

The Turnover Intention among Chinese Doctors: A Systematic Review

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Abstract

The issue of doctor turnover is a significant challenge globally, especially in China's healthcare industry. High turnover intention not only hinders the sustainable development of healthcare but also affects the quality of patient treatment. In order to have a comprehensive understanding of influential factors of doctors' turnover intention in China, this study conducted a systematic review of research mainly in Web of Science and Scopus databases from 2014 to 2023. This study explored two main research objectives: to (1) identify the key factors influencing doctors' turnover intention in China and (2) categorize these factors according to their nature and impact. The findings reveal that the doctor turnover issue in China is a barrier to the sustainable development of the healthcare industry and the quality of patients' treatment. The influential factors of turnover intention could be categorized into five parts: personal, organizational, work-related, psychological, and environmental. This survey highlights the importance of the turnover issue and offers a deeper understanding of it. Additionally, the study provides practical implications for healthcare institutions, particularly for the human resource departments, and outlines directions for future research to improve turnover intention and its consequences.

Keywords: Turnover Intention, Chinese, Doctors, Healthcare Industry.

Introduction

The turnover intention is a pervasive challenge faced by organizational human resource management that has far-reaching implications across industries. The turnover issue has a severe influence on the healthcare industry, given its unique dynamics and complexity (BaniMelhem & Abu Elanain, 2018).

There are two types of employees leaving the organization: voluntary and involuntary. Voluntary departure is when an employee quits the organization for his or her own reasons (e.g., resignation). Involuntary departure is when an employee is asked to leave the job and the organization due to termination or layoff (Shaw, 1998). Turnover intention is usually defined as the extent of an employee's willingness to voluntarily leave the current job as well as the organization (Labrague et al., 2018). Bluedorn (1982), stated that intention to leave is

a cognitive process, while the turnover from a job is an actual behavioral process. Thus, the turnover intention is a precursor and predictor of the actual behavior of employee turnover. The majority of the previous studies attached employees' turnover intention rather than their actual leave behavior (Chung & Jeon, 2020). Since it is difficult to track what happens to employees who have already turnover from an organization, turnover intentions (also known as the cognitive processes of turnover) are generally considered by researchers to be more valuable to study than turnover rates (Sager et al., 1998). Therefore, studying employees' turnover intention can provide timely and valuable feedback to the organization, which can have far-reaching implications for the organization's long-term development. Therefore, the main focus of this study is the turnover intention.

Healthcare employee turnover, especially doctor turnover, is one of the most persistent challenges in healthcare institutions (Oh & Kim, 2019). Doctors are critical for achieving the United Nations Sustainable Development Goal 3 and providing treatment for the world's people. According to a report by the World Health Organization (WHO) (2023), it is projected that by 2030, an additional 27 million healthcare professionals will be needed globally to meet unmet healthcare needs (Harun et al., 2022). However, a study by Shen et al (2020), which tallied studies on doctors turnover intention from 1988-2019, concluded that the intention of the world's doctors to leave their jobs is 47%. The turnover intention of Chinese doctors is even more alarming, with 57.9% of Chinese doctors planning to leave their jobs in three years, according to China's Dingxiang Talent (Dec. 6, 2020).

Previous studies have investigated influential factors for doctors in China (Fang et al., 2014; Hou et al., 2021; Liu et al., 2019). Some studies revealed that personal factors, such as job satisfaction and burnout, significantly influence Chinese doctor turnover intention (Chen et al., 2019; Chen et al., 2022; Duan et al., 2019). Li et al (2023), reveal that workplace violence has a direct influence on the turnover intention among Chinese doctors. In addition, prior scholars have pointed out that compensation and related organizational factors also significantly impact Chinese doctors' turnover intention (Liu et al., 2019).

Previous scholars' studies on the Chinese doctor turnover issue have rarely comprehensively summarized the various influential factors. This study provides a summary of the literature review on the factors influential factors of turnover intention among doctors in China. The results of this study offered a better understanding of the retention of Chinese doctors. When the causes are deeply understood, it will allow the management of healthcare institutions to address the problem and take timely action to reduce doctor turnover intention. It also contributes to the improvement of healthcare treatment services for patients in China.

Aims and Methods

Aims

This study aims to examine and summarize the literature on doctors' turnover intention in China from published empirical evidence and review research.

Searching Method

Research searching in WOS and Scopus databases was conducted in August 2024. The study's timeframe was restricted to the period from January 2014 to January 2023 to examine only research with updated and relevant information concerning the presenting problem. Searching terms contained combinations of the following keywords: "turnover intention," "intention to leave," "intention to quit," or "dropout intention," or "retention of employees," and "doctors," or "physician" or "medical professional."

Only studies that met the following criteria were added to this study:(i) The target population must be Chinese doctors, (ii) The target sample organization: Chinese hospitals, (iii) The paper language must be English, (iv) The articles were empirical as well as review articles. (V) The articles must have been published in 2014-2023.

Searching Outcomes

This part is the steps and outcomes of the literature review conducted in this study. The literature review method is a means for identifying, assessing, and interpreting existing empirical research on a topic, research question, or phenomenon of interest (Kitchenham, 2004)

The original search identified 213 articles in the WOS and Scopus databases. After excluding duplicates, the initial search yielded 143 papers. Two authors then independently reviewed the titles and abstracts of the remaining 143 papers. After screening their titles and abstracts, 32 papers remained. The two authors assessed the remaining 32 papers in full text for eligibility based on inclusion and exclusion criteria. After the assessment, the sample of 8 papers was an in-depth study of doctors' turnover intention in China that met all the assessment criteria (Figure 1).

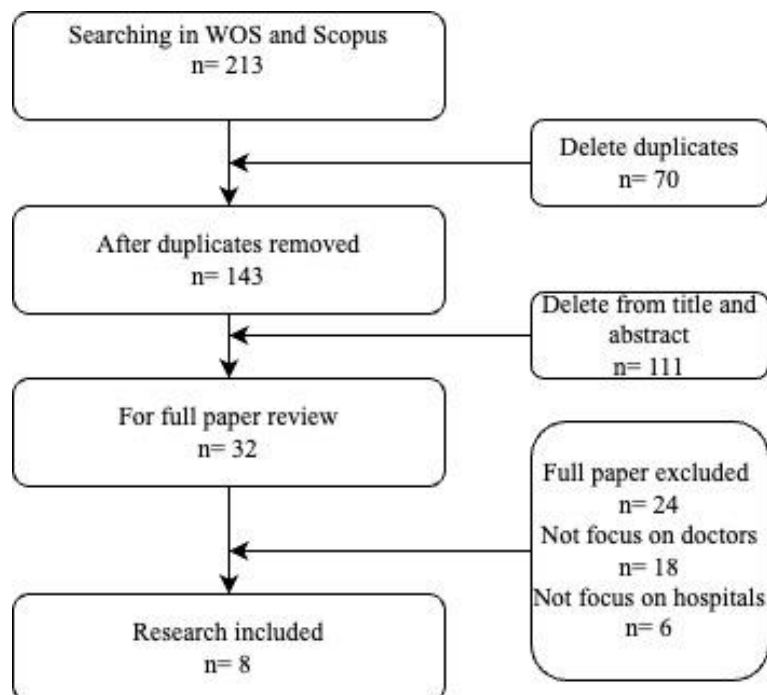


Figure 1 Study selection

Quality Appraisal

This study followed the literature review guidelines proposed by Cooper (1998). The literature was assessed regarding the research questions and sample demographics, efficacy analysis, questionnaire response rates, reliability data for the scales and sample size, descriptive statistics, and validity. Table 1 shows the above elements to be assessed. According to the guidance, the two authors evaluated eight studies and reached a consensus.

Statistic Extraction/Synthesis and Analysis

The authors examined and synthesized the following contents from the eight turnover intervention studies: authors, year, country, sample and design, influential factors, and results (see Table 2).

Results

Research Characteristics

The detail of the methodological description for the final 8 research on doctors' turnover intention in China is shown in Table 2.

Table 1

Methodological description

Methodological details	Duan et al. (2019)	Jiang et al. (2022)	Lu et al. (2017)	Ma et al. (2021)	Wu et al. (2018)	Yang et al. (2022)	Zhang et al. (2017)	Wen et al. (2023)
Research question listed	√	√	√	√	√	√	√	√
Response rate	84.59%	68.4%	89.9%	34%	95%	81.10%	94.7%	90.32%
Demographic of participants	√	√	√	√	√	√	√	√
Sample Size	1257	10,457	3563	508	222	3,783	284	2,501
Detail for scales	√	√	√	√	√	√	√	√
Reliability of scales	√	√	√	√	√	√	√	√
Validity for constructs	√	√	√	√	√	√	√	√

Note: √= yes

All 8 research were conducted in China and published in journals in the language of English. The research data source of Jiang et al. (2022) and Yang et al. (2022) covering the whole of China, Duan et al. (2019) and Wen et al. (2023) covering the east and west of China, Lu et al. (2017) and Ma et al. (2021) focusing on Guangdong Province, Zhang et al. (2017) on Hubei Province, and Wu et al. (2018) on Taiwan. The target populations of the studies were all doctors, with sample sizes ranging from 222 to 10,457. As for influential factors of turnover intention, most studies considered job satisfaction, job burnout and commitment (Duan et al., 2019; Jiang et al., 2022; Lu et al., 2017; Wen et al., 2023; Ma et al., 2021), and 4 research addressed workplace violence, work-family conflict (Duan et al., 2019; Lu et al., 2017; Wu et al., 2018; Wen et al., 2023).

Antecedents of Doctors' Turnover Intention

This review classified the determinants of Chinese doctors' turnover intention into job-related, environmental, psychological, personal attributes, and organizational factors.

Psychological Factors

Job satisfaction, job burnout, and commitment were categorized into psychological factors. 5 of the 8 research examined and reported that significant relationships exist between job satisfaction/job burnout and doctors' turnover intentions (Duan et al., 2019; Jiang et al., 2022; Lu et al., 2017; Wen et al., 2023; Ma et al., 2021). Job satisfaction and job burnout directly and indirectly impact turnover intention (Jiang et al., 2022; Wen et al., 2023). Duan et al. (2019) concluded that higher education-level doctors had low job satisfaction. The satisfaction of compensation is the critical factor contributing to doctors' turnover intention (Jiang et al., 2022; Lu et al., 2017). Job burnout is a common problem among doctors in China; the higher the levels of burnout, the more intention is to leave their job (Wen et al., 2023).

Table 2

Summary of research

No	Author (Year)	Sample	Design	Variables	Results
1	Duan et al.(2019)	1486 physicians	cross-sectional	WPV, Social support, job satisfaction, burnout, turnover intention	WPV↓ Job satisfaction↑, job burnout ↓, social support↑ => turnover intention ↓
2	Jiang et al.(2022)	10,457 physicians	cross-sectional	Occupational stress, job satisfaction, turnover intention	Occupational stress↓ Job satisfaction↑=>turnover intention ↓
3	Lu et al. (2017)	3963 physicians	cross-sectional	Turnover intention job satisfaction, work stress, work family conflict	Job satisfaction↑, work-family conflict ↓, work stress↓, social support↑ => turnover intention ↓
4	Ma et al. (2021)	508 doctors	cross-sectional	commitment HRM practices, turnover intention, Pragmatism, Doctor-Patient Relationship	commitment HRM practices↑, Doctor-Patient Relationship ↓, Pragmatism↑ => turnover intention ↓
5	Wu et al. (2018)	222 physicians	cross-sectional	Work-family conflict, intention to leave, gender	Work-family conflict ↓ => intention to leave↓
6	Yang et al.(2022)	3,973 psychiatrists	cross-sectional	Turnover intention, Job Satisfaction, insomnia.	Job satisfaction↑, insomnia↓=> turnover intention ↓
7	Zhang et al.(2017)	284 doctors	cross-sectional	Job satisfaction, turnover intention	Job satisfaction↑=> turnover intention ↓
8	Wen et al.(2023)	2259 doctors	cross-sectional	Turnover intention, Work-Family Conflict, job burnout	Work-family conflict ↓job burnout ↓=> turnover intention↓

Note: WPV= workplace violence

Environmental Factors

Workplace violence and work-family conflict are two critical environmental factors contributing to doctors' turnover intention in China. Workplace violence is a common problem faced by people in service industries around the world, especially in the healthcare sector. Workplace violence poses a serious threat to the physical and mental health of healthcare employees. Doctors in China have experienced severe workplace violence that can seriously trigger their turnover intention and reduce their motivation, as well as the quality of patient care (Duan et al., 2019). Work-family conflict is a risk in doctors' careers, especially

among married female doctors, and work-family conflict has a particularly significant impact on turnover intention (Wen et al., 2023).

Job-Related Factors

Doctor-patient relationships and work/occupational stress are regarded as job-related factors influencing turnover intention. Interaction with patients consists of a doctor's daily routine, but increasingly tense physician-patient relationships have become an essential trigger for workplace violence in the healthcare industry. The tense patient-physician relationship and the hospital management system make physicians feel burnt out, which induces a turnover intention (Ma et al., 2021). Workplace stress has become a critical problem in developing countries, especially in China, where emergency department hospitals are a more stressful workplace. The occupational stress level of emergency doctors has a significantly positive impact on turnover intention (Jiang et al., 2022).

Personal Attributes

Age, gender, sex, marital status, and educational level are critical factors of personal attributes that impact doctors' turnover intention. The following research findings suggest that male doctors are more likely to consider leaving their jobs compared to female doctors. Additionally, younger single doctors are more inclined to have turnover intentions than older, married doctors. Furthermore, doctors with master's degrees or higher are more prone to leaving their current positions (Duan et al., 2019; Jiang et al., 2022; Lu et al., 2017; Ma et al., 2021; Wu et al., 2018; Yang et al., 2022; Huang et al., 2017; Wen et al., 2023).

Organizational Factors

Human resource management practices are closely related to employees in terms of organizational factors. Professional human resource management involves accurately matching doctors to the right positions, which can reduce doctors' turnover intention. Fair performance appraisals for feedback allow doctors to benefit from perceived supervisor support. Providing appropriate professional training and development opportunities allows doctors to improve their skills and increase job satisfaction. Satisfactory compensation is essential for balancing doctors' work-family conflict (Lu et al., 2017; Ma et al., 2021).

The Detail of Doctors' Turnover Intentions in China

The influential factors contributing to Chinese doctors' turnover intention varied across different studies (Table 3.2). It's important to be cautious when interpreting these factors as they can be influenced by the varying economic and cultural development in different regions of China.

Discussion

This literature review of doctors' turnover intentions was biased toward China. In this study, 8 research on the theme of doctors' turnover intentions were reviewed and synthesized. A few influential factors of turnover intentions were summarized, including job-related, environmental, psychological, organizational factors, and personal attributes. This review paper also demonstrated the degree of doctors' turnover intentions, which differs across studies.

On the basis of the results of this review, the majority of studies have identified various factors influencing doctors' turnover intention in China. Therefore, healthcare institutions should focus on environmental, job-related, psychological, organizational factors, and personal attributes to reduce doctors' turnover intention. Duan et al. (2019) highlighted that China's healthcare industry needs to establish a consistent and available reporting system for workplace violence. It is also important to provide related self-protective training for doctors. By these methods, healthcare institutions could reduce doctors' turnover intention and promote the stability of their workforce. Li et al. (2023) stated that improving the doctor-patient relationship is key to reducing workplace violence. A safe and stable work environment has been shown to play a crucial role in increasing doctors' job satisfaction and reducing their turnover intention.

Doctors' overall satisfaction with the work environment, working conditions, direct supervisor relationships, colleague relationships, compensation levels, and promotion and development opportunities directly and indirectly affects their turnover intention (Deng et al., 2018). Long working hours and stressful work conditions produce emotional exhaustion, depersonalization, and reduced personal accomplishment, contributing to doctors' turnover intention and seriously impacting patient treatment (Lu et al., 2017). Therefore, healthcare institutions should take relevant measures to enhance doctors' comprehensive job satisfaction, reduce job burnout, and maintain the stability of their workforce.

Recruitment and selection practice, training and development, performance appraisal, and salary are critical organizational factors influencing doctors' turnover intention. Professional recruitment and selection practices accurately match new doctors to appropriate positions and contribute to the stability of the doctor workforce. Fair performance appraisals and feedback enable doctors to benefit from perceived supervisory support and feedback. Providing appropriate professional training and development opportunities enables doctors to improve their skills while reducing turnover intention. Satisfactory compensation contributes to balancing work-family conflicts among doctors and reducing turnover intention (Lu et al., 2017; Ma et al., 2021; Liu et al., 2022; Ying et al., 2021). From the organizational management perspective, human resource managers should be cautious when implementing relevant management measures to improve doctors' overall satisfaction, thus reducing the intention to leave their jobs and enhancing the quality of medical services.

Age, gender, sex, marital status, and educational level are significant personal attributes that impact doctors' turnover intention in China. Previous studies concluded that male doctors are more inclined to have turnover intention than female doctors. Additionally, younger, single doctors show a higher turnover intention compared to their older, married colleagues. Furthermore, doctors with master's or doctors' degrees exhibit a higher intention to seek new opportunities in better hospitals (Duan et al., 2019; Jiang et al., 2022; Lu et al., 2017; Ma et al., 2021; Wu et al., 2018; Yang et al., 2022; Hang et al., 2017; Wen et al., 2023).

China has the second-largest population in the world, and it has a huge demand for medical services. The doctor-patient ratio in China is much lower than in many other countries, and excessive occupational stress has been a problem among Chinese doctors (World Health Organization, 2023). Long-term high-pressure work contributes to job burnout and increases

misdiagnoses and turnover intention, seriously affecting the treatment and rehabilitation of Chinese people (Jiang et al., 2022; Lu et al., 2017). Doctors need to control and regulate their work-related stress, and hospitals should organize training sessions about stress regulation to help doctors enhance their ability to combat work-related stress.

Some limitations need to be addressed for this literature review. First, this literature review conducted a comprehensive search only in WOS and Scopus databases. However, this study's limited literature may limit its ability to explain the factors affecting doctors' turnover intention in China. Second, this review only extracted and used results from English-language articles published between 2014-2023. Therefore, future research should cover studies in multiple languages and search multiple databases. Third, the findings of this study are mainly derived from studies with cross-sectional designs. There is a need to look at different types of studies, such as longitudinal and experimental studies, and draw broader conclusions based on this.

Conclusion

This study reviewed and synthesized the results of 8 studies on doctors' turnover intention in China. The factors influencing doctors' turnover intention are complex and varied, such as environmental, organizational, work-related, psychological, and personal attributes. Environmental factors include workplace violence and doctor-patient relationships. Organizational factors include human resource management practices. Work-related factors include occupational stress. Psychological factors include job satisfaction and job burnout. Personal attributes include age, gender, marital status, and education. It has been found that all the factors mentioned above have a direct impact on doctors' turnover intention. Among these factors, most of the studies cover job satisfaction and job burnout, which have a direct and indirect effect on doctors' turnover intention. Therefore, providing doctors with a safe and comfortable working environment, appropriate management measures, and reasonable training can help reduce Chinese doctors' turnover intention and stabilize the healthcare workforce.

References

- BaniMelhem, H., & Abu Elanain, H. M. (2018). Impact of Human Resource Management Practices on Employees' Turnover Intention in United Arab Emirates (UAE) Health Care Services. *International Journal of Information Systems in the Service Sector*.
- Bluedorn, A. C. (1982). A Unified Model of Turnover from Organizations. *Human Relations*, 35(2), 135–153. <https://doi.org/10.1177/001872678203500204>
- Chen, D., Lin, Q., Yang, T., Shi, L., Bao, X., & Wang, D. (2022). Distributive Justice and Turnover Intention Among Medical Staff in Shenzhen, China: The Mediating Effects of Organizational Commitment and Work Engagement. *Risk Management and Healthcare Policy*, Volume 15, 665–676. <https://doi.org/10.2147/RMHP.S357654>
- Chen, X., Ran, L., Zhang, Y., Yang, J., Yao, H., Zhu, S., & Tan, X. (2019). Moderating role of job satisfaction on turnover intention and burnout among workers in primary care institutions: A cross-sectional study. *BMC Public Health*, 19(1), 1526. <https://doi.org/10.1186/s12889-019-7894-7>
- Chung, M., & Jeon, A. (2020). Social exchange approach, job satisfaction, and turnover intention in the airline industry. *Service Business*, 14(2), 241–261.

- <https://doi.org/10.1007/s11628-020-00416-7>
- Duan, X., Ni, X., Shi, L., Zhang, L., Ye, Y., Mu, H., Li, Z., Liu, X., Fan, L., & Wang, Y. (2019). The impact of workplace violence on job satisfaction, job burnout, and turnover intention: The mediating role of social support. *Health and Quality of Life Outcomes*, 17(1), 93. <https://doi.org/10.1186/s12955-019-1164-3>
- Fang, P., Liu, X., Huang, L., Zhang, X., & Fang, Z. (2014). Factors that influence the turnover intention of Chinese village doctors based on the investigation results of Xiangyang City in Hubei Province. *International Journal for Equity in Health*, 13(1), 84. <https://doi.org/10.1186/s12939-014-0084-4>
- Harun, I., Mahmood, R., & Md. Som, H. (2022). Role stressors and turnover intention among doctors in Malaysian public hospitals: Work–family conflict and work engagement as mediators. *PSU Research Review*, 6(1), 1–16. <https://doi.org/10.1108/PRR-08-2020-0025>
- Hou, H., Pei, Y., Yang, Y., Lu, L., Yan, W., Gao, X., & Wang, W. (2021). Factors Associated with Turnover Intention Among Healthcare Workers During the Coronavirus Disease 2019 (COVID-19) Pandemic in China. *Risk Management and Healthcare Policy*, Volume 14, 4953–4965. <https://doi.org/10.2147/RMHP.S318106>
- Huang, S., Chen, Z., Liu, H., & Zhou, L. (2017). Job satisfaction and turnover intention in China: The moderating effects of job alternatives and policy support. *Chinese Management Studies*, 11(4), 689–706. <https://doi.org/10.1108/CMS-12-2016-0263>
- Jiang, N., Zhang, H., Tan, Z., Gong, Y., Tian, M., Wu, Y., Zhang, J., Wang, J., Chen, Z., Wu, J., Lv, C., Zhou, X., Yang, F., & Yin, X. (2022). The Relationship Between Occupational Stress and Turnover Intention Among Emergency Physicians: A Mediation Analysis. *Frontiers in Public Health*, 10, 901251. <https://doi.org/10.3389/fpubh.2022.901251>
- Labrague, L. J., McEnroe – Petite, D. M., Tsaras, K., Cruz, J. P., Colet, P. C., & Gloe, D. S. (2018). Organizational commitment and turnover intention among rural nurses in the Philippines: Implications for nursing management. *International Journal of Nursing Sciences*, 5(4), 403–408. <https://doi.org/10.1016/j.ijnss.2018.09.001>
- Li, T., Guan, L., Zhang, R., Han, Y., Guo, R., Li, J., Ma, C., Zhang, N., Fan, Y., & Huang, Y. (2023). Roles of doctor–patient relationship perception and job satisfaction in the impact of workplace violence on medical professionals’ turnover intentions in the early phase of COVID-19: A cross-sectional study in China. *BMJ Open*, 13(9), e074744. <https://doi.org/10.1136/bmjopen-2023-074744>
- Liu, J., Zhu, B., Wu, J., & Mao, Y. (2019). Job satisfaction, work stress, and turnover intentions among rural health workers: A cross-sectional study in 11 western provinces of China. *BMC Family Practice*, 20(1), 9. <https://doi.org/10.1186/s12875-019-0904-0>
- Lu, Y., Hu, X.-M., Huang, X.-L., Zhuang, X.-D., Guo, P., Feng, L.-F., Hu, W., Chen, L., Zou, H., & Hao, Y.-T. (2017). The relationship between job satisfaction, work stress, work–family conflict, and turnover intention among physicians in Guangdong, China: A cross-sectional study. *BMJ Open*, 7(5), e014894. <https://doi.org/10.1136/bmjopen-2016-014894>
- Ma, S., Xu, X., Trigo, V., & Ramalho, N. J. C. (2021). Managing Doctor–Patient Relationships and Turnover Intention in Chinese Hospitals with Commitment HRM: The Moderating Role of Pragmatism. *International Journal of Public Administration*, 44(2), 167–176. <https://doi.org/10.1080/01900692.2019.1672725>
- Oh, S., & Kim, H. (2019). Turnover Intention and Its Related Factors of Employed Doctors in

- Korea. *International Journal of Environmental Research and Public Health*, 16(14), 2509. <https://doi.org/10.3390/ijerph16142509>
- Sager, J. K., Griffeth, R. W., & Hom, P. W. (1998). A Comparison of Structural Models Representing Turnover Cognitions. *Journal of Vocational Behavior*, 53(2), 254–273. <https://doi.org/10.1006/jvbe.1997.1617>
- Shaw, J. D. (1998). An organization-level analysis of voluntary and involuntary turnover. *Academy of Management Journal*.
- Wen, Z., Xu, J., Yu, J., Huang, X., & Ni, Y. (2023). Effects of work-family conflict on turnover intention among primary medical staff in Huaihai Economic Zone: A mediation model through burnout. *Frontiers in Psychiatry*, 14, 1238315. <https://doi.org/10.3389/fpsy.2023.1238315>
- World Health Organization, (2023). The Global Health Observatory , World Health Organization, [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/medical-doctors-\(per-10-000-population\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/medical-doctors-(per-10-000-population))
- Wu, Y.-F., Wang, P.-C., & Chen, Y.-C. (2018). Gender Differences and Work-Family Conflicts among Emergency Physicians with Intention to Leave. *Emergency Medicine International*, 2018, 1–9. <https://doi.org/10.1155/2018/3919147>
- Yang, Y., Zhang, L., Li, M., Wu, X., Xia, L., Liu, D. Y., Liu, T., Liu, Y., Jiang, F., Tang, Y., Liu, H., & Kalow, N. J. (2022). Turnover Intention and Its Associated Factors Among Psychiatrists in 41 Tertiary Hospitals in China During the COVID-19 Pandemic. *Frontiers in Psychology*, 13, 899358. <https://doi.org/10.3389/fpsyg.2022.899358>
- Ying, L., Fitzpatrick, J. M., Philippou, J., Zhang, Y., Murrells, T., & Rafferty, A. M. (2022). Front-line staff perspectives on a caring culture in Chinese hospitals: Validation of a Chinese version of the Culture of Care Barometer. *Journal of Nursing Management*, 30(6), 2093–2102. <https://doi.org/10.1111/jonm.13657>
- Zhang, F., Luo, Z., Chen, T., Min, R., & Fang, P. (2017). Factors affecting turnover intentions among public hospital doctors in a middle-level city in central China. *Australian Health Review*, 41(2), 214. <https://doi.org/10.1071/AH15238>