Effects of Competitive Psychological Climate on Employees' Knowledge Hiding Behavior – Moderation by Organizational Justice

Imlak Iqbal

Research Officer University of Management & Technology, Lahore
Email: iimilak4@gmail.com

Abstract

Extant literature suggests that working climate has an influence on employees' attitudinal and behavioral responses. Building on COR theory, this study aims to investigate the impact of competitive psychological climate on employees' knowledge hiding behavior while perceived organizational justice is considered moderator. The conceptual model is empirically tested on the 223 responses of the IT professionals. SPSS software was used for data analysis, where results of the study highlight that the competitive psychological climate is positively related to the employees' knowledge hiding behavior. The findings also highlight that the presence of justice at work reduces the impact of such a climate, which confirms the assumption that the presence of justice may reduce the knowledge hiding even in presence of a competitive working environment. Therefore, a sense of justice at the workplace would prove a guard against the non-productive effects of the competitive environment. The empirical findings derived from this study can be very useful for managers, especially the managers working for IT companies. This study rings the alarming bells for managers that a highly competitive work environment brings out the negative and non-productive side of employees, as they indulge themselves in various mischievous practices to secure their resources i.e. knowledge.

Keywords: Conservation of Resources Theory, Justice, Knowledge Hiding, Organizational Climate

Introduction

Healthy competition among employees within an organization is anticipated, acknowledged, appreciated, and regularly cheered at work (Pfeffer and Sutton, 2006). The academicians and practitioners have been rigorously debating on the competitive environment in any organization because of its mixed impact (positive and negative) on the success and functioning of an entity. (Han, Masood, Cudjoe & Wang, 2021). The positive outcomes include higher performance, (Fletcher et al., 2010), employee commitment (Jones et al., 2017), and career accomplishment (Spurk et al., 2019. Whereas, in the presence of high competition among co-workers, the level of insecurity and anxiety increases (Keller et al., 2016), and personal conflicts arise among employees (Semerci, 2019). These negative behaviors are associated with non-productivity and unfavorable organizational results (Hernaus et al., 2019). Though there is extant literature available on both aspects of a competitive environment, few studies have discussed the outcomes from knowledge management perspectives. For example, it is expected that, on one hand, the perception of high competition among co-workers increases knowledge hiding behaviors (Chen and Tang, 2018); while on the other hand there was an inconsiderable effect of inter-personal conflict on knowledge hiding (Semerci, 2019). Thus, studies on knowledge management aspects are both warranted and invited in literature (Han et al., 2021; Semerci, 2019). Therefore, this research study aims to develop a deeper understanding of employees' perception of a highly competitive environment on knowledge hiding behaviors in the IT sector of Pakistan. There are two main reasons for choosing IT sector as our research setting. Firstly, the environment of IT companies is highly competitive in comparison with innovation pressures (Han, Sung & Suh, 2021). Secondly, to the best of researcher awareness, no other study has explained the Competition-knowledge hiding relationship in the competitive environment of IT companies in Pakistan.

The conceptual and theoretical models of this study are based upon the conservation of resources theory (Hobfoll, 1989), which explains that the presence of a competitive environment would create perceptions of loss of social resources (as one competes others than cooperates), and would tend to protect other resources (i.e. Knowledge), this would indulge in knowledge hiding behavior. Furthermore, it is proposed that the other organizational level resources (justice) may indulge in this relationship and change the outcomes. For instance, when there would be the perception of justice at work (fair treatment, rewards, and distribution of resources), one tends to consider it yet another resource and thus not hide knowledge as sharing of knowledge may lead to positive outcomes.

This study offers two critical research insights. First, we propose a different understanding of interpersonal competition i.e. the perceived competitive environment at the workplace has negative consequences for the organizations where employees tend to hide their knowledge when they perceive that their workplace is highly competitive. It is important to mention that knowledge hiding leads to negative employees' behaviors and un-productive outcomes for the organization. This study would offer a cautionary call to managers; they should be aware of the dark side of encouraging too much competition at the workplace. Secondly, this study would contribute by classifying organizational justice as a moderator in the competition-knowledge relationship i.e. whether the employees' perception of organizational justice in competitive organizations affects the impact of competitive psychological climate on knowledge-hiding behavior.

Literature review and hypotheses development

Conservation of resources theory

According to the conservation of resources (COR) theory individuals are influenced to protect their existing resources and get new resources while achieving their targets (Hobfoll, 1989; Halbesleben et al., 2014). Resources are "those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as means for the attainment of these objects, personal characteristics, conditions, or energies" (Hobfoll, 1989, p. 516). Keeping in view COR, resource signals are favorable or unfavorable indicators of environment that influence the strategies of people whether to invest in the creation of the resources or conservation (Neveu and Kakavand, 2019). The current study focuses on the strategy of knowledge hiding used by employees to tackle the competitive environment in their organization with more emphasis on the knowledge hiding by the IT companies' employees when they feel threatened their performance because of the inherent competition in the sector. The study further investigates the changing phenomenon between the relationship of competitive psychological environment and knowledge hiding as a function resource signal (i.e. justice). Figure 1 shows our conceptual model.

Competitive Psychological Climate & Knowledge Hiding

The competitive psychological climate is defined as "the degree to which employees perceive organizational rewards to be contingent on comparisons of their performance with their coworkers" (Brown et al., 1998, p. 89). Competition may have positive and negative impacts because of individuals being naturally inclined towards rewards and benefits (Wittchen et al., 2013). Schrock et al. (2016) highlighted that competition leads to better performance because it enhances one's motivation and converges his/her attention on the given task.

Whereas, Kumar Jha and Varkkey's (2018) study indicated that competition among employees might lead to reduced cooperation among them due to more efforts of some of them to be superior over their coworkers. The competitors might also be not willing to share resources in the performance of any task (Swab and Johnson, 2019), and knowledge is among the most valuable resources thus employees are expected to hide knowledge in the wake of the competitive environment.

Knowledge hiding is "an intentional attempt by an individual to withhold or conceal knowledge that has been requested by another person" (Connelly et al., 2012, p. 65). According to Connelly et al., (2012), other similar concepts such as hoarding of knowledge and deception are different from the concept of knowledge hiding because of its dyadic nature. The first form of knowledge hiding is "evasive hiding" in which the hider gives wrong Information. In the "playing dumb" form of knowledge hiding, the hider pretends that he does not know the information requested. The third form of knowledge hiding is "rationalized hiding". Here the hider of the knowledge gives justification for not sharing the information. Like, he can say that a third party has not allowed sharing the information (Connelly et al., 2012). All these forms of knowledge hiding pose risk to the favorable organizational outputs (Abubakar et al., 2019).

Keeping in view the COR theory, a positive relationship is expected between competitive psychological climate and knowledge hiding. The COR theory postulates that a competitive environment in organizations pushes employees to achieve their personal objectives who intend to get the relative advantage over the others while optimizing their resources (Halbesleben et al., 2014; Jahanzeb et al., 2020). Particularly, salespersons might be more likely to be hiding their resources so that to remain competitively advantageous over the other coworkers. The efforts of the employees to remain superiors among their coworkers might lead them to be involved in undesirable behaviors (Hernaus et al., 2019). The work of Xiao and Cooke (2018) further strengthens our argument who stated that non-sharing of knowledge with other colleagues in a competitive workplace is a tactic to handle the Competition. Hence our hypothesis is that:

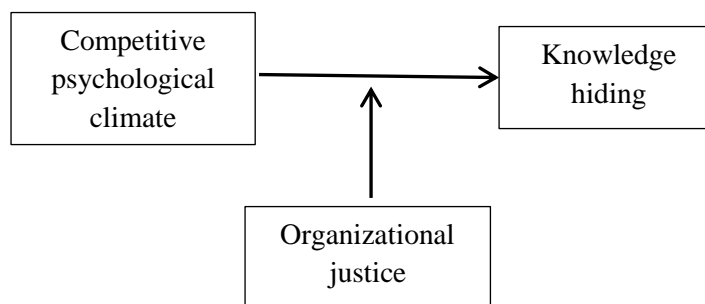**H₁:** Competitive psychological climate has a positive relationship with knowledge hiding.

The Moderating Role of Organization Justice

According to Colquitt (2001) and Huo et al. (2016), organizational justice means the level of justice and fairness perceived by individuals or groups about an entity. Perceived organizational justice promotes a positive environment and citizenship motive among employees (Huo et al., 2016). Many studies (such as Wan et al., 2015: Outlaw et al., 2019) evidence that perceptions of justice are

associated with a wide range of positive attitudes. The presence of organizational justice creates a situation where fairness is perceived and employees may perceive fair outcomes even in the presence of a competitive climate (Outlawetal., 2019). Resultantly, they feel the competitive environment is less risky. This will encourage them not to engage in any negative behavior even in the presence of a highly competitive environment. So, it is argued that under the conditions of high-level organizational justice the effects of a competitive environment in the workplace will be reduced and an employee would think of not to hide knowledge.

The said relation could also be assumed based on COR theory, which proposes situations like organizational justice as a resource that may reduce the effects of loss of other resources due to a competitive environment. Thus, it is expected that employees that tend to protect their resources (knowledge resource) due to loss of resources in presence of a competitive environment would feel no need to protect their resources (of knowledge) as justice prevails at work (Greenberg, 2004; Penney, 2011). Therefore, the following hypothesis would be assumed:

H$_2$: There is negative moderating effect of high level of organizational justice on the relationship between competitive psychological climate and knowledge hiding.

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┌──────────────┐                    ┌──────────────┐
│ Competitive  │                    │  Knowledge   │
│ psychological│────────────────────│   hiding     │
│   climate    │         ↑          │              │
└──────────────┘         │          └──────────────┘
                 ┌──────────────┐
                 │Organizational│
                 │   justice    │
                 └──────────────┘
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Figure 1 Conceptual model of the study

Methodology

A cross-sectional approach was adopted for this research study i.e. data was collected at only one time. The data of the current study were collected from IT professionals working in Lahore-based software houses. The IT sector is one of the most competitive firms where employees have to work in a highly competitive environment. Considering the nature of the sector, the online survey was designed through google-forms and was distributed to the individuals studying at two large universities. The students of the faculty of computer sciences and computing were

approached through the departmental head. Only those students were accessed that had been working at software houses as part-time employees. The link was shared through email and What's App. The respondents were also requested to share the link to their other fellows, friends, and colleagues. After an effort of one month, 239 responses were received back, while 16 were incomplete or not filled properly. Thus 223 responses were used for analysis.

The majority of the respondents were male (73%), having an average employment experience of 7.5 years, with an average age of 27.9 years. All the measures were analyzed at five points Likert scale. The competitive psychological climate was operationalized with Fletcher et al. (2010) four items scale. Knowledge hiding was assessed using Connelly et al. (2012) 12 items scale while organizational justice was operationalized using Colquitt's (2001) scale containing nine items. Following the guidelines of Peng (2013) gender, age, qualification, tenure was controlled in the current study. Regression and correlation analysis were used to analyze the data and fetch results.

Data Analysis and Results

In order to test the hypothesis, the data were first checked for reliability, normality, descriptive statistics, and correlation, as shown in table-1. The reliability values are shown diagonally in the table, where it is evident that all the measure has reliability value that falls in the acceptable range (i.e. > 0.70) (Babbie, 1992). The mean scores highlight that the working environment was perceived as highly competitive (mean=4.05, SD=0.603), employees tend to hide knowledge (mean=3.76, SD=1.101), and considered a moderate level of perception about the presence of justice at work (mean=3.07, SD=1.083). Results for correlation analysis revealed that a competitive working environment is positively correlated with knowledge hiding (r= .39; p<0.05) and negatively correlated with the perceptions of justice (r=-.04; p<0.05). The table also highlights that knowledge hiding and perceived organizational justice are negatively correlated (r= -.23; p>0.1).

Table 1
Descriptive statistics, correlation and reliability

N=223	Mean (SD)	1	2	3
Competitive working environment	4.05 (0.603)	(0.91)	-	
Knowledge hiding	3.76 (1.101)	.39*	(0.88)	-
Perceived organizational justice	3.07 (1.083)	-.04*	-.23**	(0.93)

*<0.05, **<.1

Hypotheses of the study were analyzed using Preacher and Hayes process macros (Preacher et al., 2007). The results of the direct path and moderation are shown in table-2. It is evident from the table that control variables (gender and age) are not significantly related with the outcome variable. Work experience and qualification have significant but weak association with knowledge hiding (β =

0.02, p = < 0.05; β = 0.05, p = < 0.05), thus may have meager effects on the knowledge hiding. The table also highlights that competitive working environment significantly predicts knowledge hiding behavior (β = 0.37, p = < 0.05), thus H1 is supported. Similarly, the moderator (perceived organizational justice) is also significantly related with the knowledge hiding behavior (β= -0.15, p = < 0.1). The results for moderation analysis reveal that the interaction of independent and moderator have significantly changed the relationship (β =-.33, p= < 0.05), which confirm the assumption that presence of justice may reduce the knowledge hiding even in presence of competitive working environment, thus H2 is also supported. The results are further shown in the form of slope in figure-2 which confirm the outcomes of moderator.

Table 2
Results for hypothesis testing

Variables	Knowledge hiding
Gender	0.03
Age	0.06
Work experience	0.02*
Qualification	0.05*
Competitive working environment (CWE)	0.37*
Perceived organizational justice (POJ)	-0.15**
CWE × POJ	-0.33*

*<0.05, **<.1

Before hypothesis testing preliminary data, analysis was carried out, which covered reliability analysis, descriptive statistics and correlation analysis. The results are shown in table-1 where it is evident that Cronbach's alpha for all of the variables lies between 0.817 to 0.903, which is well above the acceptable limit of 0.70. Thus, the condition of reliability was met. The means scores of the variables are reported at five-point scale, where the minimum values is 2.91 (SD=0.848) and maximum mean score is 3.91 (SD=0.802). The correlation results reveal that negative workplace gossips is positively related with emotional exhaustion (r=.219, p<.01) and environmental uncertainty (r=.169, p<.05) while negatively related with employee creativity (r=.219, p<.01). It is also evident that emotional exhaustion is positively related with (r=.044, p<.01) and negatively related with the employee creativity (r= -.107, p<.01). The results reveal that the variables of interest are significantly related, thus I approached the further analysis.

Discussions of findings

The purpose of this research study is to develop a deeper understanding with respect to the effects of employees' perception of highly competitive environment on knowledge hiding behaviors in an IT sector of Pakistan and to measure the impact of organizational justice on this competition-knowledge hiding

relationship. Due to the perceptions of a highly competitive working environment, employees tend to outperform their counterparts, as a result they feel anxiety, tensity and pressure at workplace. The perceived competition that is prevailing in the IT sector of Pakistan and the possible negative impacts of this competitive psychological climate, it is beneficial to expand our knowledge of this phenomena. Based on COR theory, the findings of this study reported that employees of IT companies perceived their workplace as highly competitive and as a result of that they tend to hide knowledge from their co-workers.
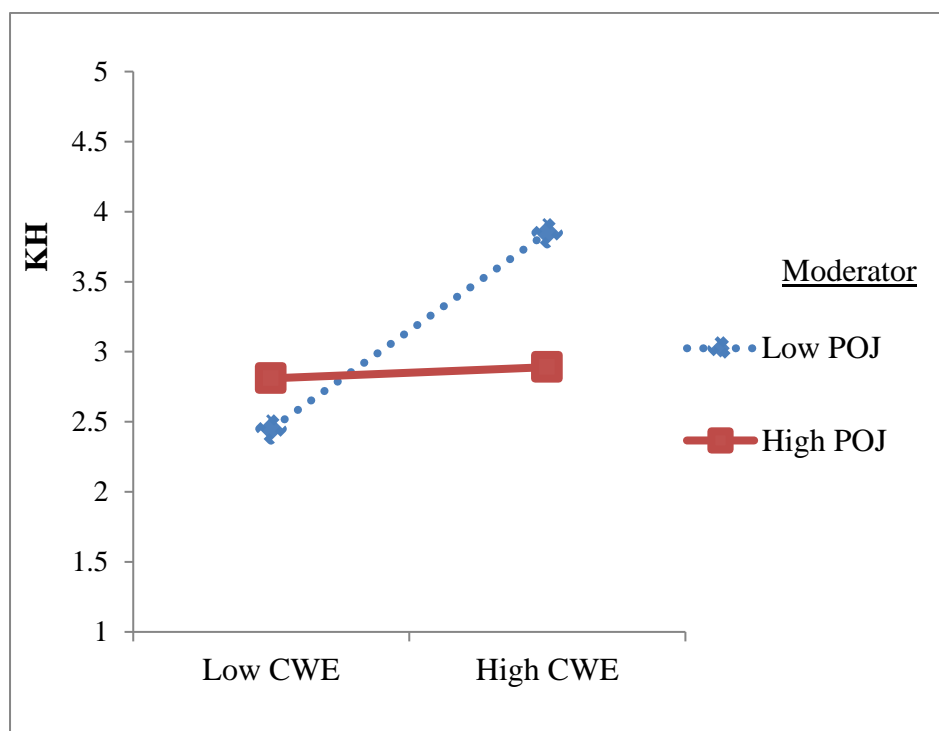

Figure 2 Slope of coefficients

This finding goes in line with the explanation of antecedents of knowledge hiding (Kumar Jha and Varkkey, 2018), where they indicated that competition among employees might lead to reduced cooperation among them due to more efforts of some of them to be superior over their coworkers and they tend to hide their knowledge from their counterparts in order to earn competitive advantage in the organization. Keeping in view COR, resource signals are favorable or unfavorable indicators of environment that influence the strategies of people whether to invest in the creation of the resources or conservation (Neveu and Kakavand, 2019). Similarly, this research highlighted that organizational justice plays an important role in mitigating the impact of knowledge hiding that occurs due to perceived competitive environment.

Theoretical Implications

This study presents various theoretical implications. Previous studies on competition- knowledge hiding relationship (Chen and Tang, 2018; Semerci, 2019), reported the conflicting results that encouraged me to examine the effects of perceived competitive workplace on knowledge hiding behaviors in a different workplace setting i.e. IT sector. As the results, reported a positive relation between the competitive psychological environment and knowledge hiding behavior between IT employees. Based on COR theory, this finding show us a dark side of highly competitive workplace where IT employees believe that such environment hinders their performance and they engage themselves in ineffectual behaviors just to secure their resource (knowledge). In the long run competitive psychological climate leads to destructive results for an organization. One more important contribution made by this study was to taking up the organizational justice based on COR context as a boundary condition that effects the relationship between the competitive psychological environment and knowledge hiding behaviors. The results reported that; IT employees tend to use organizational justice as a coping strategy and exhibit less knowledge hiding behaviors when they perceive that justice prevails in their organization. The findings help to decrease the negative and destructive effects of competitive psychological environment and knowledge hiding behaviors.

Managerial implications

The empirical findings derived from this study can be very useful for the managers, especially the mangers working for IT companies. This study rings the alarming bells for managers that high competitive work environment brings out the negative and non-productive side of employees, as they indulge themselves in various mischievous practices to secure their resource i.e. knowledge as highlighted by the previous studies as well (Wittchen et al., 2013; Swab and Johnson, 2019). This knowledge hiding behavior on the part of employees comes to play when they perceive knowledge as a critical tool to achieve success and outstand their co-workers. This knowledge hiding tactics could be a great hindrance in the free flow of creative and reforming ideas.

To achieve organizational success in the long run, it is important that employees work effectively and remain motivated even in the presence of competition at workplace, to achieve this objective manager should come up with different incentive strategies (Schaufeli, 2016). Moreover, managers should focus on team building and train employees so they could perform well in teams. Employees should be trained when it comes to knowledge sharing, trainings should lay down the proper mechanism; how to and what to share among co-worker. Another important area where managers could work to reduce the negative impacts

of competitive climate is organizational justice. As proost et al. (2015) explained that even if employees perceive the work climate as competitive, the fair treatment of mangers and a reward system that has clearly write out the dos and don'ts could be effective to cut down the negative and mischievous employee behaviors. Therefore a sense of justice at workplace would prove a guard against the non-productive effects of competitive environment.

Limitations and Future Directions

In spite of making important theoretical and practical contributions in the relevant field, there were some limitations of this study. The foremost is the cross sectional approach that didn't checked the reverse causality of the variables involved in our study; it might be possible that coworkers who are involved in knowledge hiding behaviors also believe their workplace to be competitive. Reciprocal effect of knowledge hiding behaviors and competitive working environment over the time can be measured through longitudinal approach. As we choose survey research for this study, experimental research can be conducted in future to assert the results of our study. The generalizability of this research is very limited as we only include the sales personnel. To make these results more general, the future researchers can include respondents from various job positions, industries and countries. Different types of knowledge hiding can be included in this study to present a better picture. Future research could include moderators other than organizational justice, as in optimism, self-worth etc.

Conclusion

The aim of this research study is to develop a deeper understanding with respect to the effects of employees' perception of highly competitive environment on knowledge hiding behaviors in an IT sector of Pakistan and to measure the impact of organizational justice on this competition- knowledge hiding relationship. This study concludes that employees from IT companies perceive their workplace environment highly competitive, employees tend to hide knowledge and considered moderate level of perception about presence of justice at work. Results for correlation analysis reveal that competitive working environment is positively correlated with both knowledge hiding; this means that when employees perceived their workplace highly competitive, they tend to hide knowledge from their coworkers. Moreover, the study highlights that knowledge hiding and perceived organizational justice are negatively correlated, which confirm the assumption that presence of justice may reduce the knowledge hiding even in presence of competitive working environment. Therefore, a sense of justice at workplace would prove a guard against the non-productive effects of competitive environment.

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