

---

# Perceived Organizational Support Leads to Less Depression Among Hotel Employees in China

Ming Lei\*, Wei Chen

School of Tourism Sciences, Beijing International Studies University, Beijing, China

**Email address:**

[minglei@bisu.edu.cn](mailto:minglei@bisu.edu.cn) (Ming Lei)

\*Corresponding author

**To cite this article:**

Ming Lei, Wei Chen. Perceived Organizational Support Leads to Less Depression Among Hotel Employees in China. *Journal of Human Resource Management*. Vol. 8, No. 2, 2020, pp. 60-68. doi: 10.11648/j.jhrm.201200802.13

**Received:** February 25, 2020; **Accepted:** March 9, 2020; **Published:** March 17, 2020

---

**Abstract:** Given that the occurrence of depression in the workplace are severe in China, the present study empirically explored the combating effect of perceived organizational support on hospitality employees' depression, and the mediating effect of person-organization fit, as well as the moderating role of organizational tenure on the relation between perceived organizational support and depression. A self-administered questionnaire was distributed to 250 frontline employees from the hotel industry in China. Depressive symptoms, perceived organizational support, person-organization fit and organizational tenure were measured anonymously. A total of 228 effective respondents became our final example. Hierarchical multiple regression was used to test the hypothesized model. Results showed that (a) workplace depression was negatively predicted by perceived organizational support and person-organization fit, (b) person-organization fit mediated the relation between perceived organizational support and depression, and (c) organizational tenure strengthened the negative relation between perceived organizational support and depression. This study contributes to the hospitality management literature by testing the organizational resources in mitigating depression, and investigating the pathway to link perceived organizational support to depression via person-organization fit. In practice, this study sheds light on the potential interventions that could be taken by the organization to reduce depression that is prevalent in the service industry.

**Keywords:** Depression, Perceived Organizational Support, Person-organization Fit, Organizational Tenure

---

## 1. Introduction

As the saying goes: "Happy employees, happy customers". The quality of interaction between employees and customers has a profound impact on customers' satisfaction level and their willingness to share positive word-of-mouth about an organization. Employees' mental health condition in the workplace plays a critical role in this employee-customer interaction process. Thus, workplace depression of employees has attracted the attention of researchers [1], especially in the hospitality industry [2, 3]. Depression refers to prolonged negative feelings, inability to concentrate or function normally and other related depressive symptomatology [4]. WHO (World Health Organization) estimates that depression will become the second leading cause of disability worldwide by 2020 [5]. A survey in European Union showed that 20% of the workforce suffers from some kind of mental health disorder at any given time, particularly depression [6]. In China, with the

rapid development of economy and society, the workplace depression is much more severe [7]. According to a survey conducted in 2010, the average prevalence of depressive symptoms is 46% among various occupational populations, including teachers, managers, researchers, and community health workers [8].

Hotel employees, working under high pressure, and interacting emotionally with clients, are prone to suffer from many kinds of mental disorders, especially depression [2, 3]. Shani and Pizam (2009) found that hotel employees exhibited a medium to high level of work-related depression [2]. The hotel sample's mean score of work-related depression was 12.5, with a standard deviation of 1.92, and 8.7% of the respondents had a score higher than the midpoint on the scale. Karatepe and Tizabi (2011) have also found that Arab frontline hotel employees experienced a high level of workplace depression [3]. The hospitality industry has been recognized as one of the most stressful and demanding

professions, resulting in workers' vulnerability to mental disorders, especially depression.

Beyond the obvious damage to individual's physical health and quality of life [9], depression gives rise to a number of negative job-related consequences, including deficient attention [10], lower work productivity [11], lower job satisfaction and job performance [2], and higher withdrawal behaviors of employees, such as work absence and turnover intention [12]. Also, depression could ruin the organizational climate [13] and bring economic burden to organizations [1]. Thus, managers have both social and economic reasons for taking actions to reduce depressive symptoms of employees. Despite the expensive and time-consuming approach of cognitive behavioral therapy (CBP), which is often used for severe depressive patients [1], organizational interventions would be more useful and available for the medium to high depression level in the workplace. Identifying the organizational antecedents of depression will offer potential low-cost and operational tools in combating depression in the workplace.

Perceived organizational support (POS) is defined as employees' general belief that their work organization values their contribution and cares about their well-being based on their perceptions of how readily the organization will reward their job performance and meet their social-emotional needs [14, 15]. According to the conservation of resources theory [16], psychological resources will compensate the depletion of resources in daily emotional demanding work, and alleviate the negative effects of over-consumption of resources. Although hospitality scholars have argued that psychological resources could mitigate emotional exhaustion and depression [3, 17], a wealth of studies have linked personal resources to workplace depression. For instance, Karatepe and Tizabi (2011) have examined the effects of personal factors, such as intrinsic motivation and positive affectivity in reducing depression [3], aiming to identify individuals who are vulnerable to depression and who have personal resources to adapt to their environment [18, 19]. Unfortunately, the relationship between organizational factors and individual depression remains unclear. Perceived organizational support (POS), as one of the most important organizational resources of employees, might have a profound impact on the combating of depression. Therefore, the first purpose of the present study is to elucidate the relationship between POS and employees' depression.

Based on the reciprocity norm, POS would increase the organizational commitment and job performance of employees [20, 21], and decreases the intention to leave [22]. In addition to the affective commitment to organization, POS could further increase employees' cognitive ties with the organization [23]. Job embeddedness refers to the net or web of influences and connections that attach an individual to an organization [24], and job fit, as one primary component of job embeddedness, consists of perceptions of comfort or compatibility within the environment of an organization [24]. The positive relation between POS and person-organization fit has been proved by the literature [23]. On the other hand, a

wealth of studies has found the positive relation between person-environment fit and well-being [25, 26]. The perception of fit between individuals and the environment decreases the stress level one perceives, thus improving the psychological well-being of employees [25, 26]. Therefore, the second purpose of this paper is to demonstrate the mediating role of person-organization fit in the context of perceived organization support and employee depression

Previous researchers have found that organizational tenure will affect the availability to and utilization of psychological resources [27, 28]. For instance, Kraemer et al. (2014) reported that organizational tenure moderated the relationship between job resource and organizational pride, suggesting that long tenure employees could use more job resource to foster organizational pride [27, 28]. Furthermore, age, which is positively related to organizational tenure, has been considered as a protective mechanism for mental health [29, 30]. Yet the moderating effect of organizational tenure between organizational resources and depression has remained unclear. Thus, the third purpose of this research is to posit and test potentially important moderating effect of employees' tenure on the POS and depression relation.

This study contributes to the hospitality management literature in the following ways. First, previous researches have focused on the role of personal resources in combating workplace depression [3], the present study expands on current researches by testing the organizational resources in mitigating depression. Second, this research investigates the pathway to link perceived organizational support to depression via person-organization fit. Third, this paper tests the moderating role of organizational tenure in the relation between perceived organizational support and depression. The conceptual model of this research is defined in Figure 1.

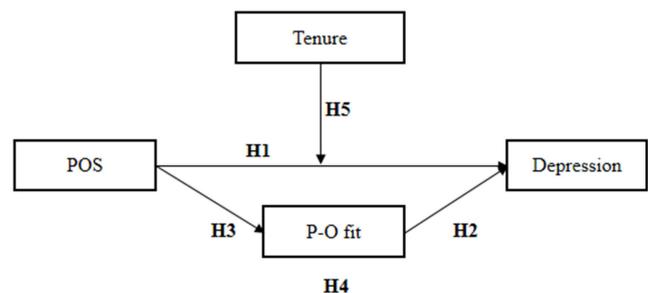


Figure 1. Conceptual model of the study.

## 2. Theory and Hypotheses

### 2.1. Perceived Organizational Support and Depression

Perceived organizational support (POS) is employees' general belief that their work organization values their contribution and cares about their well-being [14, 15]. POS could satisfy the emotional and material needs of employees. POS must satisfy certain emotional needs of the employees, such as respect, emotional support, and being approved [15]. The employees' expectations of being cared for and being valued by their organizations increases the belief of the

employees that these organizations will approve, reward and appreciate their attitudes and behaviors. The rewarding of the organization may be in the informal form of praise or counseling, or it may be in the more formal form of promotion or pay-rise [31]. Employees who have high perceptions of organizational support will have more positive feelings about their organizations (e.g. increasing job satisfaction, positive spiritual status, and decreasing stress) and will contribute to their organizations more (increasing job performance). If the organization does not care adequately for the contributions of the employees, the organizational support perceptions of the employees will decrease; and, depending on this, the gratitude/responsibility they feel for their organizations will decrease too [14]. In addition, the feeling of obligation created by high perceived organization support makes employees feel more emotionally committed towards organizations [31], as well as more cognitively embedded in the organizations [23].

The literature generally supports the idea that psychological resources will affect the mental health of employees, i.e. the well-being [32], anxiety [33], depression [34]. According to the conservation of resources theory [16], psychological resources will compensate the depletion of resources in daily emotional demanding work, and alleviate the negative effects of over-consumption of resources. Previous researches have examined the effects of personal resources, such as intrinsic motivation, positive affectivity [3], and psychological capital [34] in combating depression, aiming to identify individuals who are vulnerable to depression and who have personal resources to adapt to their environment. In our study, POS, as an important kind of organizational resources, will cover the emotional needs of employees; and depending on this, employees with high POS, that is, when the organization is providing rewards and enrichment opportunities for their service, are likely to become attached to their organization [32], and less likely to experience long-term physical and psychological health problems, such as depression and anxiety [34, 35]. On the other hand, if the organization does not care adequately for the contributions of the employees, the organizational support perceptions of the employees will decrease, and they will be more likely to experience high level of depression. Given the mentioned argument, it is expected that POS would be negatively related to depression, and therefore, it is hypothesized as following:

Hypothesis 1: perceived organizational support is negatively related to employees' depression.

## **2.2. The Mediating Role of Person-organization Fit**

Person-organization fit (P-O fit), addresses the compatibility between people and the entire organization in terms of personality, value, climate, and goal [36]. POS could promote employees' feeling of fit with the organization. Based on the reciprocity norm, POS would increase both employees' emotional attachment to and the cognitive connection with the organization [23]. According to the job embeddedness model, job embeddedness refers to the net or web of influences and connections that attach an individual to an organization. Person-organization fit, as one primary

component of job embeddedness, consists of perceptions of comfort or compatibility within the environment of an organization [24]. Due to the congruent goal employees and the organization share, POS could elicit employee' felt obligation to care about the organization's welfare and to help the organization reach its objectives, thus employees will experience higher level of person-organization fit. High POS individuals feel high level of person-organization fit because they received a high amount of support and resource from the organization and in turn want to help the organization reach its goal, leading to the increased compatibility with their organization. In contrast, individuals with low POS receive low level of support from the organization, which will decrease their commitment and belonging to the organization and reduce their feeling of compatibility with their organization. Thus, individuals higher in POS who feel a lot of support from the organization will be likely to experience higher level of person-organization fit.

On the other hand, psychological strains arise not from the person or environment separately, but rather by their fit or congruence with each other [37, 38]. Person-Environment fit theory reflects how person-environment combine to influence stress and well-being [39, 40]. The perception of fit between individuals and the environment decreases the stress level one perceives, thus improving the psychological well-being of employees [25, 26]. Researches have revealed that subjective person-organization misfit leads to psychological, physical and behavioral strains [39]. When such experience of strains accumulates over time, severe mental and physical illnesses, such as depression could occur [26, 41]. In contrary, sustained good person-organization fit can produce positive behavioral outcomes, such as less burnout, more commitment to organizations and better job performances [36]. Thus, employees with better person-organization fit will experience less psychological strains, leading to less experience of depression, while employees with lower person-organization fit will have higher level of depressive symptoms.

Finally, the effect of POS on depression could be understood in terms of the cognitive pathway. The term of depression refers not only prolonged negative emotions, but also the cognitive inability to concentrate or function normally for individuals [4]. Previous researches have been focusing on this emotional pathway to alleviate depression [2, 3]. For instance, Karatepe et al. (2011) investigated the mediating effect of emotional exhaustion between personal resources and depression. Other studies have examined the relationship between POS and P-O fit and the relationship between POS and depression. However, empirical research on the effect of POS on depression through P-O fit is scant. Based on the social exchange theory, a person's perceived feelings of organization support will increase one's cognitive connection with the organization, leading to the enhancement of fit feeling with the organization. Furthermore, the enhancement of fit with the organization will increase one's psychological well-being and mental health. Based on the above discussions and hypotheses, it is expected that P-O fit will serve as a mediator such that POS will be related to P-O fit, which will in

turn be related to depression. Thus, on the basis of the above arguments, we propose the following hypotheses:

Hypothesis 2: POS is positively related to person-organization fit.

Hypothesis 3: Person-organization fit is negatively related to depression.

Hypothesis 4: Person-organization fit mediates the relationship between POS and depression.

### 2.3. The Moderating Effect of Organizational Tenure

According to the conservation of resources theory [42], the more resources a person could utilize, the better he/she could adapt to the environment, leading to a healthier condition of mental health. Scholars addressing psychological well-being and successful aging have argued the protecting effect of organizational tenure and age in dealing with depression and aging [29, 30, 43]. Yet little attention has been paid to the moderating role of organizational tenure on the relation between POS and depression. Previous researchers have found that organizational tenure will affect the availability to and utilization of psychological resources [27, 28, 43]. Gu et al. (2017) revealed that employees with longer tenure could adapt better to the leadership of managers and promote more innovational behaviors [43]. Furthermore, age, which is positively related to organizational tenure, has been considered as a protective mechanism for mental health [29, 30]. Thus, experienced employees with longer tenure are more likely to use the organizational resources, and hence reduce the depressive symptom, while employees with shorter tenure are less likely to use the various types of organizational resources they may have access to, resulting in the more severe condition of depression. As such, we anticipate that organizational tenure will strengthen the negative relation between POS and depression. The following is proposed:

Hypothesis 5: Organizational tenure strengthens the relation between POS and depression.

## 3. Methods

### 3.1. Data Collection

This study used a sample of 228 frontline employees working in hotels in China. Survey questionnaires were distributed face to face at a hotel training seminar held in Beijing. After the participants were given a brief and complete description of the study, written informed consent was obtained. In total, 250 questionnaires were sent out and 228 valid copies were received back, with the response rate to be 91.2%. 46.5% were male and 53.5% were female. Most of the participants, 71.5%, were in the age groups of 25-44. In terms of educational background, 45.1% of participants reported having less than a bachelor's degree, 53.1% had a bachelor's degree, and 1.8% had a graduate degree or beyond. The average tenure of service in the current company was 6.24 years, ranging from 0.1 to 32 years ( $SD=5.72$ ).

### 3.2. Measures

All the scales used in the present research were in Chinese. They were translated and back-translated by the standard procedure. The survey contained the following sections, each derived from previous literature.

*Perceived organizational support.* Employees' perceptions of organizational support were captured using the short version of Eisenberger et al.'s 36-item instrument (1986). The short version with 8 items was translated into Chinese and verified [44]. Participants were asked to rate their agreement on statement such as "My hotel is willing to help me when I need a special favor" or "If possible, my hotel will make advantage of me" (reversed coded) with a 7-point Likert scale (1=strong disagree, 7=strong agree). The Cronbach's  $\alpha$  in this study was 0.79.

*Person-organization fit.* Saks and Ashforth's perception of fit [45] measure was adapted to measure person-organization fit (4 items) on a 5-point scale (1=to a very little extent, 5=to a very large extent). Example item is "The organization a good match for you". The Cronbach's  $\alpha$  in this study was 0.82.

*Center for Epidemiological Studies-Depression Scale (CES-D).* Depression scale with 20 items was used, which has been validated in Chinese population [46]. Each of the 20 items has 4 possible options that describe the frequency of respondents' feelings in the past week ranging from 0 "rarely or none of the time (less than 1 day)" to 3 "most or all of the time (5 to 7 days)". Sample items are "I felt depressed", "I felt fearful", "I felt that people dislike me" and "I felt happy" (reversed coded). The Cronbach's  $\alpha$  in this study was 0.78.

*Tenure.* Employees were asked to report their tenure with the hotel. Tenure was measured by number of years working in the hotel.

*Control variables.* We controlled for the possible effects of gender, education, working hours and employee number because previous researches have suggested the possible effect of gender [47], education [48] and hours of work [49, 50] on depression. Employee numbers were controlled because it may affect the perception and accessibility of organizational sources.

### 3.3. Statistical Analysis

Pearson's correlation analyses were used to examine the correlations among continuous variables. Hierarchical multiple regression was undertaken to test the hypothesized model using SPSS 22.0, and statistical significance was defined as  $p < 0.05$  (two tailed). PROCESS proposed by Hayes (2013) was used to analyze the indirect effect in the model.

## 4. Results

### 4.1. Test of Measurement Model

To examine the discrimination of the measured constructs, we conducted a confirmatory factor analysis (CFA) using Mplus 7.0. Results showed that the three-factor (i.e., POS,

person-organization fit and depression) model fit the data well,  $\chi^2(32)=1.85, p < .01$ , CFI [Comparative Fit Index]=.97, TLI [Tucker-Lewis Index]=.96, RMSEA [Root Mean Square Error of Approximation]=.06. All items in this model are significantly loaded on their corresponding factors ( $p < .05$ ).

Compared with all three constrained models in which any two of the three factors were combined (Table 1), the hypothesized measurement model showed a significantly better fit to the data ( $45.44 \leq \Delta\chi^2 [\Delta df=2] \leq 176.2, ps < .05$ ). These results demonstrated the distinctiveness of our measures.

Table 1. Confirmatory factor analysis of measurement models.

Model	$\chi^2$	Df	CFI	TLI	RMSEA
Three factor model: POS; FIT; DE	59.34	32	.97	.96	.06
Two factor model: POS + FIT; DE	104.78	34	.92	.89	.09
Two factor model: POS + DE; FIT	230.11	34	.78	.71	.15
Two factor model: FIT + DE; POS	235.54	34	.77	.71	.16
One factor model: POS + FIT + DE	277.96	35	.72	.65	.17

N=228. POS: perceived organizational support; FIT: person-organization fit; DE: depression.

As the questionnaires in the present study were all self-reported, we conducted Harman’s single-factor test using CFA to determine the potential threat of common method bias. The results for a single-factor model were as follows:  $\chi^2(35)=7.94$ , CFI [Comparative Fit Index]=.72, TLI [Tucker-Lewis Index]=.65, RMSEA [Root Mean Square Error of Approximation]=.17. The single-factor model accounted for 24% of the total variance. As table 1 shown, the three-factor model was superior to the single-factor model. Consequently, common method bias was not a critical threat to the magnitudes of the hypothesized relationships.

4.2. Descriptive Statistics and Correlations

The average scores, the standard deviations of variables, and their Pearson correlation coefficients are presented in Table 2. The mean score of depression was 13.03, and the standard deviation was 7.45. According to the Chinese Psychiatric Association, higher score in the CES-D questionnaire (score ranges from 0 to 60) indicates higher level of depression [46]. A score lower than 16 in the CES-D indicates “no depression tendency”, and a score higher than 16 indicates “depression tendency”. In our sample, there were 65 individuals (228 in total) with a score higher than 16, with depression rate to be 28.5%.

Table 2. Descriptive statistics and correlations among study variables.

Variables	M	SD	1	2	3	4	5	6	7
1 gender	-	-							
2 education	1.63	0.49	.11						
3 working hour	45.66	18.54	-.09	.01					
4 employee number	34.99	45.61	.02	.32**	-.11				
5 Tenure	6.24	5.72	.03	-.08	.01	.21**			
6 POS	4.84	0.93	-.02	-.11	-.02	-.04	.02		
7 P-O fit	3.53	0.64	-.03	-.01	-.09	.01	.02	.64**	
8 Depression	13.03	7.45	-.07	-.05	.01	-.04	-.19**	-.24**	-.27**

N=228. POS: perceived organizational support; P-O fit: person-organization fit. \* $p < 0.05$ , \*\* $p < 0.01$ .

As results shown, POS and P-O fit were positively related to each other ( $r=.64, p < .01$ ), and POS and P-O fit were both negatively related to depression ( $r=-.24, r=-.27, p < .01$ , respectively). Tenure was negatively related to depression ( $r=-.19, p < 0.01$ ). Gender, education, working hours and employee number were not related to other variables (all  $ps > .05$ ). The correlation analyses showed initial evidence for further hypotheses tests.

4.3. Tests of Hypotheses

We used hierarchical multiple regression analyses to test our hypotheses. Results presenting in Table 3 demonstrated that, after controlling for the effects of control variables, POS

was negatively related to depression ( $B=-2.02, p < .05$ ), supporting hypothesis 1. P-O fit significantly and negatively influenced depression ( $B=-3.23, p < .05$ ). Therefore, hypothesis 2 is supported. Also, POS was positively related to P-O fit ( $B=.43, p < .05$ ), supporting hypothesis 3.

Hypothesis 4 proposed the mediating effect of person-organization in the relation between POS and depression. PROCESS Macro suggested by Hayes was utilized to test the indirect effect. Bootstrapping with 5000 replications show that with the indirect effect of POS on depression via P-O fit was  $-.88$ , with a 95% confident interval of  $[-1.82, -.01]$ . Therefore, P-O fit mediated the relationship between POS and depression, supporting Hypothesis 4.

Table 3. Regression results.

Variables	P-O fit		Depression			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	3.86*	1.55*	15.34*	28.47*	26.01*	29.06*
Gender	-.03	-.02	-.83	-1.26	-.88	-.94
Education	-.09	-.01	-.63	-.87	-1.04	-1.05

Variables	P-O fit		Depression			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Working hours	-.003	-.002	.001	-.01	-.001	-.006
Employee number		0.001	-.005	-.003	-.006	-.005
POS		.43*			-2.02*	-1.16 <sup>+</sup>
P-O fit				-3.23*		-1.96*
R <sup>2</sup>	.01	.42	.01	.08	.07	.10
ΔR <sup>2</sup>	.01	.41*		.07*	.06*	.03*

N=228. Unstandardized coefficients were reported. POS: perceived organizational support; P-O fit: person-organization fit. \* $p < .05$ , +  $p < .1$ .

Hypothesis 5 proposed that organizational tenure would moderate the relation between POS and depression. The predicted interaction (POS  $\times$  organizational tenure), as shown in Table 4, was statistically significant in predicting depression ( $B = -.93$ ,  $p < .05$ ). And there is a significant increment in  $R^2$  of the model ( $\Delta R^2 = .015$ ,  $p < .05$ ).

Table 4. Hierarchical regression results for moderation.

Variables	Depression		
	Model 1	Model 2	Model 3
Intercept	12.85*	12.85*	12.87*
Gender	-.41	-.38	-.32
Education	-.31	-.48	-.47
Working hour	.01	.04	.01
Employee number	-.24	.04	.08
POS		-1.77*	-1.87*
Tenure		-1.39*	-1.39*
POS $\times$ Tenure			-.93*
R <sup>2</sup>	.008	.098	.113
ΔR <sup>2</sup>		.090*	.015*

N=228. Unstandardized coefficients were reported. POS: perceived organizational support; P-O fit: person-organization fit. \* $p < .05$ .

Figure 2 shows the pattern of interaction. Simple slope test demonstrated that when the tenure of employees was longer (1  $SD$  above the mean), POS was more negatively related to depression (simple slope =  $-2.81$ ,  $p < .01$ ), compared to the condition when the tenure of employees was shorter (1  $SD$  below the mean, simple slope =  $-0.94$ ,  $p < .01$ ). In sum, results indicated that organizational tenure moderated the relationship between POS and depression, such that the effect of POS on depression was strengthened by organizational tenure, supporting hypothesis 5.

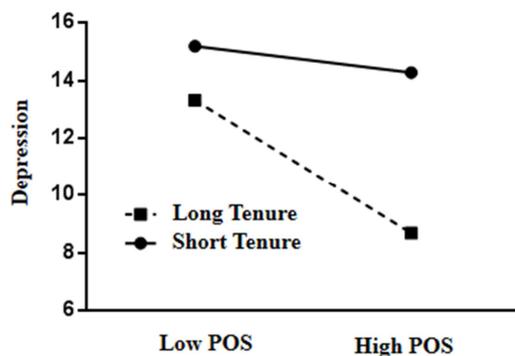


Figure 2. The moderation effect of organizational tenure. POS: perceived organizational support. Long and short tenure represent one standard deviation above and below the mean tenure length, respectively. High and low levels of POS represent one standard deviation above and below the mean, respectively.

## 5. Conclusion and Discussion

The results of the present study show that, in this sample of hotel employees in China, depression was negatively predicted by perceived organizational support, and P-O fit mediated the relation between POS and depression. In addition, organizational tenure moderated the relation between POS and depression. This study contributes to the hospitality management literature by testing the organizational resources in mitigating depression and investigating the pathway to link perceived organizational support to depression via person-organization fit and through the moderating effect of organizational tenure.

### 5.1. Theoretical Implications

Our findings show that organizational factors, such as POS and P-O fit, were negatively related to depression, and P-O fit mediated the relation between POS and depression. As two important organizational factors, POS and P-O fit could mitigate the severity of depression, which is consistent with other researches [34, 39]. Liu et al. (2013) found that POS could decrease the occurrence of depression through the mediating effect of psychological capital [34]. Edwards et al. (1998) demonstrated the close relationship between P-O fit and depression [42]. Although the connection of personal resources to work-related depression have been examined, the relationship between POS and depression remains unclear, especially the mediating effect of person-organization fit in the relation between POS and depression. Our study for the first time demonstrated that POS could affect depression through the mediating role of P-O fit. Individuals with higher level of POS would experience higher level of person-organization fit, and subsequently a better perception of well-being. As such, we provide insight into whether and how POS may connect to individual's depression, and thus contribute to literature on depression and POS. This also contributes to the conservation of resources theory. Perceive organizational support, as a typical type of organizational resources, will compensate the depletion of psychological resources of employees during daily demanding work, and increase the fit perception between person and organization, thus consequently mitigating the depressive symptoms.

Furthermore, our results also suggest the moderating effect of organizational tenure on the relation between POS and depression. This finding is consistent with previous results examining the moderating effect of tenure and age [27, 28, 30]. Ng et al. (2013) found age and tenure were closely related and

contributed to the innovation-related behaviors. Kraemer et al. (2014) demonstrated that organizational tenure moderated the relationship between job resource and organizational pride. Wade et al. (2000) also found the negative relation between age and depression. Thus, organizational tenure is found to strengthen the negative effect of POS on depression in this study. In addition to the moderating effect, we also found that organizational tenure to be negatively and significantly related to depression, indicating that organizational tenure might be a protective mechanism for mental health.

### 5.2. Managerial Implications

Several implications for managerial practice are revealed in this study. First, psychological interventions increasing the perception of organizational support and person-organization fit will be the most successful ones. Second, as depression is influenced by organizational tenure, and organizational tenure is closely related with age, HR manager should not rule out the possibility of hiring employees with longer working years. As Ng et al. (2013) demonstrated, age and organizational tenure did not negatively influence the innovation-related behaviors. This paper, consistent with the previous researches [27, 28, 30], indicated that age might be a protective mechanism of mental health. Thus, the stigma of older applicants should be removed in the selection and hiring process in the HR department.

### 5.3. Research Limitations and Future Research Directions

The present study had several limitations that need to be addressed. First, using only self-report questionnaires, one must be cautious about common methods bias. Collecting data from multiple sources would be useful for minimizing such a potential problem in the future. Second, the non-experimental research design does not allow for causal inferences. To further confirm the hypotheses, several waves of data collection, or even intervention designs that manipulate the mediators are recommended [51]. Third, according to conservation of resources theory, organizational resources, as well as personal resources, would help in reducing burnout. In future studies, it would be more fruitful and comprehensive to combine those job resources together to combat depression. Nevertheless, this research contributes to the investigation of mechanism that occur between organizational resources and depression, and points to the mediating effect of person-organization, and the moderating effect of organizational tenure, which might help the hotel managers in deciding the intervention programs for employees.

## Acknowledgements

This work was supported by grant from the National Natural Science Foundation of China (31800923), Youth Talent Fund (CIT&TCD201904064) and Project Fund (SZ201910031017) from Beijing Municipal Commission of Education, and Exchange Fund from Beijing International Studies University (PXM2017\_014221\_000005).

## References

- [1] Wan Mohd Yunus, W. M. A.; Musiat, P.; Brown, J. S. L. Systematic review of universal and targeted workplace interventions for depression. *Occupational and Environmental Medicine* 2018, *75*, 66-75.
- [2] Shani, A.; Pizam, A. Work-related depression among hotel employees. *Cornell Hospitality Quarterly* 2009, *50*, 446-459.
- [3] Karatepe, O. M.; Tizabi, L. Z. Work-related depression in the hotel industry: a study in the United Arab Emirates. *International Journal of Contemporary Hospitality Management* 2011, *23*, 608-623.
- [4] Watanabe, N.; Horikoshi, M.; Shinmei, I.; Oe, Y.; Narisawa, T.; Kumachi, M.; Matsuoka, Y.; Hamazaki, K.; Furukawa, T. A. Brief mindfulness-based stress management program for a better mental state in working populations - Happy Nurse Project: A randomized controlled trial. *Journal of Affective Disorders* 2019, *251*, 186-194.
- [5] Murray, C. J.; Lopez, A. D. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *The Lancet* 1997, *349*, 1498-1504.
- [6] Mcdaid, D.; Curran, C.; Knapp, M. Promoting mental well-being in the workplace: a European policy perspective. *International Review of Psychiatry* 2005, *17*, 365.
- [7] Yu, X.; Chen, J.; Zhao, S.; Yu, X. Impact of rumination and regret on depression among new employees in China. *Social Behavior & Personality An International Journal* 2017, *45*, 1499-1509.
- [8] Dai, J.; Yu, H.; Wu, J.; Wu, C.; Fu, H. Analysis on the association between job stress factors and depression symptoms]. *Journal of Hygiene Research* 2010, *39*, 342-346.
- [9] Hofmann, S. G.; Curtiss, J.; Carpenter, J. K.; Kind, S. Effect of treatments for depression on quality of life: a meta-analysis\*. *Cognitive Behavioral Therapy* 2017, *46*, 265-286.
- [10] Duque, A.; Vázquez, C. Double attention bias for positive and negative emotional faces in clinical depression: Evidence from an eye-tracking study. *Journal of Behavior Therapy & Experimental Psychiatry* 2015, *46*, 107-114.
- [11] Stewart, W. F.; Ricci, J. A.; Chee, E.; Hahn, S. R.; Morganstein, D. Cost of lost productive work time among us workers with depression. *JAMA* 2003, *289*, 3135-3144, doi: 10.1001/jama.289.23.3135.
- [12] Podsakoff, N. P.; LePine, J. A.; LePine, M. A. Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis. *Journal of applied psychology* 2007, *92*, 438.
- [13] Martin, A.; Hobman, E.; Howarth, E.; McDonald, K. Organizational Support for Mental Health, Stigmatization of Employees with Depression and Performance Appraisal: A Management Simulation Study. In *Psychosocial Factors at Work in the Asia Pacific: From Theory to Practice*, Shimazu, A., Bin Nordin, R., Dollard, M., Oakman, J., Eds. Springer International Publishing: Cham, 2016; 10.1007/978-3-319-44400-0\_15 pp. 267-288.

- [14] Eisenberger, R.; Stinglhamber, F. Perceived organizational support: Fostering enthusiastic and productive employees. *American Psychological Association press* 2011.
- [15] Rhoades, L.; Eisenberger, R. Perceived organizational support: a review of the literature. *Journal of applied psychology* 2002, 87, 698.
- [16] Hobfoll, S. E. Conservation of resource caravans and engaged settings. *Journal of Occupational and Organizational Psychology* 2011, 84, 116-122, doi: 10.1111/j.2044-8325.2010.02016.x.
- [17] Xu, S.; Martinez, L. R.; Van Hoof, H.; Estrella Duran, M.; Maldonado Perez, G.; Gavilanes, J. Emotional Exhaustion Among Hotel Employees: The Interactive Effects of Affective Dispositions and Positive Work Reflection. *Cornell Hospitality Quarterly* 2018, 59, 285-295, doi: 10.1177/1938965517748774.
- [18] Turner, R. J.; Lloyd, D. A.; Roszell, P. Personal Resources and the Social Distribution of Depression. *American Journal of Community Psychology* 1999, 27, 643-672, doi: 10.1023/A:1022189904602.
- [19] Turner, R. J.; Taylor, J.; Gundy, K. V. Personal Resources and Depression in the Transition to Adulthood: Ethnic Comparisons. *Journal of Health and Social Behavior* 2004, 45, 34-52, doi: 10.1177/002214650404500103.
- [20] Kalidass, A.; Bahron, A. The Relationship between Perceived Supervisor Support, Perceived Organizational Support, Organizational Commitment and Employee Turnover Intention. *International Journal of Business Administration* 2015, 6.
- [21] Casimir, G.; Yong, N. K. N.; Wang, K. Y.; Ooi, G. The relationships amongst leader-member exchange, perceived organizational support, affective commitment, and in-role performance: A social-exchange perspective. *Leadership & Organization Development Journal* 2014, 35, 366-385.
- [22] Guchait, P.; Cho, S. H.; Meurs, J. A. Psychological contracts, perceived organizational and supervisor support: investigating the impact on intent to leave among hospitality employees in India. *Journal of Human Resources in Hospitality & Tourism* 2015, 14, 290-315.
- [23] Dawley, D.; Houghton, J. D.; Bucklew, N. S. Perceived Organizational Support and Turnover Intention: The Mediating Effects of Personal Sacrifice and Job Fit. *The Journal of Social Psychology* 2010, 150, 238-257, doi: 10.1080/00224540903365463.
- [24] Mitchell, T. R.; Holtom, B. C.; Lee, T. W.; Sablinski, C. J.; Erez, M. Why People Stay: Using Job Embeddedness to Predict Voluntary Turnover. *Academy of Management Journal* 2001, 44, 1102-1121, doi: 10.5465/3069391.
- [25] Kilroy, S.; Flood, P. C.; Bosak, J.; Chênevert, D. Perceptions of High-Involvement Work Practices, Person-Organization Fit, and Burnout: A Time-Lagged Study of Health Care Employees. *Human Resource Management* 2016.
- [26] Afsar, B.; Badir, Y. F. Person-organization fit, perceived organizational support, and organizational citizenship behavior: The role of job embeddedness. *Journal of Human Resources in Hospitality & Tourism* 2016, 15, 252-278, doi: 10.1080/15332845.2016.1147936.
- [27] Kraemer, T.; Gouthier, M. H. J. How organizational pride and emotional exhaustion explain turnover intentions in call centers: A multi-group analysis with gender and organizational tenure. *Journal of Service Management* 2014, 25, 125-148, doi: 10.1108/JOSM-07-2013-0173.
- [28] Ng, T. W. H.; Feldman, D. C. A meta-analysis of the relationships of age and tenure with innovation-related behaviour. *Journal of Occupational & Organizational Psychology* 2013, 86, 585-616.
- [29] Cabello, M.; Borges, G.; Lara, E.; Olaya, B.; Martín-Maria, N.; Moreno-Agostino, D.; Miret, M.; Caballero, F. F.; Haro, J. M.; Ayuso-Mateos, J. L. The relationship between all-cause mortality and depression in different gender and age groups of the Spanish population. *Journal of Affective Disorders* 2020, 266, 424-428.
- [30] Wade, T. J.; Cairney, J. The Effect of Sociodemographics, Social Stressors, Health Status and Psychosocial Resources on the Age-Depression Relationship. *Can J Public Health* 2000, 91, 307-312.
- [31] Wayne, S. J.; Shore, L. M.; Liden, R. C. Perceived Organizational Support And Leader-Member Exchange: A Social Exchange Perspective. *Academy of Management Journal* 1997, 40, 82-111, doi: 10.5465/257021.
- [32] Panaccio, A.; Vandenberghe, C. Perceived organizational support, organizational commitment and psychological well-being: A longitudinal study. *Journal of Vocational Behavior* 2009, 75, 224-236, doi: https://doi.org/10.1016/j.jvb.2009.06.002.
- [33] Grant-Vallone, E. J.; Ensher, E. A. An examination of work and personal life conflict, organizational support, and employee health among international expatriates. *International Journal of Intercultural Relations* 2001, 25, 261-278, doi: http://dx.doi.org/10.1016/S0147-1767(01)00003-7.
- [34] Liu, L.; Hu, S.; Wang, L.; Sui, G.; Ma, L. Positive resources for combating depressive symptoms among Chinese male correctional officers: perceived organizational support and psychological capital. *BMC psychiatry* 2013, 13, 89.
- [35] Liu, L.; Wen, F.; Xu, X.; Wang, L. Effective resources for improving mental health among Chinese underground coal miners: Perceived organizational support and psychological capital. *Journal of Occupational Health* 2015, 57, 58-68.
- [36] Hoffman, B. J.; Woehr, D. J. A quantitative review of the relationship between person-organization fit and behavioral outcomes. *Journal of Vocational Behavior* 2006, 68, 389-399, doi: https://doi.org/10.1016/j.jvb.2005.08.003.
- [37] Tong, J.; Wang, L.; Peng, K. From person-environment misfit to job burnout: theoretical extensions. *Journal of Managerial Psychology* 2015, 30, 169-182.
- [38] Brandstätter, V.; Job, V.; Schulze, B. Motivational Incongruence and Well-Being at the Workplace: Person-Job Fit, Job Burnout, and Physical Symptoms. *Frontiers in Psychology* 2016, 7, 1153, doi: 10.3389/fpsyg.2016.01153.
- [39] De Cooman, R.; Mol, S. T.; Billsberry, J.; Boon, C.; Den Hartog, D. N. Epilogue: Frontiers in person-environment fit research. *European Journal of Work and Organizational Psychology* 2019, 28, 646-652.
- [40] Rani, N.; Samuel, A. A study on Generational differences in work values and person-organization fit and its effect on turnover intention of Generation Y in India. *Management Research Review* 2018, 39, 1695-1719.

- [41] Caplan, R. D. Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational behavior* 1987, 31, 248-267.
- [42] Hobfoll, S. E.; Ford, J. S. Conservation of Resources Theory \*. *Encyclopedia of Stress* 2007, 3, 562-567.
- [43] Gu, H.; Duverger, P.; Yu, L. Can innovative behavior be led by management? A study from the lodging business. *Tourism Management* 2017, 63, 144-157, doi: <https://doi.org/10.1016/j.tourman.2017.06.010>.
- [44] Xu, X.; Che, H.; Lin, X.; Zhang, J. About the Organizational Support Theory. *Psychological Science* 2005.
- [45] Saks, A. M.; Ashforth, B. E. A longitudinal investigation of the relationships between job information sources, applicant perceptions of fit, and work outcomes. *Personnel psychology* 1997, 50, 395-426.
- [46] Hong, Y.; Fang, X.; Li, X.; Liu, Y.; Li, M.; Tai-Seale, T. Self-Perceived Stigma, Depressive Symptoms, and Suicidal Behaviors Among Female Sex Workers in China. *Journal of Transcultural Nursing* 2010, 21, 29-34.
- [47] Hankin, B. L.; Abramson, L. Y.; Moffitt, T. E.; Silva, P. A.; McGee, R.; Angell, K. E. Development of depression from preadolescence to young adulthood: emerging gender differences in a 10-year longitudinal study. *Journal of Abnormal Psychology* 1998, 107, 128.
- [48] Ross, C. E.; Mirowsky, J. Sex differences in the effect of education on depression: resource multiplication or resource substitution? *Social Science & Medicine* 2006, 63, 1400.
- [49] Driesen, K.; Jansen, N. W.; Kant, I.; Mohren, D. C.; van Amelsvoort, L. G. Depressed mood in the working population: associations with work schedules and working hours. *Chronobiology International* 2010, 27, 1062.
- [50] Amagasa, T.; Nakayama, T. Relationship between long working hours and depression in two working populations: a structural equation model approach. *Journal of Occupational & Environmental Medicine* 2012, 54, 868-874.
- [51] Gan, Y. Happy People Live Longer and Better: Advances in Research on Subjective Well-Being. *Applied Psychology: Health and Wellbeing* 2020, 11 (3), 438-458.