

# A review of recent studies on workplace loneliness

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**Abstract:** *Based on the literature review in recent years, this paper first expounds the concept connotation and structural dimensions of workplace loneliness, then mainly summarizes the empirical research on workplace loneliness, and finally prospects the areas that can be further explored in the future, in order to provide support for the follow-up research.*

**Keywords:** *Workplace loneliness, Research review, Empirical research*

## 1. Introduction

The earlier research is about loneliness. Later, some scholars gradually try to bring loneliness into the scope of workplace research, and get more and more attention. In 2015, Li Chaohong and Ye Maolin made a review on workplace loneliness [1]. Since then, from about 2016, the research on workplace loneliness has increased significantly. In 2020, Firoz, M., R. Chaudhary and A. Khan made a new review, but only included the literature written in English [2]. This paper takes 2016-2021 as the retrieval scope, including journal articles, conference articles and dissertations written in Chinese, summarizes the research contents of Chinese and foreign scholars on workplace loneliness in recent years, and discusses some perspectives that can be extended in the future.

## 2. The concept and measurement of workplace loneliness

At present, researchers generally adopt the concept of workplace loneliness proposed by Wright. In 2005, Wright formally defined workplace loneliness as a lonely experience in the workplace due to the difference in the number or quality of interpersonal relationships expected and actually acquired, and the lack of individual ability to bridge the difference [3]. In 2006, he also proposed that the sense of workplace loneliness includes the sense of lack of membership and emotional deprivation of the organization [4].

Research on the structure of loneliness in the workplace is represented by Russell's single-dimensional theory and Weiss's binary structure [5]. The measurement of workplace loneliness is based on the single dimension theory, which includes group assessment and questionnaire survey. It is widely accepted and applied in the measurement based on the dual structure theory. Wright's multidimensional workplace loneliness questionnaire is the most famous, including nine questions of emotional deprivation and seven problems of organizational membership missing. Later, the scale is revised, called the Loneliness at Work Scale. In combination with the cultural background of China, a professional loneliness scale was developed by means of in-depth interview and open questionnaire survey, including five topics of existential loneliness and interpersonal loneliness [6].

## 3. An empirical study on workplace loneliness in recent years

Scholars have made a positive exploration on the antecedent, outcome, intermediary and regulatory variables of workplace loneliness, and the relevant research focuses on the individual and organization. At the organizational level, it can be divided into leadership related factors and other factors.

### 3.1 The antecedent variable of workplace loneliness

From the individual level, there are many researches on the negative factors. Peng Shuchao (2020) pointed out that social anxiety and fear of negative evaluation had a significant positive predictive effect on workplace loneliness [7]. Wen Nai and Yu Shijia thought that work stress had a significant negative predictive effect on loneliness in the workplace from the perspective of practice, and led to low work

input [8]. The results of Wan Guangsheng and Cui Lijuan show that neuroticism has a significant positive impact on the workplace loneliness, while rigor, agreeability and extroversion have a significant negative impact on the workplace loneliness [9]. Wang, D. and h.Liu pointed out that work autonomy has a positive impact on perceived insider status, which further reduces workplace loneliness [10].

From the perspective of organizational (Leadership) factors, Oge,E., Cetin,M. and Top,S. points out that paternalistic leadership reduces the loneliness of air traffic controllers and the level of work family conflict by increasing their work input. Lin Zhongyong pointed out that the negative prediction of service-oriented leadership in the sense of workplace loneliness and the lack of organizational identity dimensions [12]. Wan Pengyu pointed out that health promotion leadership also negatively predicted the emotional deprivation of workplace loneliness and the lack of organizational membership [13].

Judging from organizational (other) factors, Jung, H.S., M.K.Song and H.H.Yoon pointed out that positive social communication between employees and colleagues has been proved to alleviate the negative impact of workplace loneliness [14]. Peng Shuchao pointed out that workplace bullying has a significant positive predictive effect on workplace loneliness; organizational self-esteem plays a part of the mediating role between workplace exclusion and workplace loneliness [7]. Lan Yuanmei, et al. proposed that organizational atmosphere was negatively related to loneliness [15]. Wan Guangsheng and Cui Lijuan pointed out that trust in the staff organization has a significant negative impact on the sense of workplace loneliness [9].

### ***3.2 The outcome variable of workplace loneliness***

There are many research on the outcome variables that affect workplace loneliness, and the individual factors focus on performance and turnover intention. Performance is the foundation of employees and the most concerned topic of managers. Li Junkang pointed out that workplace loneliness can effectively predict job performance [16]. Wan Pengyu also has similar conclusions: emotional deprivation of loneliness in the workplace and lack of organizational membership predict mission performance negatively [13]. There are many researches related to turnover intention. The studies of Yu Dongning, Lin Zhongyong and li Mengjiao show that the loneliness of different groups of employees is positively correlated with turnover tendency [17,18,12]. In the study of Xia Baoguo, et al. and Ghadi, M.Y., the sense of workplace loneliness was regarded as the intermediary variable. Xia Baoguo, et al. has learned that loneliness in the workplace plays a full intermediary role between relationship center and departure turnover intention, and some intermediary role between emotional relationship, work relationship embedding and separation follow-up tendency [19]. Ghadi, M.Y. pointed out that the impact of workplace spirituality on voluntary turnover intention is partly mediated by loneliness at work [20].

The relative results of the study on workplace loneliness were less at the organizational level. Peng,J., et al. pointed out that the sense of workplace loneliness is significant only if the leaders' empathy is low, and the negative indirect impact on their creativity through the communication between leaders and members is significant [21]. Jung, H.S., et al. studied the impact of workplace loneliness on organizational commitment [14].

### ***3.3 The intermediary variable of workplace loneliness***

From the perspective of individual factors, Amarat, M., et al. pointed out that workplace loneliness has a negative impact on work performance, which is amplified when work alienation is used as an intermediary variable [22]. Besides job alienation, job burnout is a common intermediary variable of workplace loneliness. Lin Zhongyong, et al. studied the working situation of prison guards, and found that job burnout played a part of the intermediary role in the influence of loneliness on turnover intention [23]. Zhu Dingmei pointed out that the internal identity perception can not only directly affect workplace loneliness, but also affect the job burnout and indirectly affect workplace loneliness by influencing the role stress. Lan Yuanmei, et al. proposed that job burnout plays a part of the intermediary role between loneliness and duty [25]. In contrast, there are also many positive mediators. Yang Shipan pointed out that the psychological capital of employees plays a part of the mediating role between loneliness in the workplace and the creativity of employees [26]. Su Yanlin's empirical results show that the intermediary effect of loneliness and work performance in the work input field is significant [27]. The study of Oge,E., et al. examined the mediating role of work participation in the relationship between paternalistic leadership and workplace loneliness, paternalistic leadership and work-family conflict [11]. He Yushan, et al. pointed out that workplace loneliness inhibited employees' innovation behavior, while under the role of innovation intention and leadership member exchange as intermediary, workplace loneliness had

more persuasive effect on employees' innovation behavior [28].

The research of the mediating factors of workplace loneliness also includes the organizational factors. The study of Peng Jian and Chen Yushuai shows that the sense of workplace loneliness negatively affects the creativity of employees, and leadership member exchange plays an intermediary role in the above-mentioned relationship [29]. He Yushan et al. also have similar results: workplace loneliness inhibits the innovation behavior of employees, while under the role of innovation willingness and leader-member exchange as intermediary, workplace loneliness has more persuasive effect on employees' innovation behavior [28]. Shi Quan pointed out that organizational self-esteem plays a part of the mediating role between workplace exclusion and workplace loneliness, and organizational self-esteem and self-concept clarity play a chain double intermediary role between workplace exclusion and workplace loneliness [30]. Wan Guangsheng and Cui Lijuan proposed that the sense of employee alliance atmosphere has a significant negative impact on their workplace loneliness, and indirectly affects the sense of workplace loneliness through trust within the organization [9]. Li Junkang found that organizational commitment plays a part of the intermediary role between loneliness and job performance in the workplace [16]. Huang Yilin proposed that the negative prediction of employees' workplace loneliness predicted emotional commitment and leadership member exchange, emotional commitment and leader-member exchange negatively predicted workplace deviation behavior of employees [31].

### ***3.4 The adjustment variable of workplace loneliness***

What factors can regulate the influence of various factors on workplace loneliness, what factors can regulate the impact of workplace loneliness on various factors? Many scholars have also made this research. Firstly, look at the individual factor level research. Wan Guangsheng and Cui Lijuan took personality traits as the entry point, and conclude that neuroticism has a significant positive regulatory effect on the relationship between trust and loneliness in the employees' organization, and open personality traits have a significant negative regulatory effect on the relationship between them [9]. Li Mengjiao has found that the relationship between post-90s self-evaluation, others' emotional evaluation and emotional control workplace loneliness and turnover intention plays a negative role in regulating [18]. Xu Yangyang, et al. pointed out that the future work self-definition can alleviate the negative prediction of work loneliness on work investment [32]. He Yushan, et al. empirically concluded that employee tradition plays a regulatory role in the positive relationship between leader-member exchange and employee innovation behavior [28]. Wang, D. and H.Liu concluded that perceived insider status reduced workplace loneliness more effectively under the condition of higher clan culture [10]. Wen Nai and Yu Shijia used empty nest youth as a regulatory variable to explore the negative correlation between the workplace loneliness and work input.

Next, let's look at organizational factors. Xu Yangyang, et al. pointed out that transformational leadership can buffer the negative relationship between workplace loneliness and work input; when the future work self-definition and transformational leadership level are very low, the negative impact of workplace loneliness on work input is the strongest [32]. Peng Jian and Chen Yushuai have found that leadership care positively regulates the negative relationship between workplace loneliness and leader-member exchange, and regulates the intermediary effect of workplace loneliness on creativity through leader-member exchange [29]. Wan Pengyu and Yang Xinguo pointed out that supervisor-subordinate relationship plays a role in regulating strategic consensus and turnover intention [33]. Jung, H.S., et al. found that the negative impact of workplace loneliness on work engagement was also regulated by colleagues' communication [14].

Addition: there are few literatures on workplace loneliness in 2021. Di Napoli, A., et al. investigated whether workplace discrimination in self-awareness had any effect on the mental health of migrants living and working in Italy, and workplace loneliness was one of the regulatory variables [34]. The research situation of Manucci, M. is a workplace after several months of blockade. It points out that uncertainty is permeated in the subjective world, intimate relationship and social behavior of human beings. Three intervention levels are proposed to manage the emotional characteristics of employees after returning to work [35]. Kotera, Y., et al. studies indicate that in 2019, with the prevalence of covid-19, Japanese medical workers have higher mental health problems and loneliness than the general population, and their degree of hope and self sympathy is lower than that of the general population [36].

## **4. Research limitations and Prospects**

Overall, the research on workplace loneliness is still in a very new stage. Referring to a review of

workplace friendship by Wang Yan and Wu Cisheng, this paper proposes that the sense of workplace loneliness may also exist in the role of Chinese local cultural change. The high power distance and the respect for human feelings may cause the aggravation of the loneliness in the workplace, and the level of loneliness of employees under different ownership systems may also be different.

From the measurement, Mao Chonglin translated and compiled a questionnaire on workplace loneliness, taking employees of enterprises and institutions in Guangdong and Henan Province as the research object [37-38]. The future research can verify its reliability and validity. Workplace loneliness is a negative construct, and is easily affected by social approval. The previous research is mainly self-contained questionnaire survey. In the future, we can consider using field experiments to further verify and deepen the results of the questionnaire survey.

Workplace loneliness is easily affected by the working situation and has a fluctuation. The existing research mostly adopts cross-section design, which largely covers the dynamic of workplace loneliness. In the future, it is better to write out the objects of investigation clearly, and incorporate the elements of system, technology, culture, geography, economy, industry and organizational background, and adopt vertical research methods. The follow-up study can start with the short-term fluctuation of individuals, obtain sample data through frequent experience sampling and diary tracking, further deepen the research on the generation and change mechanism of workplace loneliness, and provide theoretical basis for the intervention mechanism of workplace loneliness.

## Conclusion

The main focus of existing research on workplace loneliness is to explore the causes and consequences of employees' workplace loneliness, and ignore the role mechanism of leaders' workplace loneliness, and there are fewer studies that consider the two in the same framework. At present, the research on workplace loneliness is concentrated on individual level, and the research on team and organization level is relatively lacking. It can aggregate individual loneliness to team level, explore the influence of team level loneliness on individual or organizational level consequence variables, and also study the influence of leadership loneliness on the loneliness of employees.

## References

- [1] Li Chaohong, Ye Maolin. *Research review on workplace loneliness [J]. China Human Resources Development, 2015 (11): 29-37.*
- [2] Firoz, M., R. Chaudhary and A. Khan, *Desolated milieu: exploring the trajectory of workplace loneliness (2006-2019) [J]. Management Research Review, 2020.*
- [3] Wright, S. L. *Loneliness in the Workplace [D]. University of Canterbury, 2005.*
- [4] 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(2): 59-68.*
- [5] Lu Huicong, Wen Zhonglin, Deng Jiayu, Chen Qishan. *Antecedents and consequences of workplace loneliness [J]. Psychological Science, 2015, 38 (04): 979-986.*
- [6] Mao Chonglin. *The development of workplace Loneliness Questionnaire and its influencing factors [D]. South China Normal University, 2013.*
- [7] Peng Shuchao. *The effect of workplace bullying on employees' workplace loneliness: the chain mediating effect of social anxiety and fear of negative evaluation [D]. Qufu Normal University, 2020.*
- [8] Wen Nai, Yu Shijia. *Research on the relationship between work stress and engagement: the role of empty nest youth [A]. Advanced science and industry research Centre. Proceedings of 2019 International Conference on Education, Management, Economics and Humanities (ICEMEH 2019) [C]. Advanced Science and Industry Research Centre: Science and Engineering Research Centre, 2019: 5.*
- [9] Wan Guangsheng, Cui Lijuan. *The influence of alliance atmosphere perception and trust in organization on workplace loneliness: the regulation of personality traits [J]. China Human Resources Development 2019, 36(04): 30-44+60.*
- [10] Wang, D. and H. Liu, *Effects of job autonomy on workplace loneliness among knowledge workers [J]. Chinese Management Studies, 2020.*
- [11] Oge, E., Cetin, M. and Top, S. *The effects of paternalistic leadership on workplace loneliness, work family conflict and work engagement among air traffic controllers in Turkey [J]. Journal of Air Transport Management, 2019(66): 25-35.*
- [12] Lin Zhongyong. *Study on the relationship between service-oriented leadership, workplace loneliness and turnover intention of nurses [D]. Guangxi University, 2019.*

- [13] Wan Pengyu. *Study on the relationship between health promoting leadership, workplace loneliness and doctors' task performance [D]*. Guangxi University, 2018.
- [14] Jung, H.S., M. K. Song and H. H. Yoon, *The effects of workplace loneliness on work management and organizational commitment: moderating roles of leader-member exchange and co-worker exchange [J]*. *Sustainability*, 2021, 13 (9482).
- [15] Lan Yuanmei, Ma Yabing, Zhong Gegui, Li Qiushi, Yang Xinguo. *Organizational climate and turnover intention of special education teachers: mediating role of workplace loneliness [J]*. *China Special Education*, 2019(05): 10-15.
- [16] Li Junkang. *The relationship between workplace loneliness and job performance [D]*. Jilin University, 2017.
- [17] Yu Dongning. *Research on the relationship among organizational support consistency, workplace loneliness and turnover intention of new generation employees [D]*. Jilin University, 2018.
- [18] Li Mengjiao. *Research on the relationship between workplace loneliness and turnover intention of post-90s employees [D]*. Liaoning University, 2019.
- [19] Xia Baoguo, Liang Hui, He Jie. *The influence of relationship characteristics on hotel employees' turnover following behavior: an intermediary based on workplace loneliness [J]*. *China Human Resources Development*, 2016(02): 29-34.
- [20] Ghadi, M.Y., *The impact of workplace spirituality on voluntary turnover intentions through loneliness in work [J]*. *Journal of Economic and Administrative Sciences*, 2017, 33(1): 81-110.
- [21] Peng, J., Chen, Y., Xia, Y. and Ran, Y. *Workplace loneliness, leader-member exchange and creativity: the cross-level moderating role of leader compassion [J]*. *Personality and Individual Differences*, 2017(104): 510-515.
- [22] Amarat, M., Akbolat, M., Unal, O. and Karakaya, B. G. *The mediating role of work alienation in the effect of workplace loneliness on nurses' performance [J]*. *Journal of Nursing Management*, 2018, 27(3): 553-559.
- [23] Lin Zhongyong, Wan Pengyu, Lan Yuanmei, Yang Xinguo. *Relationship between loneliness, job burnout and turnover intention of prison police [J]*. *China Occupational Medicine*, 2019, 46(01): 38-41.
- [24] Zhu Dingmei. *Relationship between insider identity perception and workplace loneliness [D]*. Jiangxi Normal University, 2017.
- [25] Lan Yuanmei, Ma Yabing, Dong Ke, Gu Song, Yang Xinguo. *The relationship between workplace loneliness, job burnout and conscientiousness of special education teachers in Guangxi [J]*. *China Occupational Medicine*, 2019, 46(04): 438-441.
- [26] Yang Shipan. *Internal mechanism of workplace loneliness influencing employee creativity: cross level moderating effect of team trust [D]*. Northwestern University, 2019.
- [27] Su Yanlin. *The relationship between workplace loneliness and job performance [D]*. Hunan Normal University, 2020.
- [28] He Yushan, Chen Pengyu, Tao Xiangnan, Peng Dafeng. *Research on the mechanism of the influence of workplace loneliness on employees' innovative behaviour from the perspective of emotion theory [J]*. *Journal of Yunnan University of Finance and Economics*, 2020, 36 (05): 92-103.
- [29] Peng Jian, Chen Yushui. *Can loneliness make you a sage? The multi-level mechanism of workplace loneliness influencing employees' creativity [A]*. Chinese Psychological Society. *Abstracts of the 19th national psychological Academic Conference [C]*. Chinese Psychological Society: Chinese Psychological Society, 2016:1.
- [30] Shi Quan. *The influence of workplace exclusion on workplace loneliness of college assistants [D]*. Guangxi University, 2017.
- [31] Huang Yilin. *The influence of workplace loneliness on workplace deviant behaviour [D]*. Donghua University, 2020.
- [32] Xu Yangyang, Lin Xinqi, Xi Yiheng. *When lonely employees will be more engaged: a study on the intervention effect of future work self-definition and transformational leadership [J]*. *Nankai Management Review*, 2019, 22(05): 79-89.
- [33] Wan Pengyu, Yang Xinguo. *The influence of strategic consensus on turnover intention of front-line sales in manufacturing industry: the role of workplace loneliness and superior subordinate relationship [A]*. Chinese Psychological Society. *The 20th National Psychological academic conference--Summary of psychology and national mental health [C]*. Chinese Psychological Society: Chinese Psychological Society, 2017: 2.
- [34] Di Napoli, A., et al., *Self-perceived workplace discrimination and mental health among immigrant workers in Italy: a cross-sectional study [J]*. *Bmc Psychiatry*, 2021.21 (851).
- [35] Manucci, M., *How people come back to workplaces during the pandemic: three dimensions of intervention for new emotional performance conditions [J]*. *Human Resource Development International*, 2021.

- [36] Kotera, Y., et al., *Mental health of medical workers in Japan during COVID-19: Relationships with loneliness, hope and self-compassion [J]. Current psychology (New Brunswick, N.J.), 2021: 1-4.*
- [37] Wang Yan, Wu Cisheng. *Workplace friendship: research review and localization thinking [J]. Management Modernization, 2021, 41(01): 113-116.*
- [38] Mao Chonglin, Ma Chao. *Research on the relationship among organizational climate, workplace loneliness and job satisfaction [A]. Chinese Psychological Society. Abstracts of the 15th National Psychological Conference [C]. Chinese Psychological Society: Chinese Psychological Society, 2012: 2.*