

The formation mechanism of employees' knowledge possession behavior from the perspective of workplace exclusion

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Abstract. Based on the Resource Conservation Theory, this study constructs a mediating effect model with defensive silence as the mediating variable and employee belonging needs as the regulating variable. The results show that: (1) workplace exclusion has a positive predictive effect on employees' knowledge possession behavior; (2) Defensive silence mediates the relationship between workplace exclusion and employees' knowledge possession; (3) Employee belonging needs not only positively regulates the positive relationship between workplace exclusion and employees knowledge possession behavior, but also positively regulates the positive relationship between workplace exclusion and defensive silence; (4) Employee belonging needs regulate the mediating role of employee defensive silence in the relationship between workplace exclusion and employee knowledge possession behavior. This study provides a new perspective on how to optimize the knowledge management process, and provides insights for managers to break the cycle of knowledge possession and create a new model of knowledge sharing among employees in the workplace.

Keywords: workplace exclusion, knowledge possession, defensive silence, employee belonging needs.

1. Introduction

In the era of knowledge driven economy, organizations rely on employees' knowledge and skills to create value for their stakeholders. However, knowledge possession is also a common phenomenon among organization members. Knowledge possession refers to a person's conscious and intentional concealment of knowledge. It is regarded as a strategic concealment of knowledge and a kind of knowledge accumulation that may or may not be shared in the future. Scholars have found that knowledge possession can lead to destructive consequences, such as reducing personal performance, hindering work-related interaction and so on.

Research shows that excluded employees have low engagement, fear and low performance. They consider themselves less important and avoid participating in the socialization process, so as to avoid showing additional role behaviors, such as organizational citizenship and knowledge sharing, and prefer to possess knowledge spontaneously. However, the author believes that workplace exclusion does not directly affect employees' knowledge possession behavior, and suggests taking defensive silence as a potential mechanism to transform workplace exclusion into knowledge possession. Defensive silence is a kind of behavior that employees actively keep silent. When employees think that being outspoken will pose a risk to an individual's position in the organization and may lead to disputes, defensive silence arises.

Conservation of resource theory provides the basic principle for this relationship. As a source of stress, workplace exclusion brings the pain of being excluded and ignored, the blocking of key resources and the destruction of social relations, all of which cause the loss of employees' personal resources (time and energy). The depletion of resources and the subsequent chain reaction will cause continuous pressure on employees, resulting in silence in the workplace. In order to avoid being rejected and make up for the lost resources, employees will begin to show knowledge possession behavior.

Therefore, based on the resource conservation theory, this study constructs a mediating effect model by taking employees' defensive silence as an intermediary variable and employees' belonging needs as a regulating variable to explore the internal mechanism of excluded employees' knowledge possession behavior in the workplace. To a certain extent, it enriches the research results of negative knowledge activities in the academic field, provides new ideas for the research on the causes of knowledge hiding behavior.

2. Theory and Hypothesis

2.1 Workplace exclusion and knowledge possession

The theory of resource conservation (COR) holds that individuals are committed to preserving, protecting, cultivating and acquiring resources. These resources include not only material resources, conditional resources and social resources, but also psychological resources, control resources and energy resources. Therefore, according to cor theory, employees will take specific measures to protect their remaining resources, such as reducing work and knowledge possession.

Workplace exclusion refers to the extent to which employees are ignored and isolated by other organization members in the workplace, resulting in other organization members not listening to their ideas, suggestions and opinions. According to Yang and treadway (2018), exclusion is an intolerable phenomenon in the workplace, whether malicious or not. Employees who suffer from workplace exclusion are prone to a series of negative emotions such as anxiety, depression and depression. They need to spend extra time and energy to evaluate, suppress and adjust their negative emotions and psychological pressure, which will consume a lot of their psychological resources.

Therefore, according to the resource conservation theory (COR), when a resource is lost, employees will try their best to save other non lost resources to make up for the lost resources, and when facing the changing workplace pressure situation, employees who are excluded from the workplace will take the initiative to adjust resources.

H1: workplace exclusion has a significant positive impact on employees' knowledge possession behavior.

2.2 The mediating role of defensive silence

Gkorezis, panagiotou and theodorou (2012) proposed that due to workplace exclusion in the organization, employees will become silent and hide important information. Milliken, Morrison and hewlin define defensive silence as an intentional and active self-protection behavior that ignores facts and retains relevant opinions due to fear. They suggest that defensive silence is harmful in an organizational environment because it can produce negative work-related results. Similarly, when employees feel that their information and views will not be appreciated by others, or may bring negative or unpleasant results, they will not fully express themselves and adopt defensive silence.

According to the resource conservation theory (COR), when its own resources are consumed excessively and there is no effective supplement of new resources, it will lead to the spiral of resource loss. Employees who suffer from workplace exclusion fear further loss of valuable resources, such as social relations, social support and opportunities for rapid growth in the workplace. Therefore, employees become more proactive, use defensive silence as a strategy to recover lost resources, and consciously avoid sharing their knowledge and opinions with others.

H2: defensive silence plays an intermediary role between workplace exclusion and knowledge possession.

2.3 Regulation of employee attribution needs

2.3.1 The moderating role of employee belonging needs in workplace exclusion and employee knowledge possession behavior

Furthermore, individuals with high attribution need to care more about collective attribution and recognition of others, and are more sensitive to the loss of relevant resources caused by exclusion, which will trigger a deeper defensive silence and more lasting follow-up response, which will have an impact on employees' knowledge possession and lead to the increase of employees' knowledge possession tendency. When employees' belonging needs are low, employees' perceived sense of resource deprivation caused by workplace exclusion is weak, which alleviates the impact of workplace exclusion on employees' knowledge possession.

H3: the need of employee belonging regulates the relationship between workplace exclusion and employee knowledge possession behavior, that is, the stronger the need of employee belonging, the stronger the positive relationship between workplace exclusion and employee knowledge possession behavior.

2.3.2 The moderating role of employee belonging needs in workplace exclusion and defensive silence

Belonging needs refer to "the bottom driving force for people to shape and maintain a minimum of lasting, positive and meaningful social ties" (Hobfoll, 1989). Individuals with different levels of belonging needs feel different degrees of workplace exclusion on resource loss. Specifically, employees with high attribution needs tend to maintain close relationships with others, have strong interpersonal sensitivity, and are more sensitive and concerned about exclusion, rejection and isolation from others. In addition, when individuals with high attribution need feel exclusion, they are more likely to make up for their relationship with others through a series of methods (such as prosocial behavior and flattering behavior), which will consume a lot of psychological resources. In order to prevent further resource depletion spiral, employees who suffer from workplace exclusion will adopt defensive silence as a means to protect existing resources.

H4: the need of employee belonging regulates the relationship between workplace exclusion and defensive silence, that is, the stronger the need of employee belonging, the stronger the positive relationship between workplace exclusion and defensive silence.

2.3.3 The need of employee belonging regulates the mediating role of defensive silence in the relationship between workplace exclusion and employee knowledge possession behavior

Combined with hypothesis 3 and Hypothesis 4, this study also proposes a regulated intermediary hypothesis, that is, with the continuous change of the degree of individual belonging needs, the impact of workplace exclusion on knowledge possession behavior through defensive silence will also change. Specifically, compared with individuals with low belonging needs, excluded people with high belonging needs are more prone to defensive silence. When facing the knowledge request of others, they will deliberately avoid others or deliberately hide knowledge to reduce the impact of the dual pressure of working environment and interpersonal relations on themselves. Therefore, they are more likely to choose to hide their knowledge in order to protect their own resources.

H5: the mediating effect of defensive silence on workplace exclusion and knowledge possession behavior is regulated by employees' attribution needs, that is, the stronger the individual's attribution needs, the stronger the mediating effect of defensive silence.

3. Research Method

In this study, a questionnaire survey was used to obtain the research data. Take the employees in the Internet industry as the survey object, and the sample covers Beijing, Shandong, Liaoning and other provinces and cities. In order to avoid the problem of common method deviation, marked variables were added to the questionnaire for measurement. A total of 247 questionnaires were

distributed and recovered, and 22 questionnaires with obvious response tendency were excluded. 225 valid questionnaires were obtained, with an effective rate of 91.1%.

4. Results

4.1 Descriptive statistics and correlation analysis

The statistical results of descriptive statistics and correlation analysis of each research variable are shown in Table 1 below. Workplace exclusion is positively correlated with knowledge possession and defensive silence, i.e. ($r=0.58, P<0.001$) and ($r=0.69, P<0.001$), which provides preliminary support for the proposed hypothesis. Table 1 also describes the positive correlation between employee belonging needs and workplace exclusion, i.e. ($r=0.70, P<0.001$). Since all values of the correlation coefficient "R" are in the range of 0.3 to 0.7; Therefore, there is no multicollinearity problem in the data.

Table.1. Descriptive statistics and correlation coefficient of variables

variable	mean value	standard deviation	1	2	3	4
1 workplace exclusion	4.44	1.54	1			
2 defensive silence	4.06	1.63	0.69***	1		
3 knowledge possession behavior	4.26	1.66	0.58***	0.71***	1	
4 employee belonging needs	4.52	1.29	0.70***	0.63***	0.34***	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, $n = 225$

4.2 Hypothesis Test

4.2.1 Main effect test and mediating effect test of defensive silence

In this study, bootstrap (Edwards & Lambert, 2007) was used to test the mediating effect of defensive silence. The results are shown in Table 2.

Table.2. Bootstrap of mediating effect test

Path relationship	c Total effect	a	b	a*b Intermediary effect	a*b (95% BootCI)	c' Direct effect	Calculation formula of effect proportion	effect proportion
workplace exclusion⇒defensive silence⇒knowledge possession behavior	0.638** *	0.522** *	0.275** *	0.148	0.098 ~ 0.194	0.497** *	a*b/c	23.197%

According to Table 2, the 95% confidence interval (CI) of defensive silence is [0.098,0.194], and the 95% interval does not contain the number 0, indicating that defensive silence plays a significant intermediary role in workplace exclusion and knowledge possession behavior, and the hypothesis H2 is verified. On this basis, the calculation shows that its effect accounts for 23.197%, indicating that defensive silence plays a partial intermediary role in workplace exclusion and knowledge possession. The mediating effect model of this study is shown in Figure 1.

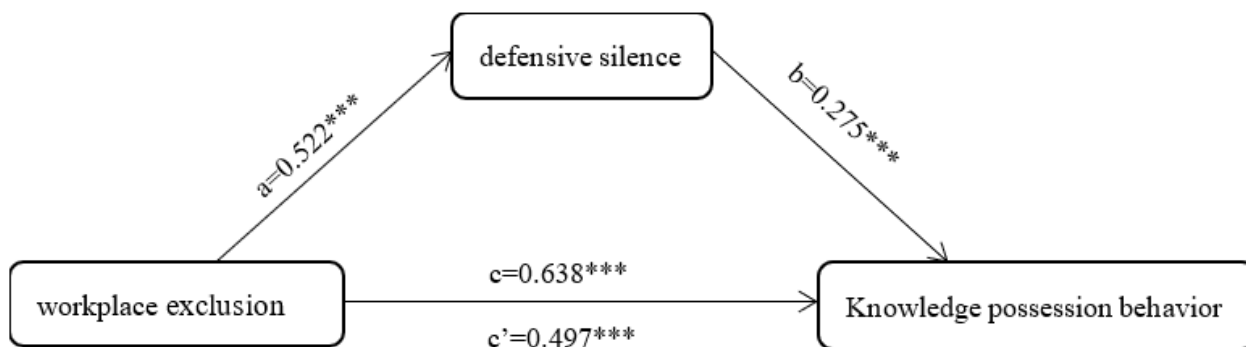


Figure 1. Mediating effect model of defensive silence

4.2.2 Adjustment effect test of employee attribution needs

(1) The moderating effect of employee belonging needs in the relationship between workplace exclusion and knowledge possession behavior

This study uses stepwise regression (Baron & Kenny, 1986) and interaction item construction (Cohen et al., 2013) to test the moderating effect of employee attribution needs in the relationship between workplace exclusion and knowledge possession behavior. The results are shown in Table 3.

Table 3. The moderating effect of employee belonging needs in the relationship between workplace exclusion and knowledge possession behavior

variable	knowledge possession behavior					
	M1		M2		M3	
	β	t	β	t	β	t
control variable						
Gender	-0.062	-0.757	-0.007	-0.076	-0.018	-0.254
Age	0.071	1.484	0.005	0.204	0.006	0.159
Management level	-0.093	-1.572	-0.026	-0.627	-0.026	-0.577
Seniority	0.205***	5.342	-0.087**	-2.765	-0.096*	-3.174
independent variable						
workplace exclusion			0.616***	16.217	0.618***	16.442
employee belonging needs			0.041	1.207	0.025	0.746
Interactive item						
workplace exclusion×employee belonging needs					0.155***	4.096
R2	0.097		0.464		0.488	
F	8.215***		46.708***		44.656***	
$\Delta R2$	0.097		0.367		0.025	
ΔF	8.215***		129.126***		16.743***	

According to the results of model 2 in Table 3, after the age, management level and other factors of employees are statistically controlled, workplace exclusion still has a significant positive impact on employees' knowledge possession behavior ($\beta=0.616$, $p<0.001$). In addition, the change of F value of model 3 relative to model 2 is significant ($\Delta F=16.743$, $P<0.001$), so there is a regulatory effect of employee attribution needs. Moreover, in model 3, the interaction item (workplace exclusion)×(Employee attribution need) has a significant positive impact on employees' knowledge possession behavior ($\beta=0.155$, $P<0.001$), so the need for employee belonging has a significant positive impact on the positive correlation between workplace exclusion and knowledge possession behavior. Specifically,

the stronger the need for personal belonging, the greater the tendency of knowledge possession after being excluded from the workplace. On the contrary, if employees have weak attribution needs, the less likely they will have knowledge possession after being excluded from the workplace, so it is assumed that H3 can be verified.

(2) The moderating effect of employee belonging needs in the relationship between workplace exclusion and defensive silence

This study uses stepwise regression (Baron & Kenny, 1986) and interaction item construction (Cohen et al., 2013) to test the moderating effect of employee attribution needs. The results are shown in Table 4.

Table.4. The moderating effect of employee belonging needs in the relationship between workplace exclusion and defensive silence

variable	defensive silence					
	M1		M2		M3	
	β	t	β	t	β	t
control variable						
Gender	0.092	0.803	0.155	1.573	0.145	1.474
Age	0.066	0.984	-0.006	-0.124	-0.008	-0.160
Management level	0.057	0.742	0.132	1.875	0.134	1.927
Seniority	-0.175**	-3.262	-0.037	-0.815	-0.052	-1.051
independent variable						
workplace exclusion			0.672***	11.317	0.676***	11.462
employee belonging needs			0.022	0.404	0.005	0.096
Interactive item						
workplace exclusion×employee belonging needs					0.153**	2.615
R2	0.028		0.274		0.288	
F	2.195		20.648***		19.202***	
Δ R2	0.028		0.246		0.015	
Δ F	2.195		64.936***		6.843**	

It can be seen from the results of model 2 in Table 4 that after the factors such as employees' age and management level are statistically controlled, workplace exclusion still has a significant positive impact on employees' defensive silence ($\beta=0.672$, $p<0.001$)。 In addition, the change of F value of model 3 relative to model 2 is significant ($\Delta F= 6.843$, $P<0.01$), so there is a regulatory effect of employee attribution needs. Moreover, in model 3, the interaction item (workplace exclusion)×(Employee attribution need) has a significant positive impact on employees' defensive silence ($\beta =0.153$, $P<0.01$), so the need for employee belonging has a significant positive impact on the positive correlation between workplace exclusion and defensive silence. Specifically, the stronger the need for personal belonging, the greater the tendency of defensive silence after being excluded from the workplace. On the contrary, if employees' belonging needs are weak, the less likely they will be to have defensive silence after being rejected by the workplace, so it is assumed that H4 can be verified.

(3) Moderated mediating effect test

The results are shown in Table 5 and Table 6.

Table.5. Conditional Direct Effect Results

dependent variable	employee belonging needs	Effect	SE	t	p	LLCI	ULCI
	(M-SD): 2.735	0.375	0.062	5.864	0.000	0.249	0.497

knowledge possession	(M) : 3.643	0.484	0.053	9.342	0.000	0.382	0.585
behavior	(M+SD) : 4.551	0.598	0.067	8.656	0.000	0.463	0.732

According to Table 5, when employees' belonging needs are at different levels, workplace exclusion has a significant positive impact on knowledge possession behavior (95% confidence interval does not include the number 0), and with the change of belonging needs from low to high, the positive correlation between workplace exclusion and knowledge possession behavior is gradually increasing. Therefore, employee belonging needs to play a positive regulatory role in the relationship between workplace exclusion and knowledge possession behavior.

Table.6. Moderated mediating effect difference results

Intermediary variable	employee belonging needs	Contrast	BootSE	BootLLCI	BootULCI
defensive silence	(M) - (M-SD)	0.029	0.001	0.024	0.025
	(M+SD) - (M-SD)	0.056	0.007	0.040	0.060
	(M+SD) - (M)	0.027	0.006	0.016	0.035

Table 6 shows that for the mediating effect of defensive silence, comparing the regulatory effects of individuals with different levels of attribution needs (M+SD, M and M-SD), it is concluded that the 95% confidence interval of the difference between the high-level attribution needs group (M+SD) and the low-level attribution needs group (M-SD) is [0.04, 0.06]. This confidence interval does not include the number 0, that is, it is considered that the regulated mediating effect exists. In other words, with the increase of the need for individual belonging, employees who suffer from workplace exclusion are more likely to have knowledge possession behavior through defensive silence, so hypothesis H5 can be verified.

5. Conclusions

Based on the resource conservation theory (COR), this study explores the internal mechanism of the impact of workplace exclusion on employees' knowledge possession behavior.

Firstly, workplace exclusion is positively correlated with employees' knowledge possession behavior. The results show that employees who suffer from workplace exclusion believe that knowledge possession behavior can be used as a way to deal with exclusion. Knowledge is regarded as an important organizational resource. Through the possession of knowledge, they may regain the resources they have lost. Therefore, employees can improve their power and influence in the workplace by accumulating knowledge.

Secondly, the empirical results show that defensive silence partially mediates the positive correlation between workplace exclusion and knowledge possession behavior. Workplace exclusion is a potential determinant of employees' defensive silence. Employees who suffer from workplace exclusion protect themselves from being ignored by taking defensive silence. When employees feel that their position in the organization is unstable, they will take defensive silence as a means and use knowledge possession as a weapon to maintain their existence in the organization. The purpose is to regain exhausted resources, so they are unwilling to share their knowledge with others.

Finally, on the one hand, the research conclusion shows that employees' belonging needs positively regulate the positive impact of workplace exclusion on knowledge possession behavior. In other words, employees with strong personal belonging needs are more likely to engage in knowledge possession after being excluded from the workplace; On the other hand, the research conclusion also shows that employee belonging needs have a positive regulatory effect on the relationship between workplace exclusion and defensive silence, that is, compared with employees with lower belonging needs, employees with higher belonging needs are more likely to adopt defensive silence as a means of self-protection when suffering from workplace exclusion; Finally, this study further found that employee belonging needs have a significant moderating effect on the mediating effect of defensive silence in the relationship between workplace exclusion and knowledge possession behavior, that is, for

employees with different levels of belonging needs, the mediating effect of defensive silence has also changed significantly. Therefore, there is a moderating mediating effect in this study. That is, for individuals with a high level of belonging needs, they will be more likely to adopt defensive silence and then appear the behavior of knowledge possession after suffering from workplace exclusion. The transmission role of defensive silence in workplace exclusion and knowledge possession behavior will be stronger.

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