*, 20(2), 115-131.
- Whatley, M. A., Webster, J. M., Smith, R. H., & Rhodes, A. (1999). The effect of a favor on public and private compliance: How internalized is the norm of reciprocity? *Basic and Applied Social Psychology*, 21(3), 251-259.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, 17(3), 601-617.
- Wilson, J. (2014). *Essentials of business research: A guide to doing your research project*: Sage.
- Xiao, M., & Cooke, F. L. (2018). 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*.
- Xie, X., Fang, L., Zeng, S., & Huo, J. (2016). How does knowledge inertia affect firms product innovation? *Journal of Business Research*, 69(5), 1615-1620.