

Hotel Employees' Workplace Loneliness and Improvisation Behavior in China: The Roles of Work Engagement and Inclusive Leadership

Zhu Changying, Li Lei

[**Abstract**] Negative emotional responses, which are associated with hotel employees' improvisation, are highly detrimental to their behaviors. Therefore, the relationship between workplace loneliness and improvisation behavior of Chinese hotel employees, as well as the mediating and moderating effects of work engagement and inclusive leadership on the relationship between workplace loneliness and improvisation behavior were investigated. In this study, data were collected from 10 hotels in Yunnan Province, China, through electronic questionnaire using a convenience sampling method, and 514 questionnaires were returned (validity rate 95. 89%). The results show that there is a significant negative correlation between workplace loneliness and improvisation behavior of Chinese hotel employees; work engagement has a mediating effect between workplace loneliness and improvisation behavior; inclusive leadership has a significant positive moderating effect between workplace loneliness and improvisation behavior; inclusive leadership has a significant positive moderating effect between workplace loneliness and work engagement; and inclusive leadership has a significant positive moderating effect between work engagement and improvisation behavior.

[**Key words**] workplace loneliness; improvisation behavior; work engagement; inclusive leadership

[**About the author**] Zhu Changying (1988—), female, from Zhaotong, Yunnan, China, assistant professor in Education and Management College, Yunnan Xinxing Occupations Institute, master of business administration. Li Lei (1987—), male, from Yingtan, Jiangxi, China, research assistant in Teachers' Continuing Professional Development Center, Ganxi Vocational Institute of Science & Technology, and International College, Mahanakorn University of Technology, doctor of business administration. Research interest: future entrepreneurship and virtual learning environments.

[**DOI**] <https://doi.org/10.62662/kxwxy0201001>

[**Website**] www.oacj.net

1 Introduction

Loneliness in the workplace has recently become a serious issue of concern with devastating effects on employees' well-being and performance. Loneliness in the workplace is characterized as an unwanted emotional response due to a lack of rapport and socialization. Furthermore, in today's highly developed ICT and increased competition in the workplace, it has become increasingly difficult to establish authentic social relationships.

In today's increasingly competitive world, Chinese hotels need to attract and retain high-quality employees to achieve sustainable growth and competitive advantage. However, hotel jobs are low-paying, have a narrow range of duties, and require the maintenance of cognitive-emotional rules. Therefore, policies are needed to improve the social relationships of Chinese hotel employees to reduce their loneliness in the workplace.

Loneliness in the workplace is harmful to both organizations and employees. In organizations, employees work in diverse and complex interpersonal relationships, and are prone to loneliness. Therefore, Wright (2005) argued that workplace loneliness is an essentially unique emotional response experienced by employees in the workplace, and the increased competition in the workplace has made it increasingly difficult for them to establish genuine social relationships. Thus, Cardon and Arwine (2024), and Jung et al. (2021) emphasized that social relationships are

very important in human life and that individuals spend most of their time in the workplace, but research on loneliness and negative performance in the workplace has been limited. As Chou (2024), Livia and Tasençe (2023), and Yang et al. (2023) suggested, a lonely employee will be distressed by the lack of respect he or she receives from co-workers or supervisors, and will perceive himself or herself as lonely and make relatively negative evaluations of himself or herself. Meanwhile, Firoz and Chaudhary's study (2022) also confirmed that workplace loneliness is significantly associated with employees' potential negative behavioral intentions. Conversely, it was also found to be strongly associated with organizational commitment. Furthermore, recent surveys suggest that loneliness is ubiquitous, with approximately 20% of employees feeling lonely in the workplace. However, research on loneliness in the workplace remains scarce, and scholars have called for further research into this grey area. In the research conducted to date, loneliness has been mentioned primarily in clinical or as a personal dimension. Moreover, the focus has been on the nature of the phenomenon of loneliness itself, neglecting approaches that address it from the perspective of the organizational climate. However, to date, very little research has been conducted on loneliness in the workplace, and in this regard, researchers have argued that relevant studies should be further developed. On the other hand, improvisation is considered to be the occurrence of spontaneous and creative behaviors, which represents a possible response when individuals and organizations need to face urgent problems. This improvisation behavior has also been described as a way for employees to think quickly and act immediately, bypassing formal organizational plans, in situations where it is not possible to set aside more time to find a solution. As Secchi et al. (2020) suggested, improvisation behavior is particularly important in uncertain projects that cannot be fully understood a priori, do not rely on the application of routines, and require flexibility and quick improvisational responses. However, in the hospitality industry, due to its specificities, workplace loneliness is a common phenomenon that can be very damaging to employees' behaviors. Therefore, there is a need to take steps to explore the negative effects of workplace loneliness in more depth. However, the link between workplace loneliness and improvisation behavior has not yet been explored within the context of Chinese hotels.

In addition, as work engagement is an important agent in improving individual behavior during the process of employee behavioral influences, it has been described as the positivity of the members of an organization towards the state of work, a level of commitment to the work, and a positive psychological state of the individuals themselves. Research has shown that work engagement is strongly linked to service behavior. Conversely, it is also effective in mitigating the development of absenteeism. As stated by Afsar et al. (2021), the organization needs energetic, dedicated, and focused employees as it motivates them to put more effort and energy into their work, thus contributing to the success of the organization. On the other hand, studies have also found that workplace loneliness is negatively related to work engagement. Furthermore, Jason's study (2021) also confirmed that work engagement is effective in mediating increased innovative behavior. This is because employees with high work engagement can lead other employees to take initiative, manage high levels of decentralization, and cope more effectively with the complexity of cross-border activities. However, although work engagement has been found to contribute to the development of processes that contribute to individual behaviors, it is not clear how work engagement mediates the relationship between workplace loneliness and improvisation behavior within the context of Chinese hotels.

Inclusive leadership is a possible facilitator for how to improve improvisation behavior more effectively. It is considered to be a leader who demonstrates openness, accessibility, and usability in their interactions with followers. Inclusive leadership is strongly linked to innovative behavior. Conversely, it also inhibits turnover intentions. Furthermore, inclusive leadership is found to be positively related to work engagement. Conversely,

inclusive leadership is negatively associated with emotional exhaustion. As stated by Atwi and Hassani (2021), the intellectual and emotional support that inclusive leaders possess helps to shape and sustain the work environment, motivate employees to engage in creative behavior, and create a positive organizational climate in which their employees continue to follow them and work for the organization. On the other hand, inclusive leadership is found to promote the relationship between entrepreneurship and willingness for green innovation. Meanwhile, Khan et al.'s study (2022) also confirmed that inclusive leadership has a facilitating effect between employee awareness and innovative behavior. Similarly, Qasim et al.'s study (2022) confirmed that psychological engagement can mediate the relationship between the domain of inclusion and helping behavior. As suggested by Zhou and Mou (2022), inclusive leadership helps to build employees' confidence and trust in the organization and also ensures their continued enthusiasm for the organization. Although inclusive leadership is an integral part of the contemporary human resource management field, and is an important facilitator of employee behaviors, its facilitating role between workplace loneliness and improvisation behavior within the context of hotels in China has never been explored.

In addition, the role of inclusive leadership in the facilitation mechanism of psychological states is equally influential. Workplace loneliness is found to be negatively related to transformational leadership. As a facilitator, leadership is also found to have a facilitating effect between workplace loneliness and psychological factors (job stress and satisfaction). As Li and Peng (2022) suggested, inclusive leadership is a relationship in which the leader and subordinates work together to accomplish tasks to achieve a win-win situation, i. e. working with people is an essential feature of inclusion. Although inclusive leadership is beneficial to organizational development and is an important contributor to psychological factors, its facilitating role between workplace loneliness and work engagement within the context of Chinese hotels has never been explored.

On the other hand, the role of inclusive leadership has an equally important role in the facilitation mechanism of psychological factors and behaviors. Inclusive leadership is positively associated with work engagement. Conversely, inclusive leadership is negatively associated with emotional exhaustion. As Gürbüz et al. (2022) suggested, the potential benefits of diversity cannot be realized if employees do not have a sense of inclusion, which includes a sense of belonging and being able to be true to oneself at work. As a facilitator, inclusive leadership is also found to have a facilitating effect between corporate social responsibility and creative behavior. It has also been found to be effective in promoting psychological factors and individual behaviors. As Shabeer et al. (2023) suggested, win-win situations can be created for organizations by building shared goals, visions, and relationships with followers. Although inclusive leadership is beneficial to organizational development and is an important contributor to employees' behaviors, its facilitating role between work engagement and improvisation behavior in the context of Chinese hotels has never been explored.

In summary, this study aims to explore the impacts of workplace loneliness and improvisation behavior of employees in China's hospitality industry, as well as the mediating and facilitating roles of different modes of inclusive leadership in such mechanisms of individual work engagement to positive psychological states and leader-follower interactions.

2 Literature review and hypothesis development

2.1 Conservation of resources theory

From the conservation of resources theory perspective, improvisation is a resource investment behavior, which contributes to an individual's access to resources. As stated by Capano and Toth (2023), Clercq et al. (2021), and Hadjimichael and Tsoukas (2023), people who have improvisation behavior in the workplace will achieve

higher performance, which will help to build more resources for both the individual and the organization. The potential resource gains through acquisition can be attractive to improvisation behavior because they are the very resources that high improvisation behavior lacks. However, potential gains may not fully mobilize improvisation behavior because people have a strong sense of lack of resources and are more sensitive to uncertain rewards. In addition, people with high negativity are less likely to achieve the positive gain spiral of helping organizations and individuals, as they tend to lack the quality of establishing necessary relationships with others. Taking all these factors into account, the present study suggests that high negativity tends to favor resource conservation over resource acquisition compared to low negativity, resulting in a lower overall propensity to engage in improvisation behavior in the workplace.

Furthermore, people invest in their resources to avoid losses and maximize gains. As work engagement (a subtype of personal resources) has been found to trigger positive attitudes and performances, it may also further trigger the emergence of positive behaviors. Therefore, it has also been described as a level of the individual's commitment to work and a positive psychological state. As stated by Afsar et al. (2021), Jason (2021), and Zahari and Kaliannan (2023), employees who are dedicated to their work have a strong willingness to share their work-related knowledge and put efforts to perform behaviors that are beneficial to the organization.

On the other hand, organizations with leaders with high levels of inclusiveness are more likely to trust their colleagues. Thus, higher levels of interpersonal trust lead to employees' higher levels of positive behavior and psychology. As such, it has also been described as leaders who demonstrate openness, accessibility, and usability in their interactions with followers, contributing to the enhancement of employees' behaviors and attitudes. As Chen et al. (2023), Egitim (2022), and Zhou and Mou (2022) suggested, inclusive leadership helps to build employees' confidence and trust in the organization and also ensures that employees continue to be enthusiastic about the organization, as well as maintaining a positive psychological state.

In summary, compared to low negativity, high negativity may not lack objective resources such as skills, knowledge, or time to help others, but tend to lack important relational, psychological, and interpersonal resources and resource-building capabilities. Those with high negativity may have a stronger sense of lack of resources due to the way they experience the demands of their jobs. These factors will lead to a strong preference for resource conservation and avoidance of helping when such behavior is perceived as resource depletion. Therefore, with the aid of the conservation of resources theory, the level of resources for negative emotional responses will be influenced by their desire to protect and acquire resources (work engagement and inclusive leadership), which further explains the types of goals they seek to achieve in their improvisation behavior.

2.2 Improvisation behavior

Employees' improvisation behavior refers to the real-time innovation activities generated by employees, including both improvisation and execution, which are essentially improvisational when faced with an innovation opportunity, and therefore effective in helping organizations to convert the threats posed by environmental uncertainty into innovation opportunities. As Bird (2020), and Faraco (2023) suggested, improvisational is a powerful tool for organizations to respond to crises and gain access to innovative resources.

2.3 Workplace loneliness and improvisation behavior

Workplace loneliness has been described as an emotional response in the workplace caused by a wide gap between an individual's expectations of socializing and the actual level. Improvisation behavior, on the other hand, has been defined as a situation in which employees think quickly and act immediately, bypassing formal organizational plans, when it is not possible to set aside more time to find a solution. Workplace loneliness is

significantly associated with helping behavior. Conversely, it has been found to be strongly related to silent behavior. The factor that leads to the suppression of improvisation behavior may be the individual's negative emotional response. This is because workplace loneliness, as a highly damaging negative emotional response, creates a sense of alienation in the workplace due to loneliness, which reduces affective commitment. This will increase an individual's negative emotions and inhibit an employee's initiative at work, which may directly diminish the effects produced by improvisation behavior. As Badri et al. (2022) suggested, only when employees feel that they are not alone and when there are more opportunities for camaraderie in the workplace, they will be more actively engaged in the organization and give more back to the organization, e. g. , improvisation behavior. Hence the assumption:

H1: Workplace loneliness negatively affects improvisation behavior.

2.4 The moderator role played by work engagement

Research has found that an individual's underlying behavioral intentions are largely shaped by workplace loneliness. Therefore, workplace loneliness has also been described as an emotional reaction in the workplace caused by a wide gap between an individual's expectations and the actual level of socialization, which reduces the production of work engagement. On the other hand, work engagement is an important bridge to enhance the process of individual behavioral development. Therefore, work engagement is defined as the motivation of an organization's members towards their work status, which is an individual's (his/her) own level of commitment to the work and a positive psychological state, and it can, directly and indirectly, enhance an individual's behavioral tendencies.

When employees' workplace loneliness brings negative emotional responses, they would not like to work hard and be more committed to being energetic in their work, which will not make them get positive emotional experiences and happiness. This will make employees have negative emotional depression, which will inhibit the generation of work engagement, leading to the loss of energy and dedication in their work, and ultimately leading to employees' behavioral tendency towards work. Ultimately there will be no beneficial behaviors for the organization as they will not be able to be positive and enthusiastic about their work. Hence the assumption:

H2: Work engagement has a mediating effect between workplace loneliness and improvisation behavior.

2.5 Inclusive leadership as a moderator between workplace loneliness and improvisation behavior

Research has found that an individual's underlying behavioral intentions are largely influenced by workplace loneliness. Therefore, workplace loneliness has also been described as an emotional response in the workplace that is caused by an excessive gap between an individual's expectations and the actual level of socialization. On the other hand, inclusive leadership is an important facilitating mechanism to enhance the process of behavioral development in individuals. Therefore, inclusive leadership is also defined as the positive behaviors and attitudes of leaders, which can promote individual behavioral enhancement.

However, when employees have a negative emotional response to workplace loneliness, it causes them to be depressed and inhibits the emergence of positive behaviors. This is because lonely employees mostly ignore or terminate meaningful relationships in the workplace and tend to avoid the process of maintaining positive relationships. As a result, individuals who prefer loneliness will have a negative opinion of others, the unwillingness to communicate with their leaders, and the fear for risks in socializing, which leads to the fact that loneliness in the workplace will not allow for the establishment of good interpersonal relationships, resulting in employees' pursuit of and passion for beneficial things such as their careers. On the other hand, support from superiors is an important work resource to mitigate negative experiences in organizations and is a motivation for employees to engage in their work. The effect of the interaction between job title loneliness and inclusive leadership

can be used to build rapport through the support provided to employees, which can inhibit the negative emotions' behavioral negative effects. As stated by Atwi and Hassani (2021), Carmeli et al. (2010), Egitim (2022), Ly (2024), and Zhou and Mou (2022), inclusive leadership gives subordinates the ability to give openness by listening to their suggestions, actively working with them to achieve the team's goals and giving them help in their work. It also has an affinity for patiently listening to requests and encouraging working with subordinates on difficult work issues, which not only contributes to the individual employee's work attitudes and values but also interacts with negative emotional responses to construct rapport, provide enthusiasm and further mitigate the negative effects of negative emotional responses on beneficial organizational behaviors. Hence the assumption:

H3: Inclusive leadership has a positive moderating effect between workplace loneliness and improvisation behavior.

2. 6 Inclusive leadership as a moderator between workplace loneliness and work engagement

Leadership is an important facilitating mechanism to influence the process of psychological factors (job stress and satisfaction). However, when employees' workplace loneliness is associated with negative emotional responses, this causes them to be depressed and inhibits the emergence of positive psychological states. This is because lonely employees mostly ignore or terminate meaningful relationships in the workplace and tend to avoid the process of maintaining positive relationships. As a result, individuals who prefer loneliness will have a negative opinion of others, the unwillingness to communicate with their leaders, and the fear for risks in socializing, which leads to the fact that loneliness in the workplace will not allow for the establishment of good interpersonal relationships, resulting in employees' pursuit of and passion for beneficial things such as their careers. On the other hand, support from superiors is an important work resource to alleviate negative experiences in organizations and is a motivation for employees to engage in their work. Positive leadership can be helpful and effective in influencing the psychological state of employees. In addition, in the process of individual psychological state, inclusive leadership can not only offer openness when listening to subordinates' suggestions and actively working with them to achieve team goals and help them in their work, but also has an affinity to patiently listen to requests, encouragement to work with subordinates to deal with work problems, etc. This not only contributes to the individual employee's attitudes and values but also interacts with negative emotional experiences to further motivate employees, and mitigate the negative effects of negative experiences on organizationally beneficial behaviors. Hence the assumption:

H4: Inclusive leadership has a positive moderating effect between workplace loneliness and work engagement.

2. 7 Inclusive leadership as a moderator between work engagement and improvisation behavior

When employees have a positive mental state as a result of work engagement, this causes them to be emotionally high and happy, and enhances the production of positive behaviors. As stated, when employees have high work engagement, they are normatively and emotionally invested in the organization, which plays an important role in increasing employees' behaviors. However, when an employee possesses a high level of dedication, he or she develops a strong belief in the organization's goals and values and puts considerable effort and willingness to accept sacrifices for the organization. On the other hand, rapport is an important resource that motivates employees to engage in their work, and the interactive effects of work engagement and inclusive leadership can build rapport and effectively stimulate intrinsic motivation and ultimately further positive behaviors through the support provided to employees, e. g. improvisation behavior. As Ly (2024) suggested, inclusive leadership can also interact with positive psychological states that can further stimulate intrinsic motivation and engagement, which can lead to the creation of organizationally beneficial behaviors. Hence the assumption:

H5: Inclusive leadership has a positive moderating effect between work engagement and improvisation behavior.

3 Methodology

3.1 Research framework

Construct the framework based on the assumptions, as shown in Figure 1 below:

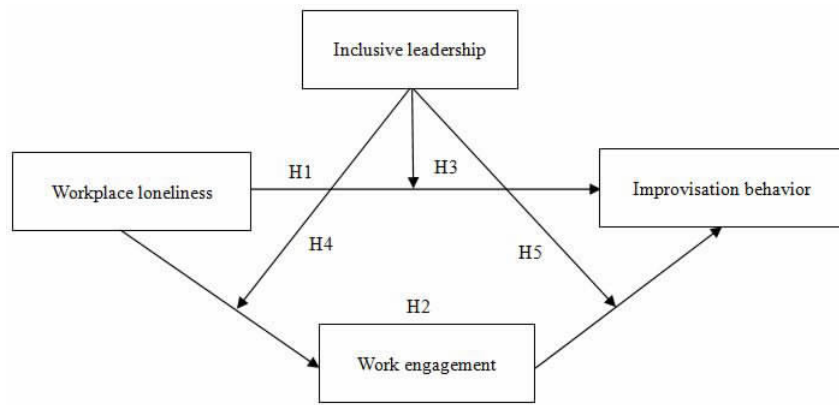


Figure 1. Depiction of the study's framework

3.2 Sample and data collection procedure

The survey was conducted in March 2024 by purposive sampling method. 514 (95.89% validity rate) questionnaires were obtained through an online questionnaire to investigate the experiences and perceptions of frontline employees in 10 hotels in Kunming City, Yunnan Province, China, regarding workplace loneliness, improvisation behavior, work engagement, and inclusive leadership.

3.3 Measures

Workplace loneliness scale: designed by Wright et al. (2006), 12 items ($\alpha=0.840$).

Improvisation behavior scale: designed by Vera and Crossa (2005), 7 items ($\alpha=0.91$).

Work engagement scale: designed by Schaufeli et al. (2002), 14 items ($\alpha=0.88$).

Inclusive leadership scale: designed by Carmeli et al. (2010), 9 items ($\alpha=0.94$).

Gender, age, academic qualification, and length of service are used as demographic background, and other variables are measured on a 5-point scale with self-assessment.

4 Results

4.1 Distribution of population traits

An analysis of the demographic profile (as shown in Table 1) shows that 51.95% of the samples are male (267 cases), while the proportion of females is 48.05% (247 cases). In terms of educational attainment, the proportion of undergraduate ranks the highest at 38.33% (197 cases), while the proportion of technical college is 33.27% (171 cases), followed by high school/technical secondary school/vocational high school (92 cases) and master's degree and above (54 cases). In terms of age, 31-35 years old accounts for the highest proportion of 33.66%, while the proportion of samples aged 26-30 years old is 30.35%, followed by 18-25 years old (56 cases), 36-40 years old (99 cases), and 41 years old and above (30 cases). In terms of length of service, there is a relatively large number of samples with 4-5 years of service, with a proportion of 40.86% (210 cases), while the proportion of samples with 1-3 years of service is 38.13% (196 cases), followed by 6-10 years of service (87 cases), 11-15 years of service (17 cases), and 16 years of service and above (4 cases).

Table 1. Distribution of population traits

Demographic variables	Category	N	%
Gender	Male	267	51.946
	Female	247	48.054
Academic qualification	High school/technical secondary school/vocational high school	92	17.899
	Technical college	171	33.268
	Undergraduate	197	38.327
	Master and above	54	10.506
Age	18-25	56	10.895
	26-30	156	30.350
	31-35	173	33.658
	36-40	99	19.261
	41 and above	30	5.837
	1-3	196	38.132
Length of service	4-5	210	40.856
	6-10	87	16.926
	11-15	17	3.307
	16 and above	4	0.778

Note: N=514.

4.2 Model fit

The overall model has $\chi^2/\text{df}=1.692$; all other indices also meet the criteria for a good match (as shown in Table 2).

Table 2. Model fit

Index name	Judgment standard	Result of model
RMR	≤ 0.08	0.042
SRMR	≤ 0.05	0.039
RMSEA	≤ 0.05	0.025
GFI	≥ 0.90	0.919
NFI	≥ 0.90	0.923
IFI	≥ 0.90	0.984
TLI	≥ 0.90	0.982
CFI	≥ 0.90	0.984
χ^2		1017.246
df		601
χ^2/df	≤ 3.00	1.692

Note: * $p < 0.05$.

4.3 Correlation analysis

The correlation matrix (as shown in Table 3) shows that workplace loneliness is negatively correlated with improvisation behavior ($\beta = -0.528$ ***, $p < 0.001$), and hypothesis H1 is valid.

Table 3. Narrative and correlation coefficient matrix

Variables	M	SD	1	2	3	4
1. Workplace loneliness	3.53	0.81	(0.736)			
2. Improvisation behavior	3.61	0.72	-0.528 ***	(0.771)		
3. Work engagement	3.55	0.76	-0.229 ***	0.283 ***	(0.764)	
4. Inclusive leadership	3.60	0.81	-0.427 ***	0.558 ***	0.318 ***	(0.781)
α			0.906	0.905	0.898	0.853
CR			0.701	0.811	0.909	0.816
AVE			0.542	0.595	0.585	0.611

Note: * = $p < 0.05$.

4.4 Intermediary analysis

The intermediary analysis (as shown in Table 4) shows that the direct effect of workplace loneliness-work engagement-improvisation behavior is -0.217 , with a 95% confidence interval $[-0.301, -0.134]$, not including 0, indicating a significant direct effect; and the indirect effect is -0.230 , with a 95% confidence interval $[-0.284, -0.179]$, not containing 0, indicating a significant indirect effect of 51.5%. It indicates that work engagement has a mediating effect between workplace loneliness and improvisation behavior, and hypothesis H2 is valid.

Table 4. Intermediary analysis

Effect	Effect	SE	LLCI	ULCI	Percentage
Total effect	-0.447	0.038	-0.522	-0.372	
Direct effect	-0.217	0.043	-0.301	-0.134	48.5%
Indirect effect	-0.230	0.027	-0.284	-0.179	51.5%

Note: * $p < 0.05$.

4.5 Regression analysis

Model 6 is the regression analysis model of workplace loneliness, inclusive leadership, and the interaction term (workplace loneliness \times inclusive leadership) on improvisation behavior with the addition of demographic variables. Model 6 has an R^2 of 0.338 and an $F = 38.858$ ***. In addition, the interaction term (workplace loneliness \times inclusive leadership) has a $\beta = 0.125$ ***, $p < 0.001$, which indicates that inclusive leadership has a significant positive moderating effect between workplace loneliness and improvisation behavior, so H3 of this study is supported.

As shown in Figure 2, inclusive leadership inhibits the relationship between workplace loneliness and improvisation behavior. Specifically, subjects with higher inclusive leadership show a weaker relationship between workplace loneliness and improvisation behavior compared to subjects with lower inclusive leadership.

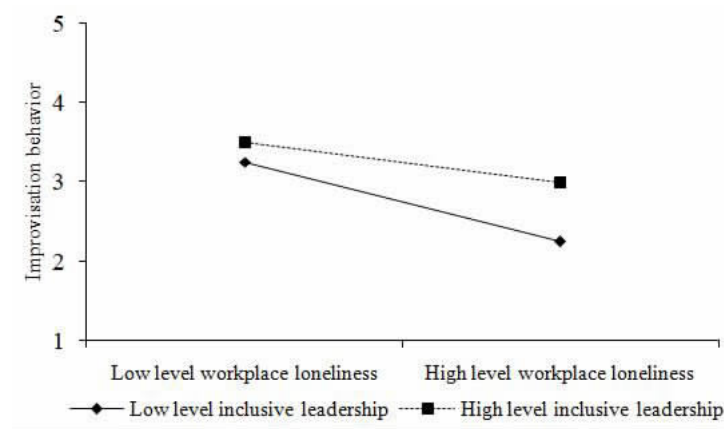


Figure 2. Plot of high and low interaction differences between inclusive leadership on the relationship between workplace loneliness and improvisation behavior

Model 3 is the regression analysis model of workplace loneliness, inclusive leadership, and interaction term (workplace loneliness \times inclusive leadership) on work engagement with the addition of demographic variables. Model 3 has an R^2 of 0.480 and an $F = 69.988 ***$. In addition, the interaction term (workplace loneliness \times inclusive leadership) has a $\beta = 0.242 ***$, $p < 0.001$, indicating that inclusive leadership has a significant positive moderating effect between workplace loneliness and work engagement, so H4 is supported in this study.

As shown in Figure 3, inclusive leadership inhibits the relationship between workplace loneliness and work engagement. Specifically, subjects with higher inclusive leadership show a weaker relationship between workplace loneliness and work engagement compared to subjects with lower inclusive leadership.

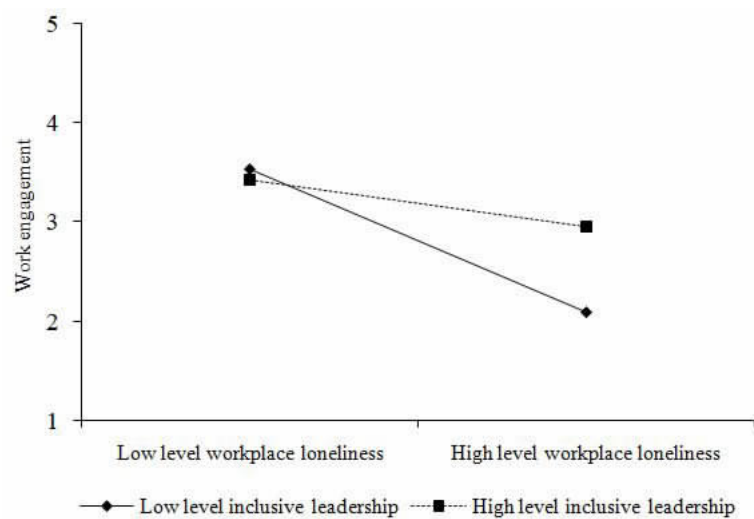


Figure 3. Plot of high and low interaction differences between inclusive leadership on the relationship between workplace loneliness and work engagement

According to the figure above, Model 9 is the regression analysis model of workplace loneliness, inclusive leadership, and the interaction term (work engagement \times inclusive leadership) on improvisation behavior with the addition of demographic variables. With the R^2 added in the model, Model 9 has an R^2 of 0.390 and an $F = 48.618 ***$. In addition, the interaction term (work engagement \times inclusive leadership) has a $\beta = 0.136 ***$, $p < 0.001$, indicating that inclusive leadership has a significant positive moderating effect between work engagement and improvisation behavior, so H5 is supported in this study.

As shown in Figure 4, inclusive leadership strengthens the relationship between work engagement and improvisation behavior. Specifically, subjects with higher inclusive leadership show a stronger relationship between work engagement and improvisation behavior compared to subjects with lower inclusive leadership.

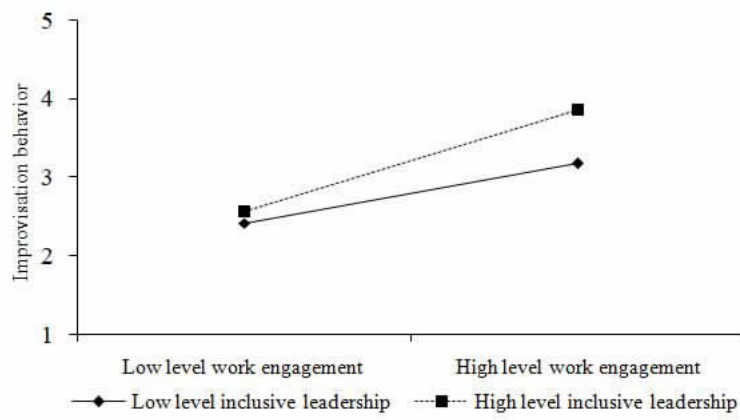


Figure 4. Plot of high and low interaction differences between inclusive leadership on the relationship between work engagement and improvisation behavior

Table 5. Adjustment analysis

	Work engagement					Improvisation behavior			
	M1	M2	M3	M4	M5	M6	M7	M8	M9
Gender	-0.01	-0.012	-0.018	-0.043	-0.04	-0.037	-0.041	-0.038	-0.043
Academic qualification	-0.240	-0.252	-0.250	-0.271	-0.287	-0.286	-0.132	-0.161	-0.143
Age	-0.021	-0.020	-0.041	-0.014	-0.012	-0.023	-0.001	-0.001	-0.012
Length of service	0.215	0.219	0.245	0.046	0.051	0.066	0.072	0.054	0.076
Workplace loneliness	-0.527 ***	-0.480 ***	-0.478 ***	-0.436 ***	-0.374 ***	-0.373 ***			
Work engagement							0.545 ***	0.477 ***	0.510 ***
Inclusive leadership		0.185 ***	0.186 ***		0.245 ***	0.246 ***		0.185 ***	0.205 ***
Workplace loneliness × inclusive leadership			0.242 ***			0.125 ***			
Work engagement × inclusive leadership									0.136 ***
R^2	0.380	0.417	0.480	0.257	0.319	0.338	0.336	0.370	0.390
Adj R^2	0.374	0.410	0.473	0.250	0.311	0.329	0.330	0.363	0.382
F	65.598 ***	63.368 ***	69.988 ***	37.468 ***	41.868 ***	38.858 ***	54.288 ***	52.268 ***	48.618 ***
DW			1.967			2.225			2.081

Note: * = $p < 0.05$.

5 Discussion

5.1 Conclusion and recommendation

This study confirms for the first time that workplace loneliness is significantly negatively related to improvisation behavior. That is, the higher the workplace loneliness is, the lower the improvisation behavior will be. Consequently, the distress of negative emotions associated with loneliness makes these hotel employees feel mentally exhausted and unable to perform their work responsibilities satisfactorily, which leads to their lack of

creative improvisation behavior. Therefore, workplace loneliness impairs the improvisation behavior of frontline hotel workers in China. This is because a lower propensity to trust makes lonely individuals hesitant to seek social connections and feel a lack of support and a sense of belonging, leading to reduced interest and motivation to exhibit improvisation behaviors towards co-workers or organizations.

For the first time, this study finds that work engagement has a partial mediating effect between workplace loneliness and improvisation behavior. A positive resource such as work engagement provides frontline employees in Chinese hotels with the coping mechanisms necessary to deal with negative emotions. This is because employees with high work engagement can lead other employees to take initiative, manage high levels of geographical dispersion, and cope more effectively with the complexity of cross-border activities. Thus, the damaging effects of workplace loneliness on improvisation behavior are less severe for individuals with high work engagement. On the other hand, work engagement can buffer the negative effects of workplace loneliness on improvisation behavior. That is, employees with high-spiritedness are more likely to manage their work responsibilities and display positive attitudes at work compared to frontline hotel employees with low work engagement.

For the first time, this study finds that inclusive leadership has a significant negative moderating effect between workplace loneliness and improvisation behavior. When employees have a negative emotional response to their workplace loneliness, this causes them to be depressed and inhibits the emergence of positive behaviors. This is because lonely employees mostly ignore or terminate meaningful relationships in the workplace. As a result, individuals who prefer loneliness develop negative evaluations of others, which leads to their inability to build good relationships, resulting in employees' pursuit of and passion for beneficial things such as their careers.

This study finds for the first time that inclusive leadership has a significant positive moderating effect between workplace loneliness and work engagement. Support from superiors is an important work resource to alleviate negative experiences in organizations and motivation for employees to engage in their work, and positive leadership can be helpful and effective in influencing employees' psychological states. Therefore, in the process of individual psychological state, inclusive leadership not only can offer openness when listening to subordinates' suggestions and actively working with them to achieve team goals and help them in their work, but also has an affinity for patiently listening to requests, encouragement to work with subordinates to deal with work problems, etc., which contributes to the individual employee's attitudes and values. Therefore, having strong leadership interacting with negative emotional experiences can further motivate frontline hotel employees and mitigate the creation of negative effects of negative experiences on behaviors that benefit the organization.

For the first time in this study, inclusive leadership is found to have a significant positive moderating effect between work engagement and improvisation behavior. When employees have a positive state of mind as a result of work engagement, this causes them to be emotionally high and pleasant and enhances the emergence of positive behaviors. This is because when employees have high work engagement, they are normatively and emotionally invested in the organization and it plays an important role in increasing employees' behaviors. The interactive effect of work engagement and inclusive leadership builds rapport through the support provided to the employees and is effective in stimulating intrinsic motivation which ultimately further enhances the improvisation behavior of the employees.

5.2 Research contribution

With the help of conservation of resources theory and the context of Chinese hotels, this study explores the relationship between workplace loneliness and improvisation behavior, and the mediating and facilitating effects of work engagement and inclusive leadership. Contributions are shown below:

Firstly, as previous studies have not explored the relationship between workplace loneliness and improvisation

behavior among employees in the hospitality field, this study is the first empirical study to explore the relationship between workplace loneliness and improvisation behavior among employees in the hospitality field in China to fill the gap. This brings evidence for the Chinese hospitality field to understand why negative emotional responses have an impact on individual behaviors, leadership, and psychological states. As Firoz and Chaudhary (2022) suggested, there are rare studies on loneliness in the workplace, and its theoretical research should be further developed to curb its persistent harms. Therefore, this study, based on the conservation of resources theory, can better explain the direct and indirect effects of how negative emotional responses inhibit employees' positive behaviors, which is an important contribution to the expansion and extension of the theory.

Secondly, this study emphasizes the differential context of the Chinese hotel context and seeks to understand the impact of employees' workplace loneliness on improvisation behavior and the mediating and facilitating roles of work engagement and inclusive leadership, linking them to the theory of resource conservation. By doing so, a framework is constructed. As Hogr and Cin (2020) argued, only with greater clarity on the influencing factors and mechanisms of loneliness in the workplace can the detrimental effects in HR and organizational management be well understood and strategies be tailored to curb its emergence.

Finally, the results of this study not only fill the relationship between workplace loneliness and improvisation behavior, but also fill the gap between work engagement as a mediator and inclusive leadership as a facilitator in the aforementioned relationship, and extend the theory of resource conservation. As Firoz and Chaudhary (2022) argued, only more systematic research from different and diverse theories can better substantiate the great dangers of workplace loneliness.

5.3 Limitations and future research directions

Despite the significant research and practical contributions of this study, some limitations remain. Firstly, this study mainly uses cross-sectional survey research, which is relatively less rigorous in assessing causal relationships between concepts than adopting a multi-source or tracer study design. Therefore, it is suggested that longitudinal data tracking could be used to test causality more rigorously in future explorations. Secondly, as the scales in this study are from the west, despite the translation process in this study, there are differences between Chinese and western cultures, and future studies on the measurement of loneliness in the workplace still need to be conducted in the Chinese context to conduct further research and develop scales that fit the Chinese context. Finally, future research could focus on exploring the process mechanisms between individuals and internal and external environmental factors, such as empowering atmosphere, family support, etc., to constitute theoretical innovations for a better understanding of the influence mechanisms of workplace loneliness.

References:

- [1] Chung Y. W. , Dong X. T. , Yun J. K. A Study on the Mediating Effects of Anxiety and Happiness for Workplace Loneliness and Behavioral Outcomes of Korean Police Officers[J]. Policing: An International Journal, 2022, 45(6) : 924-938.
- [2] Firoz M. , Chaudhary R. The Impact of Workplace Loneliness on Employee Outcomes: What Role Does Psychological Capital Play? [J]. Personnel Review, 2022, 51(4) : 1221-1247.
- [3] Yang F. , Wen D. Combating Workplace Loneliness Climate and Enhancing Team Performance: The Roles of Leader Humor and Team Bureaucratic Practices[J]. Journal of Business Research, 2021, 136(4) : 305-315.
- [4] Du S. , Ma Y. , Lee J. Y. Workplace Loneliness and the Need to Belong in the Era of COVID-19[J]. Sustainability, 2022, 14(8) : 1-24.
- [5] Hogr H. , Cin S. Relationship Between Workplace Loneliness and Organizational Cynicism: Practice in

an Education and Research Hospital[J]. *Turkish Studies*, 2020, 15(5): 2449-2461.

[6] Jha S. Workplace Loneliness and Job Performance: Moderating Role of Person-environment Fit[J]. *Industrial and Commercial Training*, 2023, 55(2): 213-233.

[7] Basit A. A., Nauman S. How Workplace Loneliness Harms Employee Well-being: A Moderated Mediation Model[J]. *Frontiers in Psychology*, 2023(13): 1-10.

[8] D'Oliveira T. C., Persico L. Workplace Isolation, Loneliness and Wellbeing at Work: The Mediating Role of Task Interdependence and Supportive Behaviours[J]. *Applied Ergonomics*, 2023(106): 1-10.

[9] Yang H., Lin Z., Chen X., Peng J. Workplace Loneliness, Ego Depletion and Cyberloafing: Can Leader Problem-focused Interpersonal Emotion Management Help? [J]. *Internet Research*, 2023, 33(4): 1473-1494.

[10] Li Z., Long M., Huang S., Duan Z., Hu Y., Cui R. Effects of Inertia and Switching Costs on Customer Retention: A Study of Budget Hotels in China[J]. *International Journal of Contemporary Hospitality Management*, 2023, 35(3): 1030-1050.

[11] Mazlan M. R. M., Jambulingam M. Challenges of Talent Retention: A Review of Literature [J]. *Journal of Business and Management Review*, 2023, 4(2): 78-91.

[12] Shen C., Wang Y., Zuo J., Rameezdeen R. Leave or Stay? Antecedents of High-level Talent Migration in the Pearl River Delta Megalopolis of China: From a Perspective of Regional Differentials in Housing Prices[J]. *Chinese Geographical Science*, 2023, 33(6): 1068-1081.

[13] Ari E. Human Resource Risk Challenges in the Hotel Industry[J]. *Journal of Hospitality and Tourism Insights*, 2023, 6(5): 2073-2092.

[14] Baquero A. Hotel Employees' Burnout and Intention to Quit: The Role of Psychological Distress and Financial Well-being in a Moderation Mediation Model[J]. *Behavioral Sciences*, 2023, 13(2): 1-18.

[15] Kuriakose V., Paul V. M. T., Bishwas S. K. Examining the Pathway Linking Workplace Incivility and Employee Well-being: A Study among Frontline Hotel Employees in India [J]. *International Journal of Contemporary Hospitality Management*, 2023, 35(7): 2465-2480.

[16] Wright S. L. *Loneliness in the Workplace*[D]. Christchurch: University of Canterbury, 2005.

[17] Georgiana S. A., Tasente T. The Influence of Loneliness at Work on Occupational Depression[J]. *The Black Sea Journal of Psychology*, 2023, 14(4): 445-456.

[18] Dor-Haim P. Expressions of Loneliness: Different Perspectives of Loneliness among School Deputy Principals[J]. *Educational Management Administration & Leadership*, 2023, 51(5): 1181-1199.

[19] Shrum L. J., Fumagalli E., Lowrey T. M. Coping with Loneliness Through Consumption[J]. *Journal of Consumer Psychology*, 2023, 33(2): 441-465.

[20] Cardon M. S., Arwine R. P. The Many Faces of Entrepreneurial Loneliness [J]. *Personnel Psychology*, 2024, 77(1): 225-277.

[21] Jung H. S., Song M. K., Yoon H. H. The Effects of Workplace Loneliness on Work Engagement and Organizational Commitment: Moderating Roles of Leader-member Exchange and Coworker Exchange [J]. *Sustainability*, 2021, 13(2): 1-14.

[22] Chou I. W. Perceived Social Support and Employee Well-being in Remote Work Settings: Exploring the Mediating Role of Workplace Loneliness—A Case Study of a Top 500 Enterprise in China[J]. *Connexion: Journal of Humanities and Social Sciences*, 2024, 13(1): 1-15.

[23] Elena-Livia V., Tasente T. Emotion as a State/Trait and Loneliness of Employees at Work in Multinationals in Constanta and Bucharest[J]. *The Black Sea Journal of Psychology*, 2023, 14(4): 487-498.

[24] Li M., Amponstira F. The Moderator Effect of Researchers' Team Tenure Heterogeneity on the

Relationship Between Improvisation Behavior and Innovative Performance in Henan Province, China[J]. *Asian Culture and History*, 2020, 12(2): 1-11.

[25] Vera D. , Crossan M. Improvisation and Innovative Performance in Teams[J]. *Organization Science*, 2005, 16(3): 203-224.

[26] Secchi E. , Roth A. , Verma R. The Effect of Service Improvisation Competence on Hotel Performance [J]. *International Journal of Operations & Production Management*, 2020, 40(3): 245-270.

[27] Afsar B. , Al-Ghazali B. M. , Cheema S. , Javed F. Cultural Intelligence and Innovative Work Behavior: The Role of Work Engagement and Interpersonal Trust [J]. *European Journal of Innovation Management*, 2021, 24(4): 1082-1109.

[28] Schaufeli W. B. , Salanova M. , Gonzálezromá G. , Bakker A. B. The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach[J]. *Journal of Happiness Studies*, 2002, 3(1): 71-92.

[29] Orlowski M. , Bufquin D. , Nalley M. E. The Influence of Social Perceptions on Restaurant Employee Work Engagement and Extra – role Customer Service Behavior: A Moderated Mediation Model [J]. *Cornell Hospitality Quarterly*, 2021, 62(2): 261-275.

[30] Darban G. , Karatepe O. M. , Rezapouraghdam H. Does Work Engagement Mediate the Impact of Green Human Resource Management on Absenteeism and Green Recovery Performance? [J]. *Employee Relations*, 2022, 44(5): 1092-1108.

[31] Jason V. S. N. G. Regulatory Focus and Innovative Work Behavior: The Role of Work Engagement [J]. *Current Psychology*, 2021(40): 2791-2803.

[32] Mubarak N. , Khan J. , Yasmin R. , Malaysia U. S. The Impact of a Proactive Personality on Innovative Work Behavior: The Role of Work Engagement and Transformational Leadership[J]. *Leadership & Organization Development Journal*, 2021, 42(7): 989-1003.

[33] Ly B. Inclusion Leadership and Employee Work Engagement: The Role of Organizational Commitment in Cambodian Public Organization[J]. *Asia Pacific Management Review*, 2024, 29(1): 44-52.

[34] Zahari N. , Kaliannan M. Antecedents of Work Engagement in the Public Sector: A Systematic Literature Review[J]. *Review of Public Personnel Administration*, 2023, 43(3): 557-582.

[35] Carmeli A. , Palmon R. , Ziv E. Inclusive Leadership and Employee Involvement in Creative Tasks in the Workplace: The Mediating Role of Psychological Safety[J]. *Creativity Research Journal*, 2010, 22(3): 250-260.

[36] Yasin R. , Jan G. , Huseynova A. , Atif M. Inclusive Leadership and Turnover Intention: The Role of Follower-leader Goal Congruence and Organizational Commitment[J]. *Management Decision*, 2023, 61(3): 589-609.

[37] Vakira E. , Shereni N. C. , Ncube C. M. , Ndlovu N. The Effect of Inclusive Leadership on Employee Engagement, Mediated by Psychological Safety in the Hospitality Industry[J]. *Journal of Hospitality and Tourism Insights*, 2023, 6(2): 819-834.

[38] Li X. , Peng P. How Does Inclusive Leadership Curb Workers' Emotional Exhaustion? The Mediation of Caring Ethical Climate and Psychological Safety[J]. *Frontiers in Psychology*, 2022, 13(2): 1-12.

[39] Al-Atwi A. A. , Al-Hassani K. K. Inclusive Leadership: Scale Validation and Potential Consequences [J]. *Leadership & Organization Development Journal*, 2021, 42(8): 1222-1240.

[40] Mamani W. C. , Manrique G. M. L. , Madrid S. D. P. C. , Herrera E. E. , Acosta D. B. , Rivas-Diaz R. R. , Ramos F. S. S. The Role of Entrepreneurship and Green Innovation Intention on Sustainable Development: Moderating Impact of Inclusive Leadership[J]. *Baltic Journal of Management*, 2022, 24(1): 124-139.

- [41] Khan J. , Jaafar M. , Mubarak N. , Khan A. K. Employee Mindfulness, Innovative Work Behaviour, and IT Project Success: The Role of Inclusive Leadership[J]. *Information Technology and Management*, 2022, 11(1) : 1-15.
- [42] Qasim S. , Usman M. , Ghani U. , Khan K. Inclusive Leadership and Employees' Helping Behaviors: Role of Psychological Factors[J]. *Frontiers in Psychology*, 2022, 13(3) : 1-18.
- [43] Zhou F. , Mou J. Does Social Media Usage Evoke Employees' Spirituality? A Cross-level Moderation Model of Inclusive Leadership[J]. *Information Technology & People*, 2022, 35(4) : 1383-1409.
- [44] Chen H. , Liang Q. , Feng C. , Zhang Y. Leadership and Follower Voice: The Role of Inclusive Leadership and Group Faultlines in Promoting Collective Voice Behavior [J]. *Journal of Applied Behavioral Science*, 2023, 59(1) : 61-87.
- [45] Egitim S. Challenges of Adapting to Organizational Culture: Internationalization Through Inclusive Leadership and Mutuality[J]. *Social Sciences & Humanities Open*, 2022, 5(1) : 1-24.
- [46] Kloutsiniotis P. V. , Mihail D. M. , Mylonas N. , Pateli A. Transformational Leadership, HRM Practices and Burnout during the COVID-19 Pandemic: The Role of Personal Stress, Anxiety, and Workplace Loneliness[J]. *International Journal of Hospitality Management*, 2022, 102(1) : 1-17.
- [47] Firoz M. , Chaudhary R. , Khan A. Desolated Milieu: Exploring the Trajectory of Workplace Loneliness (2006-2019)[J]. *Management Research Review*, 2021, 44(5) : 757-780.
- [48] Shafaei A. , Nejati M. Creating Meaningful Work for Employees: The Role of Inclusive Leadership[J]. *Human Resource Development Quarterly*, 2024, 35(2) : 189-211.
- [49] Gürbüz S. , van Woerkom M. , Kooij D. T. , Demerouti E. , van Der Klink J. J. , Brouwers E. P. Employable until Retirement: How Inclusive Leadership and HR Practices Can Foster Sustainable Employability Through Strengths Use[J]. *Sustainability*, 2022, 14(19) : 1-17.
- [50] Shao J. , Cherian J. , Xu L. , Zaheer M. , Samad S. , Comite U. , Badulescu D. A CSR Perspective to Drive Employee Creativity in the Hospitality Sector: A Moderated Mediation Mechanism of Inclusive Leadership and Polychronicity[J]. *Sustainability*, 2022, 14(10) : 1-27.
- [51] Shabeer S. , Nasir N. , Rehman S. Inclusive Leadership and Career Adaptability: The Mediating Role of Organization-based Self-esteem and the Moderating Role of Organizational Justice[J]. *International Journal of Leadership in Education*, 2023, 26(3) : 496-515.
- [52] Charoensukmongkol P. , Pandey A. The Effectiveness of Improvisational Behavior on Sales Performance during the COVID-19 Pandemic: The Moderating Effect of Functional Customer Orientation[J]. *Journal of Asia Business Studies*, 2023, 17(4) : 766-784.
- [53] De Clercq D. , Ul Haq I. , Azeem M. U. Unpacking the Relationship Between Procedural Justice and Job Performance[J]. *Management Decision*, 2021, 59(9) : 2183-2199.
- [54] Vera D. , Crossan M. M. Character-enabled Improvisation and the New Normal: A Paradox Perspective [J]. *Management Learning*, 2023, 54(1) : 77-98.
- [55] Capano G. , Toth F. Thinking Outside the Box, Improvisation, and Fast Learning: Designing Policy Robustness to Deal with What Cannot Be Foreseen[J]. *Public Administration*, 2023, 101(1) : 90-105.
- [56] Hadjimichael D. , Tsoukas H. Phronetic Improvisation: A Virtue Ethics Perspective[J]. *Management Learning*, 2023, 54(1) : 99-120.
- [57] Charoensukmongkol P. Does Entrepreneurs' Improvisational Behavior Improve Firm Performance in Time of Crisis? [J]. *Management Research Review*, 2022, 45(1) : 26-46.
- [58] Faraco A. Perception of Structure in Collective Free Improvisation and Its Context Dependency: An

Exploratory Analysis[J]. *Empirical Musicology Review*, 2023, 18(1): 63-81.

[59] Hobfoll S. E. The Influence of Culture, Community, and the Nested-self in the Stress Process: Advancing Conservation of Resources Theory[J]. *Applied Psychology: An International Review*, 2001, 50(3): 337-370.

[60] Hobfoll S. E. Social and Psychological Resources and Adaptation[J]. *Review of General Psychology*, 2002, 6(4): 307-324.

[61] Liu Y. , He H. , Zhu W. Motivational Analyses of the Relationship Between Negative Affectivity and Workplace Helping Behaviors: A Conservation of Resources Perspective [J]. *Journal of Business Research*, 2020(108): 362-374.

[62] Kyriakopoulos K. Improvisation in Product Innovation: The Contingent Role of Market Information Sources and Memory Types[J]. *Organization Studies*, 2011, 32(8): 1051-1078.

[63] Bingham C. B. , Eisenhardt K. M. Rational Heuristics: The ‘Simple Rules’ That Strategists Learn from Process Experience[J]. *Strategic Management Journal*, 2011, 32(13): 1437-1464.

[64] Bird T. The Creativity of Everyday Uncertainty: Improvisation, Material Security, and Wellbeing in Urban Households in the Northeastern United States[J]. *Journal of Organizational Ethnography*, 2020, 9(1): 1-16.

[65] Zheng C. , Zhou J. , Liu S. , Li X. The Impact of Workplace Loneliness on Employee Helping Behavior: Based on the Perspective of Conservation of Resource Theory [J]. *Journal of Hunan University of Technology (Social Science Edition)*, 2022, 27(1): 43-51.

[66] Lan Y. , Ma Y. , Yang J. , Yang X. Workplace Status, Workplace Loneliness and Silence Behavior of Primary and Secondary School Teacher[J]. *Journal of Hangzhou Normal University (Natural Science Edition)*, 2019, 18(4): 396-401, 436.

[67] Badri S. K. Z. , Yap W. M. , Ramos H. M. Workplace Affective Well-being: Gratitude and Friendship in Helping Millennials to Thrive at Work [J]. *International Journal of Organizational Analysis*, 2022, 30(2): 479-498.

[68] Anyan F. , Hjemdal O. Loneliness in Social Relationships: Mapping the Nomological Network of Loneliness with Key Conceptual Domains and Theoretical Constructs [J]. *Journal of Social and Personal Relationships*, 2022, 39(2): 132-154.

[69] Nembhard I. M. , Edmondson A. C. Making It Safe: The Effects of Leader Inclusiveness and Professional Status on Psychological Safety and Improvement Efforts in Health Care Teams [J]. *Journal of Organizational Behavior*, 2006, 27(7): 941-966.

[70] Wright S. L. , Burt C. D. , Strongman K. T. Loneliness in the Workplace: Construct Definition and Scale Development[J]. *New Zealand Journal of Psychology*, 2006, 35(1): 59-68.

[71] Gable S. L. , Berkman E. T. Social Motives and Goals[A]. *Handbook of Approach and Avoidance Motivation*[M]. New York: Psychology Press, 2013: 203-216.

[72] Chang C. H. , Ferris D. L. , Johnson R. E. , Rosen C. C. , Tan J. A. Core Self-evaluations: A Review and Evaluation of the Literature[J]. *Journal of Management*, 2012, 38(1): 81-128.

[73] Ariani D. W. Relationship with Supervisor and Co-workers, Psychological Condition and Employee Engagement in the Workplace[J]. *Journal of Business and Management*, 2015, 4(3): 34-47.

[74] Hobfoll S. E. Conservation of Resources. A New Attempt at Conceptualizing Stress [J]. *American Psychologist*, 1989, 44(3): 513-529.