Article

Supervisor Bottom-Line Mentality and Knowledge Hiding: A Moderated Mediation Model

Zhen Li and Yanyuan Cheng *

School of Labor and Human Resources, Renmin University of China, Beijing 100872, China; lizhen2018000451@ruc.edu.cn

Abstract: Organizations need to respond to multiple demands, not only of shareholders but of stakeholders. Supervisor mentality that focuses on bottom-line goals, such as financial performance, can result in negative consequences. We used conservation of resources theory to examine how and when employees engage in knowledge hiding toward coworkers was influenced by supervisor bottom-line mentality. A two-wave survey (N = 274) revealed a positive impact of supervisor bottom-line mentality on knowledge hiding toward coworkers via prevention-based psychological ownership. Further, the higher the competitive psychological climate, the stronger the positive relationship between supervisor bottom-line mentality and knowledge hiding via prevention-based psychological ownership. Our study highlights the negative effect of supervisor bottom-line mentality on knowledge transfer among employees.

Keywords: supervisor bottom-line mentality; psychological ownership; knowledge hiding

1. Introduction

Organizations are consistently under pressure to maximize economic outcomes. Fierce corporate competition promotes a mindset that only concerns bottom-line results, such as shareholder interests and financial performance [1]. A bottom-line mentality (BLM) refers to a mindset that focuses on bottom-line related goals while neglecting competing demands [2], which jeopardizes the organization and its stakeholders in the long term [3]. However, little research has elucidated how this type of thinking influences not only employee attitudes but also their interpersonal behaviors at work.

Social cognitive theory suggests that supervisors play an important role in shaping the context in which employees work and interact with others [4]. Thus, employees and their interactions with colleagues may be significantly impacted when they perceive supervisors to adopt a one-dimensional mindset. Studies have shown that supervisor BLM influences employees’ interpersonal behaviors, such as social undermining [2], organizational citizenship behavior toward coworkers [1], and workplace mistreatment [5] Because employees are so focused on pursuing bottom-line performance goals that ignore ethical issues in their work [2,6]. Indeed, the BLM literature to date has focused on the effects of supervisor BLM on employees’ explicit unethical behavior toward coworkers. However, such hostile interrelationships with others may violate social norms, especially in a cultural context that emphasizes interpersonal harmony, such as in China [7]. In contrast, implicit behaviors seem to be more applicable in the cultural context of China. One commonly practiced implicit behavior is knowledge hiding, defined as intentionally withholding or concealing knowledge when others request it [8] and recognized to be detrimental to individual and team creativity [9,10], interpersonal relationships [11], and employee retention [12]. To shed light on this negative interpersonal behavior in the Chinese context, we investigated how employee perceptions of supervisor BLM influence their knowledge hiding toward coworkers.
We drew on conservation of resources (COR) theory [13] to explain how supervisor BLM in the eyes of employees will induce knowledge hiding toward coworkers. We hypothesized that prevention-based psychological ownership mediates the positive relationship between supervisor BLM and knowledge hiding toward coworkers. Psychological ownership (PO) is the feeling of ownership toward a target [14], which can be promotion or prevention-based [15]. Prevention-based PO can be distinguished from the promotion-based form as being more defensive and driven by values of conservation [15]. Individuals who have prevention-based PO tend to be territorial to protect their physical spaces, ideas, roles, and relationships in organizations [15,16]. As a result, employees are likely to protect important information from their colleagues because knowledge is an important resource in contemporary organizations that may determine employee promotion and career success. A competitive psychological climate will moderate this indirect effect because employees who work under a highly competitive climate will experience more resource loss, causing more prevention-based PO than those who work in a less competitive climate.

2. Theoretical Background and Hypotheses
2.1. Supervisor BLM and Employee Knowledge Hiding toward Coworkers

Securing bottom-line profit goals inherently underscores one’s competence, status, and ability to win scarce resources within an organization [17]. COR theory suggests that individuals are motivated to protect and acquire resources [13]. From a knowledge-based view, knowledge is stored within individuals and is an important resource for organizations to advance their competitiveness and profit [18]. At the individual level, employees need specific knowledge or expertise to complete productivity goals [2]. Exclusive knowledge is a source of power and competitive advantage [19,20], whereas sharing important knowledge with others often risks losing personal influence [21].

Knowledge hiding involves withholding or concealing knowledge from others and consists of three aspects [8]. Evasive hiding refers to providing wrong, incomplete, or misleading information for knowledge requestors; playing numb occurs when the hider ignores the requirement of knowledge requestors, and rationalized hiding is a less deceptive behavior aimed at protecting information for confidentiality reasons. Knowledge hiding can be driven by the desire to obtain higher performance [22]. When employees perceive their supervisors to hold a BLM that is only concerned about performance, they are more sensitive to resource loss resulting from losing privately held knowledge [14,23]. Employees tend to hide knowledge from their coworkers to protect their knowledge resources and hold their knowledge advantage. Therefore, we proposed the following hypothesis.

Hypothesis 1 (H1): Supervisor BLM will be positively related to knowledge hiding toward coworkers.

2.2. Supervisor BLM and Prevention-Based Psychological Ownership

Psychological ownership (PO) is one’s awareness, thoughts, and beliefs regarding the target of ownership [14]. Individuals hold feelings of possessiveness and build psychological ties with the target of ownership [14]. Following regulatory focus theory [24], Avey et al. [15] distinguished prevention- from promotion-based PO. A promotion focus is useful for personal improvement and development, while a prevention focus is activated when a person needs stability and safety [15]. Individuals who have prevention-based PO often show territorial behaviors to claim ownership of material (e.g., working spaces) and intangible (e.g., project information) assets [16].

We argue that prevention-based ownership may emerge when employees perceive their supervisor to have a BLM. Supervisor BLM can spur employees’ felt obligation toward bottom-line goals and further contribute to task performance [17]. When supervisors hold a BLM, the only way for employees to win the performance game is to devote intellectual energy, time, and effort to their work. On the one hand, the investment of self creates not only a bond between the self and the target [25] but a sense of control over jobs [26]. For instance, Wang et al. [27] indicated that job engagement makes employees extend their
self to their jobs and further enhances job-based psychological ownership. On the other hand, supervisor BLM facilitates a win–lose context which highlights a potential resource loss. As such, employees are encouraged to protect their resources accumulated in working processes. Hence, we proposed the following hypothesis:

**Hypothesis 2 (H2):** Supervisor BLM will be positively related to prevention-based psychological ownership.

2.3. Mediating Role of Prevention-Based Psychological Ownership

As mentioned above, high-BLM supervisors will amplify the potential resource loss and the need to protect resources that may determine the promotion of an employee. As a result, employees develop prevention-based ownership of their possessions within the organization. Individuals experiencing resource loss adopt coping strategies to avoid this situation [28]. Resource depletion triggers a defensive coping strategy. In this situation, knowledge obtained from work effort tends to be marked as an important personal property valued by employees. Sharing knowledge with coworkers threatens knowledge ownership [29]. In contrast, hiding knowledge from coworkers avoids resource loss and accumulates competitive advantages over others. In addition, the behavior of requesting knowledge is interpreted as an infringement on the targets of ownership [15], which implies further resource depletion. Therefore, individuals with a preventative focus are more hesitant about knowledge sharing and are more likely to hide knowledge from others. Hence, we proposed the following hypothesis:

**Hypothesis 3 (H3):** Prevention-based PO will mediate the positive relationship between supervisor BLM and knowledge hiding toward coworkers.

2.4. Moderating Role of Competitive Psychological Climate

A competitive psychological climate refers to “the degree to which employees perceive organizational rewards to be contingent on comparisons of their performance with their coworkers” [30] (p. 89). Indeed, higher levels of it motivate individuals to invest more intellectual energy and focus attention on tasks [31], which enhances employees’ psychological ownership [14]. Such a climate also emphasizes the comparison of performance between employees, causing employees to engage in competition with their colleagues. Especially when supervisors only underscore the importance of profit maximization, comparisons of performance among employees mean that the winning of a higher performance appraisal depends on the failure of others [2]. Hence, individuals feel threatened, rather than stable, regarding their organizational rewards. According to COR theory, individuals form defensive PO as a coping strategy.

In contrast, lower levels of a competitive psychological climate provide more stability and predictability of one’s reward, creating a relatively less stressful environment for employees. Such a climate will mitigate competition marching toward bottom-line goals and evoke fewer defensive coping strategies to deal with resource loss. Hence, we hypothesized the following:

**Hypothesis 4 (H4):** A competitive psychological climate will moderate the relationship between supervisor BLM and prevention-based PO.

As suggested above, when supervisors have high BLM, high (vs. low) levels of the competitive psychological climate will foster a defensive form of PO, evoking more knowledge hiding from coworkers. Thus, we proposed the following hypothesis:

**Hypothesis 5 (H5):** A competitive psychological climate will moderate the indirect effect of supervisor BLM on knowledge hiding through the mediation of prevention-based PO.
3. Method
3.1. Participants and Procedures

We collected data using an online survey of Chinese employees through a widely known platform (www.credamo.com, accessed on 28 September 2021, [32]). We ensured validity and legitimacy through several procedures. First, we added a detection item to identify problematic responses. Second, we excluded questionnaires by checking the completion time and internet protocol (IP) of the respondents. To minimize common method bias [33], we conducted a two-wave survey with a one-month lag in August and September 2021. At Time 1, we measured supervisor BLM, competitive psychological climate, and prevention-based psychological ownership. At Time 2, we measured knowledge hiding from coworkers and collected demographic data.

In the first-wave survey (Time 1), 350 employees completed the questionnaire. One month later (Time 2), 274 out of the 350 employees participated in the second-wave survey, yielding a response rate of 78.3%. Of this sample, 62.8% were women and 37.2% were men. In terms of age, the majority were 21–30 (47.8%) and 31–40 years old (44.5%); less than one-tenth were 41–50 (4.7%) and 51–60 years old (2.9%). Regarding education level, 17.2% had a college degree and below, 69.3% had a bachelor’s degree, 13.1% had a master’s degree, and 0.4% had a doctoral degree. Regarding tenure, 1.5% had worked in their company for below one year, 17.5% for 1–3 years, 63.5% for 3–10 years, and 17.5% for over ten years.

3.2. Measures

All measures were translated, back-translated, and rated on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). We measured supervisor BLM using four items from Greenbaum et al. [2] (α = 0.89). A sample item is “My supervisor cares more about profits than employee well-being.” Competitive psychological climate was measured using three items adapted from Fletcher and Nusbaum [34] (α = 0.79). A sample item is “My coworkers frequently compare their results with mine.” Prevention-based PO was measured with a four-item scale developed by Avey et al. [15] (α = 0.81). A sample item is “I feel I need to protect my ideas from being used by others in my organization.” Knowledge hiding toward coworkers was measured using eight items from Connelly et al. [8] (α = 0.86). Four items were dropped due to low factor loadings. A sample item is “When my colleagues request knowledge from me, I say that I do not know, even though I do.”

4. Results
4.1. Correlations and Descriptive Statistics

Table 1 shows the correlations and descriptive statistics.

<table>
<thead>
<tr>
<th>Table 1. Correlations and descriptive statistics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>1. Gender</td>
</tr>
<tr>
<td>2. Age</td>
</tr>
<tr>
<td>3. Tenure</td>
</tr>
<tr>
<td>4. Education</td>
</tr>
<tr>
<td>5. Supervisor BLM</td>
</tr>
<tr>
<td>6. Competitive Psychological Climate</td>
</tr>
<tr>
<td>7. Prevention-based Psychological Ownership</td>
</tr>
<tr>
<td>8. Knowledge Hiding</td>
</tr>
</tbody>
</table>

Note. N = 274. *p < 0.05 (two-tailed), **p < 0.01 (two-tailed).

4.2. Confirmatory Factor Analysis

The confirmatory factor analysis in Table 2 shows a good fit of the four-factor model.
Table 2. Results for Confirmatory Factor Analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>SRMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four factors (SBLM, PPO, CPC, KH)</td>
<td>307.99</td>
<td>146.00</td>
<td>2.11</td>
<td>0.93</td>
<td>0.92</td>
<td>0.06</td>
<td>0.05</td>
</tr>
<tr>
<td>Three factors (SBLM + PPO, CPC, KH)</td>
<td>642.42</td>
<td>149.00</td>
<td>4.31</td>
<td>0.78</td>
<td>0.75</td>
<td>0.11</td>
<td>0.11</td>
</tr>
<tr>
<td>Two factors (SBLM + PPO, CPC + KH)</td>
<td>906.47</td>
<td>151.00</td>
<td>6.00</td>
<td>0.66</td>
<td>0.62</td>
<td>0.14</td>
<td>0.14</td>
</tr>
<tr>
<td>One factor (SBLM, PPO, CPC, KH)</td>
<td>1523.78</td>
<td>152.00</td>
<td>10.02</td>
<td>0.39</td>
<td>0.31</td>
<td>0.18</td>
<td>0.17</td>
</tr>
</tbody>
</table>

Note. SBLM = supervisor bottom-line mentality; PPO = prevention-based psychological ownership; CPC = competitive psychological climate; KH = knowledge hiding toward coworkers; CFI = comparative factor index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

4.3. Common Method Variance

We conducted Harman’s single-factor test to test for common method variance. The first factor explained 27.48% of the variance, indicating that common method variance was not problematic in our study.

4.4. Hypotheses Testing

We controlled for demographic statistics, including gender, age, education level, and tenure in the analysis. We performed a hierarchical regression analysis to test the hypotheses. As shown in Table 3, supervisor BLM was positively related to prevention-based psychological ownership (b = 0.15, \( p < 0.001 \), 95%CI [0.06, 0.25]) and knowledge hiding toward coworkers (b = 0.18, \( p < 0.001 \), 95%CI [0.11, 0.26]), supporting hypotheses 1 and 2.

Table 3. Results for hierarchical regression.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>PPO</th>
<th>KH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.05</td>
<td>0.06</td>
</tr>
<tr>
<td>Age</td>
<td>–0.08</td>
<td>–0.10</td>
</tr>
<tr>
<td>Tenure</td>
<td>–0.01</td>
<td>0.00</td>
</tr>
<tr>
<td>Education</td>
<td>–0.04</td>
<td>–0.05</td>
</tr>
<tr>
<td>Independent variable</td>
<td>0.15 ***</td>
<td>0.12 ***</td>
</tr>
<tr>
<td>Mediator</td>
<td>0.23 ***</td>
<td></td>
</tr>
<tr>
<td>PPO</td>
<td>0.23 ***</td>
<td></td>
</tr>
<tr>
<td>CPC</td>
<td>0.27 ***</td>
<td>–0.11</td>
</tr>
<tr>
<td>Interaction item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBLM × CPC</td>
<td>0.13 *</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>4.40</td>
<td>2.39 **</td>
</tr>
<tr>
<td>R²</td>
<td>0.00</td>
<td>0.04</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>–0.01</td>
<td>0.03</td>
</tr>
<tr>
<td>ΔR²</td>
<td>0.01</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Note. N = 274. SBLM = supervisor bottom-line mentality; PPO = prevention-based psychological ownership; CPC = competitive psychological climate; KH = knowledge hiding toward coworkers. * \( p < 0.05 \), ** \( p < 0.01 \), *** \( p < 0.001 \) (two-tailed).

We examined the mediation of prevention-based PO using 5000 bootstrapping samples to build 95% confidence intervals. The results indicated a significant direct effect of supervisor BLM on knowledge hiding toward coworkers (b = 0.15, \( p < 0.001 \), 95%CI [0.07, 0.22]), and a significant indirect effect of prevention-based PO (b = 0.04, \( p < 0.05 \), 95%CI [0.01, 0.07]), providing support for hypothesis 3.

We tested the moderating effect of competitive psychological climate on the relationship between supervisor BLM and prevention-based PO. The interaction item was significant (b = 0.13, \( p < 0.05 \), 95%CI [0.01, 0.26]), as shown in the hierarchical regression analysis results in Table 3, providing initial support for the moderating effect. As shown in Figure 1, the simple slope test revealed that supervisor BLM was positively related to prevention-based PO when the competitive psychological climate was high (b = 0.19, \( p < 0.001 \), 95%CI [0.08, 0.31]). However, when the competitive psychological climate was low, the relationship between supervisor BLM and prevention-based PO was not significant (b = 0.01, ns., 95%CI [–0.13, 0.15]). Therefore, hypothesis 4 was supported.
Regarding hypothesis 5, the bootstrapping results indicated that the conditional indirect effect was significant when the competitive psychological climate was high ($b = 0.05$, $SE = 0.02$, 95%CI $[0.01, 0.09]$). However, when the competitive psychological climate was low, the conditional indirect effect was weak and not significant ($b = 0.002$, $SE = 0.02$, 95%CI $[-0.04, 0.04]$). Thus, hypothesis 5 was supported.

5. Discussion

We examined the negative effect of supervisor BLM on employee knowledge hiding via prevention-based PO and revealed the moderating role of a competitive psychological climate. Our study has several theoretical implications. First, drawing on COR theory, we explained why and when supervisor BLM influences employee attitudes and, further, their interpersonal behavior. Our work enriches the current understanding of the mechanisms and boundary conditions of supervisor BLM which focuses on a social learning perspective that supervisor BLM will trigger employee BLM and further influence employee behaviors [2,35]. Second, recent BLM studies have investigated the positive effects of BLM in terms of fostering employee work engagement and task performance [17,36]. However, our findings highlighted the potential dark side of these effects. High levels of job engagement in the context of supervisor BLM are more likely to cause employees’ territorial behaviors [16,37]. Hiding knowledge from coworkers is a defensive coping strategy to avoid resource loss in the competition. Yet this can harm team creativity and performance, which also depends on knowledge transfer among coworkers [38]. Finally, although early psychological ownership studies have identified two forms [15], antecedents of prevention-based PO have rarely been investigated. Our study addressed the role of supervisor BLM in triggering this defensive form of PO.

We should notice that our study had several limitations that might provide future directions for researchers. Although we conducted a two-wave survey to reduce common method bias, our findings are limited by the cross-sectional design. Future studies should gather longitudinal data to explore the changes in the way employees perceive supervisor BLM. In addition, we focused on the cognitive mechanisms underlying supervisor BLM. Further studies could examine the mediating role of affective responses such as workplace anxiety and contempt. For example, faced with supervisor BLM, employees may experience anxiety which involves feelings of nervousness and uneasiness [39]. It will be intriguing for future studies to investigate how and when this feeling hinders or boosts employee performance.

Nonetheless, our study has several practical implications. For one, organizations should notice the detrimental effects of supervisor BLM and be careful when emphasizing the bottom-line goals. When employees perceive that performance goals are overwhelming, they are less like to share knowledge with their coworkers because such behavior is expected to lose resources in the competition. Instead, embracing multiple ways to achieve goals may be an alternative, to avoid such adverse employee outcomes. In addition, our
study implies that a highly competitive climate leads to defensive reactions and hinders knowledge transfer. A reward system that provides more stability and predictability could help reduce unnecessary social comparisons and relieve such a climate.

6. Conclusions

Our research highlights that when employees perceive that their supervisors only focus on bottom-line goals, they tend to develop a defensive form of psychological ownership, which causes knowledge hiding behaviors among employees. These effects are enhanced when the psychological climate is competitive. The comparison of organizational reward among coworkers promotes more defensive reactions to protect knowledge. In conclusion, supervisors should be aware of the negative effects of adopting a BLM on knowledge transfer within the organization and should carefully promote a competitive psychological climate among employees.

Author Contributions: Conceptualization, Z.L. and Y.C.; methodology, Z.L.; software, Z.L.; formal analysis, Z.L.; investigation, Z.L.; resources, Z.L. and Y.C.; writing—original draft preparation, Z.L.; writing—review and editing, Y.C.; visualization, Z.L.; supervision, Y.C. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Ethics Committee of School of Labor and Human Resources, Renmin University of China (SLHR20210005, 24 July 2021) for studies involving humans.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data can be requested from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

References


Sustainability 2022, 14, 586


22. Rhee, Y.W.; Choi, J.N. Knowledge management behavior and individual creativity: Goal orientations as antecedents and in-group social status as moderating contingency. *J. Organ. Behav.* 2017, 38, 813–832. [CrossRef]


