


# Exploring the mediating role of flexible working hours in the relationship of supervisor support, job and life satisfaction: A study of female nurses in China

Oscar Dousin<sup>1</sup>  | Chen Xi Wei<sup>2</sup> | Bamini K. P. D. Balakrishnan<sup>1</sup> | Michelle Chin Chin Lee<sup>3</sup>

<sup>1</sup>Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Kota Kinabalu, Malaysia

<sup>2</sup>Teacher Development Centre, Guangxi Vocational College of Safety Engineering, Guangxi Zhuang Autonomous Region, China

<sup>3</sup>School of Medical and Life Sciences, Sunway University, Bandar Sunway, Malaysia

## Correspondence

Oscar Dousin, Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, Malaysia.  
Emails: odousin@ums.edu.my; oscarousin@gmail.com

## Abstract

**Aims:** To examine the mediating role of flexible working hours on the relationship between supervisor support, job and life satisfaction among female nurses in China.

**Design:** A cross-sectional, quantitative study was conducted with online survey questionnaires.

**Methods:** Convenience sampling was implemented with 171 female nurses from two tertiary public hospitals in 2019.

**Results:** The mediation analysis demonstrates that flexible working hours significantly and positively mediate the relationship between supervisor support to job ( $\beta = 0.775, p < .001$ ) and life satisfaction ( $\beta = 0.745, p < .001$ ). In addition, supervisor support and flexible working hours significantly and positively influence job ( $r = 0.520, p < .01; r = 0.520, p < .01$ ) and life satisfaction ( $r = 0.487, p < .01; r = 0.487, p < .01$ ). The study suggested that flexible working hours is an indicator of what supervisor support ( $r = 0.656, p < .01$ ) is to improve nurses' job and life satisfaction. The study revealed that flexible working hours and supervisor support are crucial to female nurses who face high demands at both work and home.

## KEYWORDS

China, female nurses, flexible working hours, job satisfaction, life satisfaction, supervisor support

## 1 | INTRODUCTION

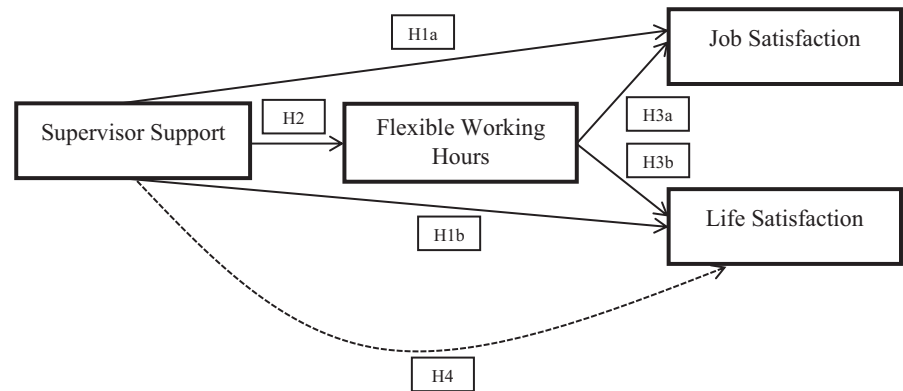
There has been an increase in research on work-life balance and well-being among nurses in recent years (see Barnett et al., 2010; Dousin, et al., 2021, Dousin, Collins, Bartram, et al. 2021; Jamieson et al., 2013; Skinner & Chapman, 2013). These studies investigate how approaches to work-life balance, such as flexible working hours, supervisor support, lifelong learning and manpower shortages,

affect nurses' well-being (job and life satisfaction, organizational commitment). According to Tanaka et al. (2011), nurses in Japan demand flexible working hours and quality of life benefits as essential work-life balance practices; however, these practices are rarely implemented in organizations, while Dousin, Collins, Bartram, et al. (2021) discovered that gender norms, workplace collegiality and medical professional shortages have a significant impact on work-life balancing experiences among nurses in Malaysia.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2021 The Authors. *Nursing Open* published by John Wiley & Sons Ltd.

FIGURE 1 Conceptual framework



China's Registered Nurse population has increased considerably in recent years, from 1.3 million in 2004 to 3.8 million in 2017, reflecting the Chinese government's recent focus on upgrading the healthcare system (China Daily, 2005; National Health Commission of the People's Republic of China, 2017; Shen et al., 2020). While this helps in reducing the nurse-patient ratio, the recent implementation of the "two child policies" in 2016 and the challenges of the ageing population have significantly increased the work demand and work-life conflict of working adults in China (Min et al., 2018). This calls for an in-depth investigation job and life satisfaction of female nurses in order to sustain a continuous service that is of quality for their patients. In the latest statistics, China is still facing shortages of nurses in comparison with the nation's population, which is the largest in the world. The ratio of nurses to population is 2.74 nurses per 1,000 citizens (1 nurse: 365 patients), a ratio that is still far below the average of some developed countries such as the USA (11.9:1,000) and Japan (11.8:1,000) (Min et al., 2018; OECD, 2019). Therefore, the nursing profession has become a high-risk group of burnouts because of the demands of long working hours, on-call for almost 24 hr a day, high work pressure and demands (Chen & Zhang, 2018; Dousin et al., 2019; Li et al., 2008).

Moreover, in the context of the nursing profession within the Asian context, women are still expected to participate actively at work, while being responsible for household duties as raising cost of children continue to rise (Luo, 2018). This leads them to facing three major pressures including work pressure from work, pressure of family responsibilities, and pressure from caring for their children and older people (Dong, 2012; Dousin et al., 2019). In China, women are expected to fulfil domestic responsibilities; therefore, in this patriarchal society, women tend to face a high work-life conflict due to their dual responsibilities as a professional employee and family duties (Adisa et al., 2019; O'Sullivan, 2012). Moreover, the full implementation of the second child policy has had an impact on the work-life balance of working women in China (Fan & Qin, 2018). In addition, the inflexible and long working hours as well as high work demands also contribute to a higher work-life conflict (Adisa et al., 2014; Timms et al., 2015; Yu, 2014).

Since women are the main bearers of family labour, they are facing a greater workload from both work and family. Evidence suggests

that supervisor support is associated with nurses' turnover intention when the supervisor increases their career calling (Lee & Idris, 2019; Zhang et al., 2020). Besides, it increases distributive justice among nurses which indirectly increases their presenteeism at work (Yang et al., 2019). These studies further support the importance of having supervisor support for nurses. Studies conducted by Chen and Zhang (2018) and Fang et al. (2015) stated the issues of shortage of nurses leads to increase work-life conflict due to the inflexible working hours with high pressure and eventually could decrease their well-being (i.e. job and life satisfaction). Further, Wang et al. (2012) suggested that inflexible working hours sometimes perceived as lack of supervisor support while the study by Yang et al. (2017) acknowledged that young nurses in China are facing a higher work-life conflict due to their multiple social roles in the face of early marriage and starting a new family. Through this study, we aim to further investigate a potential relationship between supervisor support and nurses' job and life satisfaction.

Hence, our research question is as follows: "does flexible working hours mediate the relationship between supervisor support to job and life satisfaction among female nurses in China?" The study offers important contribution into integrating the understanding of the issues between flexible working hours and supervisor support, where flexible working hours are an indicator of *what* supervisor support means; as crucial for nurses in a collectivist and patriarchal culture that emphasizes the importance of public and external roles and maintaining balance between family and professional work (Abdullah, 1996; Dousin, Collins, Bartram, et al., 2021; Dousin et al., 2021). Findings of the study aim not only to expand the existing nursing literature from the aspect of supervisor but also what supervisors can do to improve nurses' job and life satisfaction, besides extending the topic which is currently understudied among nurses in China. The study also will further address the importance of flexible working hours arrangement and supervisor support among nurses indirectly, in improving the quality of patients' care. In this paper, first, we introduce our conceptual framework and hypotheses development and then, we outline our quantitative research method design. Next, the results will be reported followed by the discussion of our findings and finally, we draw the conclusion. Figure 1 below illustrates the study's conceptual framework.

## 1.1 | Background

Previous studies suggested that the implementation of flexible human resource strategies, working hours and supervisor support strategies such as child and dependent care, family and parental leaves are popular work-concept which perceived by employees as beneficial in increasing work-life balance (Grover & Crooker, 2005). These organizational strategies could improve employee attraction, motivation and retention, since these supportive work-concept could maintain their balance between responsibilities at home and work besides emphasizing the enhancement of the autonomy of employees in the process of coordinating and integrating work and non-work aspects of lives (De Cieri et al., 2005; Felstead et al., 2002).

In extending the current nursing literature in China, the study adopts the spillover theory (Googins, 1991) to investigate the relationship between supervisor support and job and life satisfaction through flexible working hours, an important job resource in nurses' working conditions. The theory argues that individual feelings, attitudes and behaviours of their work will be affected by other domains such as their family, and then, there will be a potential spillover between these two domains. Positive spillover benefits can enhance a person's role performance, while negative spillover benefits can adversely affect the quality of a character (Pedersen et al., 2009; Radó et al., 2016). Interestingly, women tend to face a negative effect of work on family life compared with men due to their lack of access to flexible jobs that allow them to manage their time better (Radó et al., 2016).

We conceptualized supervisor support as a management effort that uses a "practical system of objective measures to foster improvements in procedures, personal interactions and management of primary healthcare facilities" (Adeyemo, 2017, p. 54). Flexible working hours defined as the use of time schedules that allows employees to schedule when their work to be completed in different periods with deliberately obeying the contractual time (Allan et al., 1998). In the nursing context, it also refers to whether nurses can finish their work during their working shifts (White et al., 2003). Job satisfaction refers to a subjective evaluation of how employees value their work besides their perception about the work environment and process, job content, performance and evaluation as well as interpersonal relationships in the workplace (Hagmaier et al., 2018). We defined life satisfaction as a subjective assessment of individual's quality of life, which was being influenced by their work situation combining material desires, spiritual desires and the psychological gap after comparison with others (Lian & Ling, 2018; Suárez et al., 2017).

### 1.1.1 | Supervisor support, job and life satisfaction

In the context of the healthcare sector, supervisor support is a process that enhances the overall quality of the health system by optimizing resources allocation, strengthening internal relationships within the system, practical system of objective measures

to promote improved procedures, personal interaction and effective management of primary healthcare institutions (Marquez & Kean, 2002). It also focuses on promoting high standards, teamwork and efficient two-way communication through supportive leadership which supports quality improvement process and improves quality of care. In China, regular supervisor support is perceived as a work-family support strategy that could improve nurses' job and life satisfaction, well-being and retention (Lu et al., 2012; Madede et al., 2017; Zuo et al., 2011).

The concept of supervisor support also includes nurses' team cohesion, good cooperation with colleagues in providing optimum patient care (Lu et al., 2012). However, supervisor support is still being perceived as inadequate due to the nature of the work environment and the nature of work, which nurses often struggle to balance work and life (Zuo et al., 2011). Supervisor support is crucial in the nursing profession with supervisors taking a series of measures within a system to provide nurses with work guidance to improve the work processes besides to assist them to carry out their work more effectively, strengthen internal communication and improve their well-being (Madede et al., 2017; Panda et al., 2015). Therefore, we propose that supervisor support will have a direct effect on nurses' job and life satisfaction by proposing the following hypotheses:

- H1** Supervisor support is positively associated with (a) job satisfaction and (b) life satisfaction.

### 1.1.2 | Supervisor support and flexible working hours

A positive organizational climate and highly committed supportive supervision practices could encourage employees to be highly involved in organizational tasks, promotes positive well-being (e.g. job and life satisfaction) and strive to achieve organizational goals (Ahmad et al., 2018). Within the organization, employee participation and channel expression could encourage a positive work environment (Petrescu & Simmons, 2008). At present, flexible working hours not only refer to their flexible working arrangement but also extended to factors such as job sharing and career leaves (John, 2017). This practice could improve employee well-being by ensuring that working hours can be adjusted to match individual needs and different workloads.

Several researchers argued that besides supervisor support, the implementation of family-friendly policies that allows employees to negotiate work requirements and flexible working hours could improve employee well-being and reduce turnover intentions (Dong, 2012; Pan, 2018). In China, the inflexible and excessive working hours among nurses could lead to negative perceptions as unsupportive supervisors which eventually decrease employees' well-being since they are required to spend more time at work (Fang et al., 2015; Fang, 2017). Thus, we propose that supervisor support

will influence nurses' flexible working hours because of the positive organizational climate presented by their highly committed supervisor support. We propose the following hypotheses:

**H2** Supervisor support is positively associated with flexible working hours.

### 1.1.3 | Flexible working hours, supervisor support, job and life satisfaction

Providing flexible and family-friendly work practices can be an employee's active spillover from family to work, making work and family complementary (Pedersen et al., 2009). The implementation of supervisor support and flexible working hours is seen as a social support needed by most employees to reduce family-work spillovers (García-Cabrera et al., 2018). Furthermore, organizational working hours are closely related to work-family conflicts, which is the key factor to influence the subjective well-being (i.e. job and life satisfaction) of individual, especially female employees. Due to the traditional gender division of labour in China, women are responsible for most household duties that lead to a higher conflict in managing their work and family roles. An extensive time spent at work could reduce their subjective well-being (Wu et al., 2016). Besides, there is a positive spillover effect among nurses from active work-related scenarios to private life (Agosti et al., 2015). A meaningful and supportive work environment helps to improve individual positivity in life through organizational practices such as flexible work hours, supervisor and job support (Poulouse & Sudarsan, 2017).

Flexible working hours arrangement could be beneficial to employees since there is a freedom for them to choose their working-time besides it can be adjusted to suit individual and different workloads (Ambrose, 1992; Elbing et al., 1975). Zuo et al. (2011) studied the issue among emergency nurses in China and revealed that flexible working hours are a work-family support strategy, which could lessen work-life conflict. In addition, Dousin, Collins, Bartram, et al. (2021) also revealed that flexible working hours could improve nurses' employee well-being (job and life satisfaction). Excessive working hours with inflexible arrangement could decrease job satisfaction that can lead to increase burnout (Fang et al., 2015). Therefore, flexible working hours are crucial to improve employee job and life satisfaction as well as to strengthen their perceptions of supervisor support. These debates lead to the development of the hypotheses as below:

**H3** Flexible working hours are positively associated with (a) job satisfaction and (b) life satisfaction.

**H4** Flexible working hours mediate the relationship between supervisor support and (a) job satisfaction and (b) life satisfaction.

## 2 | THE STUDY

### 2.1 | Aims

Our study examines the mediating role of flexible working hours on the relationship between supervisor support to job and life satisfaction among nurses in Guigang, China.

### 2.2 | Design

A cross-sectional quantitative study conducted with nurses from two tertiary public hospitals in Guigang, China, in between April–June 2019. Tertiary hospitals are the representative of large general hospital in China, which have the highest level of medical technology and major providers for critical care besides emphasizing on quality care and patient's safety (National Health Commission of the People's Republic of China, 2011; Shen et al., 2020; Xiang & Zhuo-Ping, 2015). Since nurses in these tertiary hospitals tend to have a higher burden to attend patient needs, their perception towards the issues of supervisor support, flexible working hours, job and life satisfaction reflects the hypotheses for the study.

### 2.3 | Participants

Convenience sampling (Sekaran & Bougie, 2013) was adopted to recruit nurses from two public tertiary hospitals in Guigang, China. A total of 171 female clinical nurses participated in the study. Table 1 shows that most participants aged between 21–35 years old (69.6%), with 1–5 year's work experience (33.9%). The majority of participants were junior nurses (70.8%) holding a Bachelor Degree (42.7%).

### 2.4 | Data Collection

Supervisor support (3 items) was adopted from Shinn et al. (1986) and Yoon and Lim (1999) measurement. An example of the item was, "my supervisor is supportive when I want to re-schedule my duty roster". The measurement of flexible working hours (5 items) was adopted from White et al. (2003). For instance, the item stated, "I can finish work within my contracted hours." Job satisfaction (5 items) adopts Hackman and Oldham (1975) while life satisfaction (4 items) adopts Diener et al. (1985) satisfaction with life scale (SWLS). In specific, a sample item was, "I am satisfied with my working hours" and "the conditions of my life are excellent." The study adopts a 5-point Likert scale ranging from 1="strongly disagree/ dissatisfied" to 5="strongly agree/ satisfied" for all measurement scales. All of the measurement items were written in English, and the data were gathered using an online survey. A month after the survey and informed consent were provided, an email was sent to the Nurse Manager as a reminder.

**TABLE 1** Participants characteristics

Participant characteristics	Nurses	
	No. of respondents	Percentage (%)
Age		
21–35 years	119	69.6
36–45 years	34	19.9
46 years and above	18	10.5
Length of Service		
<1 year	1	0.6
1–5 years	58	33.9
6–10 years	48	28.1
11–15 years	20	11.7
16–20 years	10	5.8
21 years and above	34	19.9
Job Title		
Junior Nurse	121	70.8
Senior Nurse	9	5.3
Nurse Manager	41	24.0
Education Level		
Bachelor's degree	73	42.7
Diploma	98	57.3

## 2.5 | Ethical Consideration

The study was approved by the Faculty of Business, Economics and Accountancy, UMS Research Committee. Nurse managers of the participating hospitals were briefed about the nature of the study by the researcher. After that, the researcher emailed copies of the informed consent forms, a letter from the university approving the study and a link to the survey questionnaire. The instructions on the inform consent form made it clear that their participation is entirely voluntary and that confidentiality and anonymity are guaranteed. Then, participants of the study were informed by their nurse managers to fill-in the inform consent and the online survey.

## 3 | RESULTS

### 3.1 | Description of data analysis

All statistical analyses were performed with SPSS version 23.0. Standardized scores were used to conduct our analysis. The principal component analyses were used to examine the structure of the measures, and hypotheses were tested using Baron and Kenny's (1986) procedure for testing mediation effects. The analyses started by analysing the participants' demographic, and validity and reliability analysis. Pearson correlation analysis was employed to examine linear relationships, whereas Baron and Kenny (1986) were employed to examine mediation relationships. According to Baron and Kenny (1986), there is a mediation effect if: (i) the independent variable

significantly predicts the dependent variable; (ii) the independent variable significantly predicts the mediating variable; (iii) when the dependent variable is regressed simultaneously on the independent and the mediating variable, the mediating variable significantly predicts the dependent variable and the effect of the independent variable on the dependent variable is less than that obtained in Condition 1. If the independent variable has a significant effect in condition 3, then there is partial mediation. If the independent variable has a non-significant effect in condition 3, then there is a full mediation. According to Baron and Kenny (1986), only conditions 2 and 3 are needed to demonstrate mediation effects.

### 3.2 | Validity and reliability

The study used Harman's single factor test to address common method variance (Podsakoff et al., 2003). Results shows that the percentage value of the variance of the sample for this research was 42.05%, indicating there are no common method variance problems (Podsakoff et al., 2003).

Exploratory factor analysis (EFA) was used to examine the construct validity of the scales. This method allows the researcher to determine the structure of factors to be evaluated and can be used even when the relationships between latent and observable variables are unknown or uncertain (Pallant, 2005). EFA was also used to determine the dimensionality and convergent validity of the item-construct relationships. Because it is robust, generates more clearly interpretable findings and maximizes the variance of the loading, principal component analysis with varimax rotation was used (Hair et al., 2006; Pallant, 2005). A factor analysis with varimax rotation was first done for four variables with 17 items. Then, the Kaiser-Meyer-Olkin test (KMO) was conducted to measure the sampling adequacy for each variable and the results shows that it was acceptable according to the guidelines by Hair et al. (1998) and Nunally and Bernstein (1994). The result shows that: (i) the loadings for factor analysis for all items were above 0.4 which is acceptable to the standard of validity analysis (ii) all research variables exceeded 0.6 value, the acceptable standard of Kaiser-Meyer-Olkin's and were significant in Bartlett's test of sphericity and (iii) the eigenvalues for all research variables were larger than 1 (Hair et al., 1998).

In addition, Cronbach alphas for all variables was analysed to check reliability. The result shows that all research variables scored the acceptable standard of reliability analysis of 0.7 (Nunally & Bernstein, 1994). These statistical analyses confirmed that measurement scales used in this study have met the acceptable standard of validity and reliability analyses as shown in Table 2 below.

### 3.3 | Hypotheses testing

Table 3 presents the correlations between all measures at the individual level. The results from the Baron and Kenny (1986) mediation analyses are shown in Table 4.

**TABLE 2** Validity and reliability analysis

Measure	Items	Factor loadings	KMO	Bartlett Test of sphericity	Eigenvalue	Variance explained	Cronbach alpha
Flexible Working Hours	5	0.48–0.71	0.84	312.70	3.06	61.15	0.84
Supervisor Support	3	0.77–0.85	0.67	133.90	2.03	67.59	0.76
Job Satisfaction	5	0.47–0.71	0.73	184.40	2.38	59.41	0.76
Life Satisfaction	4	0.67–0.85	0.85	422.31	3.34	66.84	0.87

**TABLE 3** Pearson correlation analysis

		1	2	3	4	5	6
1.	Education level	1					
2.	Length of service	0.106	1				
3.	Flexible working hours	0.099	0.059	1			
4.	Supervisor support	0.094	0.143	0.656**	1		
5.	Job satisfaction	0.052	0.097	0.780**	0.520**	1	
6.	Life satisfaction	0.020	0.102	0.740**	0.487**	0.851**	1

Note:  $N = 171$ , \*\* $p < .01$ .

Hypotheses 1 (a) and (b) predicted that supervisor support would show positive relationships with job and life satisfaction. As indicated in Table 3, the outcome of testing the direct effects, the model showed that supervisor support is significantly and positively correlated with job and life satisfaction ( $r = 0.520$ ,  $p < .01$ ) and ( $r = 0.487$ ,  $p < .01$ ), therefore H1 (a) and H1 (b) were supported. Hypotheses 2 indicated that supervisor support significantly predicts flexible working hours. The result of the hypothesis testing in Table 3 revealed that supervisor support has a positive and significant relationship with flexible working hours ( $r = 0.656$ ,  $p < .01$ ); therefore, H2 was supported. Hypotheses 3 (a) and (b) predicted that flexible working hours are positively associated with job and life satisfaction. The results as shown in Table 3 revealed that flexible working hours have significant and positive relationship to job and life satisfaction ( $r = 0.520$ ,  $p < .01$ ) and ( $r = 0.487$ ,  $p < .01$ ); therefore, H3 (a) and (b) were supported.

Our analysis in Table 4 confirmed the mediation effect from supervisor support to job and life satisfaction via flexible working hours. The Baron and Kenny (1986) mediation results are as follows: (i) supervisor support significantly predicts job and life satisfaction ( $\beta = 0.519$ ,  $p < .001$ ,  $\beta = 0.484$ ,  $p < .001$ ); hence, condition 1 is met; (ii) supervisor support significantly predicts flexible working hours ( $\beta = 0.804$ ,  $p < .001$ ); hence, condition 2 is met; and (iii) flexible working hours were regressed on supervisor support and job satisfaction ( $\beta = 0.775$ ,  $p < .001$ ) and life satisfaction ( $\beta = 0.745$ ,  $p < .001$ ); hence, condition 3 is met. Therefore, H4 (a) and (b) were supported as flexible working hours fully mediate the relationship between supervisor support to job and life satisfaction.

## 4 | DISCUSSION

The study investigated whether flexible working hours mediate the relationship between supervisor support to job and life satisfaction

among nurses in Guigang, China. Our study identified four key findings.

First, our study suggests that supervisor support has a positive relationship to job and life satisfaction. This result is consistent with most previous studies (see Chen & Scannapieco, 2010; Goh et al., 2015; Madede et al., 2017). The supervisor support is a process, which should be cyclical and continuous besides supervisor as mentors to collectively identify and address work-related issues and encourages a two-way communication (Adeyemo, 2017). We emphasize supervisor support to include conducive work environment that is empowered by delivering feedbacks that are constructive in terms of employee performance as it is found to be critical to work-life balance initiatives.

Secondly, our findings revealed that supervisor support is positively related to flexible working hours. Previous studies suggested that supportive supervisor behaviours include effective management of healthcare system, optimizing resources allocations and strengthening internal relationships within the system (Marquez & Kean, 2002). Hereby, the study confirmed flexible working hours as another key element of supervisor support. As suggested by previous researchers, supervisor support and flexible working hours complement each other to promote a positive and highly committed organizational climate as well as to encourage positive well-being among employees (Ahmad et al., 2018; Petrescu & Simmons, 2008).

In the context of the healthcare sector, supervisor support is a process that enhances the overall quality of the health system by optimizing resources allocation, strengthening internal relationships within the system, practical system of objective measures to promote improved procedures, personal interaction and effective management of primary healthcare institutions (Marquez & Kean, 2002). It also focuses on promoting high standards, teamwork and efficient two-way communication through supportive leadership that supports quality improvement process and improves quality of care.



TABLE 4 Baron and Kenny (1986) mediation analysis

Variables	Dependent Variable: Job Satisfaction			Dependent Variable: Life Satisfaction		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
Education level	0.042	0.001	-0.031	0.009	-0.029	-0.0.060
Length of service	0.092	0.023	0.053	0.101	0.036	0.065
Supervisor support		0.519***	0.007		0.484***	-0.0.006
Flexible working hours			0.775***			0.745***
R	0.105	0.520***	0.782***	0.102	0.489***	0.744***
R <sup>2</sup>	0.011	0.271***	0.612***	0.010	0.239***	0.554***
R <sup>2</sup> change	0.011	0.259***	0.341***	0.010	0.228***	0.315***
			Dependent variable: flexible working hours			
Controlled variable			Step 1			Step 2
Education level			0.238			0.159
Length of service			0.068			0.003
Supervisor support						0.804***
R			0.176			0.646***
R <sup>2</sup>			0.031			0.418***
R <sup>2</sup> square change			0.031			0.387***

Note: N = 171, \*\*\*p < .001.

In China, a regular supervisor support is perceived as a work-family support strategy could improve nurses' job and life satisfaction, well-being and retention (Lu et al., 2012; Madede et al., 2017; Zuo et al., 2011). The concept of supervisor support also includes nurses team cohesion, good cooperation with colleagues in providing optimum patient care (Lu et al., 2012).

Thirdly, our findings recommend that flexible working hours have a positive relationship to job and life satisfaction. This result supports previous studies conducted by Dousin, Collins, Bartram, et al. (2021), Dousin et al. (2019) and Nurumal et al. (2017), which stated that flexible working hours will improve nurses' job satisfaction which is a critical factor to nurse retention. This work practice is a part of organizational work-life balance practices, which is important to reduce employees' emotional labour and burnout, which could reduce their intention to leave (Bartram et al., 2012; Cheng et al., 2013).

Furthermore, the study also suggests that flexible working hours positively mediate the relationship between supervisor support towards job and life satisfaction. Although there are only few studies of these relationships, this result highlights that this issue is critical to be explained. Employees perceived the flexible working hours practice as beneficial to complement supervisor support, which could improve nurses' job and life satisfaction. Hall and Atkinson (2006) stated that this work practice is as important as financial benefits and management support in which employees demanded for an effective working-time management with an adequate flexibility because it could improve their well-being and retention. In the context of the nursing profession in China, an informal flexible working arrangement could be implemented, which allows employees to request for a temporary change in their planned work-roster within

a short period of time and this practice is more favourable than a formal working arrangement (Hall & Atkinson, 2006). In addition, the implementation of flexible work schedule could also improve employees' emotional health (Dhaini et al., 2018).

In relation to theoretical contributions, this study expands the understanding of work-life balance by enriching the spillover theory (Googins, 1991). The study provided a comprehensive understanding of the theory by proposing that nurses required an emotional positive spillover, when positive emotional states in one domain continue to other domains. A value-based overflow occurs when values obtained and applied in one realm help to execute in other realms. A continuous work-life balance practices could provide nurses with a balance role system through an adequate support from supervisors and having an option for a flexible working arrangement. It will then allow them to experience greater role ease, less role strain and other enhancements. The findings from this study emphasizes the role of healthcare supervisor and managers in cultivating positive supportive role with the nurses in order to enhance the job and life satisfaction. Therefore, in turn contribute to the retention of nurses, particularly in healthcare organizations as well as noticeably enhance their work performance (Wu et al., 2019). Then, our study proposed those flexible work hours' arrangements and supervisor support influences nurses' job satisfaction and life satisfaction. Although job satisfaction and life satisfaction are well acknowledged in management research, they have not been simultaneously examined as emanating from flexible work hours and supervisor support (García-Cabrera et al., 2018; Lott, 2018; Wu et al., 2012; 2016). Second, the present study expands previous research by linking flexible work hours through supervisor support in understanding their impact on job and life satisfaction. These relationships were evaluated by

exploring the exhaustive role of female nurses who are in China who see increasing workload due to China's high nurse: patient ratio and increasing number of children.

#### 4.1 | Implications for nursing practice

Our study has positive implications for the nursing management in China. First, in the context of the Chinese government's policy of reopening the second child, this undoubtedly increases the potential work-family conflict of nurses. Supervisory support and flexible working hours in hospitals will help nurses ease the conflict between work and family to a certain extent, and gradually achieve a work-life balance. Secondly, in China, the vast majority of managers are pursuing the "people-oriented" management philosophy (Lu, 2011). The two human resource management practices proposed in this paper—supervisor support and flexible working hours are all manifestations of the "people-oriented" management philosophy. Flexible working hours are a work practice which displays supportive supervisor behaviour. In addition, flexible working hours also resonate with supervisor support as effective and supportive management practices. Eventually, these work practices could develop strong trust between supervisor and supervisee which could improve the leader-member exchange and perceived organizational support, which further improve employee commitment and retention (Robson and Robson, 2016). In addition, the support from management and flexible working arrangement could improve the social processes in the health-care sector because it allows nurses to work together as cohesive groups, which could emphasize and improve the care-quality improvement (Kjellström et al., 2017). Thus, it is extremely important to improve job satisfaction for nurses as this has the ability to both boost the perceptions of the quality of care of patients and ensure sufficient nursing workforce (Lu et al., 2019).

#### 4.2 | Limitations

This study acknowledged its limitations. First, the survey data were collected from a single source (the nursing sector) and from Guigang; therefore, the conclusions may carry less weight than those triangulated from multiple sources and across China. Furthermore, because the findings are preliminary and exploratory, they should be tested in different contexts and with a larger sample using structural equation modelling (SEM), which can account for error variance and goodness of model fit, which this exploratory study could not measure. Next, the variables were self-reported at a given period, which could leave data subject to some biases in the sampling techniques, responses and representativeness. However, steps were taken to reduce single-source bias based on past research (Podsakoff et al., 2003). The data analysis did not include factor analysis with oblique rotation, and no CFA had been performed as of yet. Furthermore, no multi-group analysis was performed, which may show different results for either

single or multiple demographic variables. The study did not compare participants' occupational levels and years of employment. Thus, future research could consider these issues. The results of study could be interpreted with caution given that a larger group and employees from a different work culture could lead to different results.

## 5 | CONCLUSION

Flexible working hours and supervisor support were identified as critical approaches to assist organizations in motivating and retaining valuable nurses in these two Chinese tertiary hospitals in this preliminary-exploratory study. Because employees' work and lives in China are influenced by traditional conceptions, family and work commitments, and the practice of supervisor support and flexible working arrangements, which increase their job and life happiness, the study needs to be replicated with a larger sample. The direct and mediated relationships of flexible work hours arrangement and supervisor support with job and life satisfaction among nurses in this study have led to a more detailed view of the dynamic issue of employee satisfaction, which in turn will help to build successful methods for resolving nursing deficiencies and increasing the quality of patient care in China. Since the nursing profession in China is still facing a huge shortage of staff, an informal work-life balance practices such as close-mentoring and informal flexible working arrangements are suggested to be implemented as an improvement to the current management practices, which could improve employee motivation, retention and to meet the needs of the current and future workforce.

#### FUNDING STATEMENT

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

#### ACKNOWLEDGMENTS

We appreciate nurses from the two tertiary public hospitals in Guigang, China, who have participated in this study.

#### CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

#### AUTHOR CONTRIBUTIONS

All authors have agreed on the final version and meet at least one of the following criteria (recommended by the ICMJE\*): (1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; (2) drafting the article or revising it critically for important intellectual content. \*<http://www.icmje.org/recommendations/>

#### DATA AVAILABILITY STATEMENT

The data that support the findings of the study are available upon reasonable request.



## ORCID

Oscar Dousin  <https://orcid.org/0000-0002-8633-2211>

## REFERENCES

- Abdullah, A. (1996). *Going glocal: Cultural dimensions in Malaysian management*. Malaysian Institute of Management.
- Adeyemo, M. O. (2017). The role of supportive supervision in enhancing and sustaining health education in home management and prevention of malaria among mothers of under-five children. *International Journal of Nursing and Midwifery*, 9(5), 53–57.
- Adisa, T. A., Abdurraheem, I., & Isiaka, S. B. (2019). Patriarchal hegemony: Investigating the impact of patriarchy on women's work-life balance. *Gender in Management: An International Journal*, 34(1), 19–33. <https://doi.org/10.1108/GM-07-2018-0095>
- Adisa, T. A., Mordi, C., & Mordi, T. (2014). The Challenges and realities of work-family balance among nigerian female doctors and nurses. *Economic Insights-Trends & Challenges*, 6(3), 23–37.
- Agosti, M. T., Andersson, I., Ejlertsson, G., & Janlöv, A. C. (2015). Shift work to balance everyday life—a salutogenic nursing perspective in home help service in Sweden. *BMC Nursing*, 14(1), 2. <https://doi.org/10.1186/s12912-014-0054-6>
- Ahmad, K. Z. B., Jasimuddin, S. M., & Kee, W. L. (2018). Organizational climate and job satisfaction: Do employees' personalities matter? *Management Decision*, 56(2), 421–440. <https://doi.org/10.1108/MD-10-2016-0713>
- Allan, C., Brosnan, P., & Walsh, P. (1998). Non-standard working-time arrangements in Australia and New Zealand. *International Journal of Manpower*, 19(4), 234–249. <https://doi.org/10.1108/01437729810220419>
- Ambrose, M. (1992). Flexible working hours: The benefits for staff in education. *International Journal of Educational Management*, 6(4). <https://doi.org/10.1108/09513549210014718>
- Barnett, T., Namasivayam, P., & Narudin, D. (2010). A critical review of the nursing shortage in Malaysia. *International Nursing Review*, 57(1), 32–39. <https://doi.org/10.1111/j.1466-7657.2009.00784.x>
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical consideration. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bartram, T., Casimir, G., Djurkovic, N., Leggat, S. G., & Stanton, P. (2012). Do perceived high performance work systems influence the relationship between emotional labour, burnout and intention to leave? A study of Australian nurses. *Journal of Advanced Nursing*, 68(7), 1567–1578. <https://doi.org/10.1111/j.1365-2648.2012.05968.x>
- Chen, C., & Zhang, C. (2018). Management status on occupational stress of domestic nurses. *Hospital Administration Journal of Chinese People's Liberation Army*, 25(5), 456–459.
- Chen, S. Y., & Scannapieco, M. (2010). The influence of job satisfaction on child welfare worker's desire to stay: An examination of the interaction effect of self-efficacy and supportive supervision. *Children and Youth Services Review*, 32(4), 482–486. <https://doi.org/10.1016/j.childyouth.2009.10.014>
- Cheng, C., Bartram, T., Karimi, L., & Leggat, S. G. (2013). The role of team climate in the management of emotional labour: Implications for nurses retention. *Journal of Advanced Nursing*, 69(12), 2812–2825.
- China Daily. (2005). *China short of nurses with nurse to patient ratio at 1:3*.
- De Cieri, H., Holmes, B., Abbott, J., & Pettit, T. (2005). Achievements and challenges for work/life balance strategies in Australian organizations. *The International Journal of Human Resource Management*, 16(1), 90–103. <https://doi.org/10.1080/0958519042000295966>
- Dhaini, S. R., Denhaerynck, K., Bachnick, S., Schwendimann, R., Schubert, M., De Geest, S., & Math RN Study Group. (2018). Work schedule flexibility is associated with emotional exhaustion among registered nurses in Swiss hospitals: A cross-sectional study. *International Journal of Nursing Studies*, 82, 99–105. <https://doi.org/10.1016/j.ijnurstu.2018.03.019>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- Dong, X. (2012). Balancing work, family, personal, family and national strategies. *Jiangsu Social Science*, 2, 83–91.
- Dousin, O., Collins, N., Bartram, T., & Stanton, P. (2021). The relationship between work-life balance, the need for achievement, and intention to leave: Mixed-method study. *Journal of Advanced Nursing*, 77(3), 1478–1489. <https://doi.org/10.1111/jan.14724>
- Dousin, O., Collins, N., & Kler, B. K. (2019). Work-life balance, employee job performance and satisfaction among doctors and nurses in Malaysia. *International Journal of Human Resource Studies*, 9(4), 306–319. <https://doi.org/10.5296/ijhrs.v9i4.15697>
- Dousin, O., Collins, N., & Kler, B. K. (2021). The experience of work-life balance for women doctors and nurses in Malaysia. *Asia Pacific Journal of Human Resources*. <https://doi.org/10.1111/1744-7941.12282>
- Elbing, A. O., Gadon, H., & Gordon, J. R. (1975). Flexible working hours: The missing link. *California Management Review*, 17(3), 50–57. <https://doi.org/10.2307/41162148>
- Fan, X. J., & Qin, F. (2018). A study on the countermeasures of career womens' work-life balance under the policy of "two-children". *Value Engineering*, 37(3), 236–238.
- Fang, P., Luo, Z., & Fang, Z. (2015). What is the job satisfaction and active participation of medical staff in public hospital reform: A study in Hubei province of China. *Human Resources for Health*, 13(1), 34. <https://doi.org/10.1186/s12960-015-0026-2>
- Fang, Y. X. (2017). Burnout and work-family conflict among nurses during the preparation for re-evaluation of a grade A tertiary hospital. *Chinese Nursing Research*, 4(1), 51–55. <https://doi.org/10.1016/j.cnre.2017.03.010>
- Felstead, A., Jewson, N., Phizacklea, A., & Walters, S. (2002). Opportunities to work at home in the context of work-life balance. *Human Resource Management Journal*, 12(1), 54–74. <https://doi.org/10.1111/j.1748-8583.2002.tb00057.x>
- García-Cabrera, A. M., Lucia-Casademunt, A. M., Cuéllar-Molina, D., & Padilla-Angulo, L. (2018). Negative work-family/family-work spillover and well-being across Europe in the hospitality industry: The role of perceived supervisor support. *Tourism Management Perspectives*, 26, 39–48. <https://doi.org/10.1016/j.tmp.2018.01.006>
- Goh, Z., Ilies, R., & Wilson, K. S. (2015). Supportive supervisors improve employees' daily lives: The role supervisors play in the impact of daily workload on life satisfaction via work-family conflict. *Journal of Vocational Behavior*, 89, 65–73. <https://doi.org/10.1016/j.jvb.2015.04.009>
- Googins, B. K. (1991). *Work/family conflicts*. Auburn House.
- Grover, S. L., & Crooker, K. J. (2005). Who appreciates family-responsive human resource policies: The impact of family-friendly policies on the organizational attached of parents and non-parents. *Personnel Psychology*, 48(2), 271–288.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159. <https://doi.org/10.1037/h0076546>
- Hagmaier, T., Abele, A. E., & Goebel, K. (2018). How do career satisfaction and life satisfaction associate? *Journal of Managerial Psychology*, 33(2), 142–160. <https://doi.org/10.1108/JMP-09-2017-0326>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis*, 5th ed. Prentice Hall International Inc.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*, Vol. 6. Pearson-Prentice Hall Upper Saddle River.
- Hall, L., & Atkinson, C. (2006). Improving working lives: Flexible working and the role of employee control. *Employee Relations*, 28(4), 374–386. <https://doi.org/10.1108/01425450610673420>

- Jamieson, I., Kirk, R., & Andrew, C. (2013). Work-life balance: What generation Y nurses want. *Nurse Leader*, 11(3), 36–39. <https://doi.org/10.1016/j.mnl.2013.01.010>
- John, W. (2017). Flexible working hours and organizational productivity: Exploring the potential linkage. *AIMA Journal of Management and Research*, 11(4), 1–7.
- Kjellström, S., Avby, G., Areskoug-Josefsson, K., Gäre, B. A., & Bäck, M. A. (2017). Work motivation among healthcare professionals: a study of well-functioning primary healthcare centers in Sweden. *Journal of health organization and management*, 31(4), 487–502.
- Lee, M. C. C., & Idris, M. A. (2019). Psychosocial safety climate within the model of proactive motivation. In M. F. Dollard, C. Dormann & M. A. Idris (Eds.), *Psychosocial safety climate* (pp. 149–168). Springer.
- Li, L., Huo, B., Zhu, R., & Zhang, R. (2008). An analysis of the influence of cognitive intervention on female nurses' working family relationship and well-being—a study based on the theory of positive income of working family. *Henan Medical Research*, 27(10), 1885–1887.
- Lian, J. K., & Ling, F. Y. (2018). The influence of personal characteristics on quantity surveyors' job satisfaction. *Built Environment Project and Asset Management*, 8(2), 183–193. <https://doi.org/10.1108/BEPAM-12-2017-0117>
- Lott, Y. (2018). Does flexibility help employees switch off from work? Flexible working-time arrangements and cognitive work-to-home spillover for women and men in Germany. *Social Indicators Research*, 151(2), 471–494. <https://doi.org/10.1007/s11205-018-2031-z>
- Lu, H., Barriball, K. L., Zhang, X., & While, A. E. (2012). Job satisfaction among hospital nurses revisited: A systematic review. *International Journal of Nursing Studies*, 49(8), 1017–1038. <https://doi.org/10.1016/j.ijnurstu.2011.11.009>
- Lu, H., Zhao, Y., & While, A. (2019). Job satisfaction among hospital nurses: A literature review. *International Journal of Nursing Studies*, 94, 21–31. <https://doi.org/10.1016/j.ijnurstu.2019.01.011>
- Lu, S. (2012). The Application of People-Oriented Management Philosophy in Hotel Management. In: X. Qu, & Y. Yang (eds.) *Information and Business Intelligence. IBI (2011). Communications in Computer and Information Science*, Vol. 268. Springer.
- Luo, C. Y. (2018). Analysis of reasons for leaving nurses in primary hospitals and related factors. *Journal of Qilu Nursing*, 24(5), 35–37.
- Madede, T., Sidat, M., McAuliffe, E., Patricio, S. R., Uduma, O., Galligan, M., Bradley, S., & Cambe, I. (2017). The impact of a supportive supervision intervention on health workers in Niassa, Mozambique: A cluster-controlled trial. *Human Resources for Health*, 15(91), 58. <https://doi.org/10.1186/s12960-017-0213-4>
- Marquez, L., & Kean, L. (2002). Making supervision supportive and sustainable: New approaches to old problems. *Maximum Access and Quality (MAQ) Initiative*.
- Min, Z. H. O. U., Lindu, Z. H. A. O., Nan, K. O. N. G., Kathryn, S. C., & Shujuan, Q. U. (2018). What caused seriously shortage of Chinese nurses? *Iranian Journal of Public Health*, 47(7), 1065.
- National Health Commission of the People's Republic of China. (2011). Notice on Printing and Distributing evaluation criteria for tertiary general hospitals. Retrieved from <http://www.nhc.gov.cn/zygj/s3585u/201101/38cfafb5c2594801a98d245b9f1442e0.shtml>
- National Health Commission of the People's Republic of China. (2017). Statistical Bulletin of the Development of China's Health Care Industry.
- Nunally, J. C., & Bernstein, I. H. (1994). *Psychometric theory*. McGraw-Hill.
- Nurumal, M. S., Makabe, S., Jamaludin, F. I. C., Yusof, H. F. M., Aung, K. T., & Kowitlawakul, Y. (2017). Work-life balance among teaching hospital nurses in Malaysia. *Global Journal of Health Science*, 9(8), 81–89. <https://doi.org/10.5539/gjhs.v9n9p81>
- O'Sullivan, K. (2012). *The Role of Women in China*. Fair Observer. Retrieved from [https://www.fairobserver.com/region/central\\_south\\_asia/role-women-china/](https://www.fairobserver.com/region/central_south_asia/role-women-china/)
- OECD (2019). *Nurses: Health at a Glance*. Retrieved from <https://data.oecd.org/healthres/nurses.htm>
- Pallant, J. (2005). *SPSS survival manual: A step by step guide to using SPSS for windows (version 12)*. Allen & Unwin.
- Pan, S. Y. (2018). Do workaholic hotel supervisors provide family supportive supervision? A role identity perspective. *International Journal of Hospitality Management*, 68, 59–67. <https://doi.org/10.1016/j.ijhm.2017.09.013>
- Panda, B., Pati, S., Nallala, S., Chauhan, A. S., Anasuya, A., Som, M., & Zodpey, S. (2015). How supportive supervision influences immunization session site practices: A quasi-experimental study in Odisha. *India. Global Health Action*, 8(1), 25772. <https://doi.org/10.3402/gha.v8.25772>
- Pedersen, D. E., Minnotte, K. L., Kiger, G., & Mannon, S. E. (2009). Workplace policy and environment, family role quality, and positive family-to-work spillover. *Journal of Family and Economic Issues*, 30(1), 80. <https://doi.org/10.1007/s10834-008-9140-9>
- Petrescu, I. A., & Simmons, R. (2008). Human resource management practices and workers' job satisfaction. *International Journal of Manpower*, 29(7), 651–667. <https://doi.org/10.1108/01437720810908947>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 885(879), 1010–1037. <https://doi.org/10.1037/0021-9010.88.5.879>
- Poulose, S., & Sudarsan, N. (2017). Assessing the influence of work-life balance dimensions among nurses in the healthcare sector. *Journal of Management Development*, 36(3), 427–437. <https://doi.org/10.1108/JMD-12-2015-0188>
- Radó, M., Nagy, B., & Király, G. (2016). Work-to-family spillover: Gender differences in Hungary. *Demográfia English Edition*, 58(5), 39–64. <https://doi.org/10.21543/dee.2015.2>
- Robson, A., & Robson, F. (2016). Investigation of nurses' intention to leave: A study of a sample of UK nurses. *Journal of Health Organization and Management*, 30(1), 154–173. <https://doi.org/10.1108/JHOM-05-2013-0100>
- Sekaran, U., & Bougie, R. (2013). *Research Methods for Business: A skill-building approach*, 6th ed. Printer Trento Srl.
- Shen, Y., Jian, W., Zhu, Q., Li, W., Shang, W., & Yao, L. (2020). Nurse staffing in large general hospitals in China: An observational study. *Human Resources for Health*, 18(1), 1–7. <https://doi.org/10.1186/s12960-020-0446-5>
- Shinn, M., Wong, N. W., Simko, P. A., & Ortiz-Torres, B. (1986). Promoting well-being of working parents: Coping, social support, and flexible schedules. *American Journal of Community Psychology*, 17, 31–55.
- Skinner, N., & Chapman, J. (2013). Work-life balance and family friendly policies. *Evidence Base*, 4(4), 1–25.
- Suárez, M., Asenjo, M., & Sánchez, M. (2017). Job satisfaction among emergency department staff. *Australasian Emergency Nursing Journal*, 20(1), 31–36. <https://doi.org/10.1016/j.aenj.2016.09.003>
- Tanaka, S., Maruyama, Y., Ooshima, S., & Ito, H. (2011). Working condition of nurses in Japan: Awareness of work-life balance among nursing personnel at a university hospital. *Journal of Clinical Nursing*, 20(1–2), 12–22. <https://doi.org/10.1111/j.1365-2702.2010.03354.x>
- Timms, C., Brough, P., O'Driscoll, M., Kalliath, T., Siu, O. L., Sit, C., & Lo, D. (2015). Flexible work arrangements, work engagement, turnover intentions and psychological health. *Asia Pacific Journal of Human Resources*, 53(1), 83–103. <https://doi.org/10.1111/1744-7941.12030>
- Wang, Y., Chang, Y., Fu, J., & Wang, L. (2012). Work-family conflict and burnout among Chinese female nurses: The mediating effect of psychological capital. *BMC Public Health*, 12(1), 915. <https://doi.org/10.1186/1471-2458-12-915>
- White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. (2003). High-performance Management Practices, Working Hours and Work-Life

- Balance. *British Journal of Industrial Relations*, 41(2), 175–195. <https://doi.org/10.1111/1467-8543.00268>
- Wu, L. Z., Kwan, H. K., Liu, J., & Resick, C. J. (2012). Work-to-family spillover effects of abusive supervision. *Journal of Managerial Psychology*, 27(2), 714–731.
- Wu, C., Lin, C., Chang, S., & Chou, H. (2019). Identifying the positive energy for retention in clinical nurses: A focus group study. *Journal of Nursing Management*, 27(6), 1200–1207. <https://doi.org/10.1111/jonm.12792>
- Wu, Y., Wang, P., & Huang, C. (2016). Family patronage, institutional patronage, and work family conflict: Women's employment status and subjective well-being in urban China. *The Journal of Chinese Sociology*, 3(1), 21. <https://doi.org/10.1186/s40711-016-0041-2>
- Xiang, J., & Zhuo-ping, T. (2015). Research on the construction and optimization of medical quality evaluation indicators of tertiary hospital in Shanghai. *China Hospital Management*, 35(10), 43–45.
- Yang, H., Lv, J., Zhou, X., Liu, H., & Mi, B. (2017). Validation of work pressure and associated factors influencing hospital nurse turnover: A cross-sectional investigation in Shaanxi Province. *China. BMC Health Services Research*, 17(1), 112. <https://doi.org/10.1186/s12913-017-2056-z>
- Yang, T., Lei, R., Jin, X., Li, Y., Sun, Y., & Deng, J. (2019). Supervisor support, Coworker support and Presenteeism among healthcare workers in China: The mediating role of distributive justice. *International Journal of Environmental Research and Public Health*, 16(5), 817. <https://doi.org/10.3390/ijerph16050817>
- Yoon, J., & Lim, J. (1999). Organizational support in the workplace: The case of Korean hospital employees. *Human Relations*, 82, 923–945. <https://doi.org/10.1177/001872679905200704>
- Yu, S. (2014). Work-life balance-work intensification and job insecurity as job stressors. *Labour & Industry: A Journal of the Social and Economic Relations of Work*, 23(3), 203–216. <https://doi.org/10.1080/10301763.2014.961683>
- Zhang, L., Jin, T., & Jiang, H. (2020). The mediating role of career calling in the relationship between family-supportive supervisor behaviors and turnover intention among public hospital nurses in China. *Asian Nursing Research*, 14(5), 306–311. <https://doi.org/10.1016/j.anr.2020.08.011>
- Zuo, H. M., Yang, H., & Liu, Q. C. (2011). The status quo of work-family conflict of emergency nurses and its balancing strategies. *Chinese General Nursing*, 9(7), 571–572.

**How to cite this article:** Dousin, O., Wei, C. X., Balakrishnan, B. K. P. D., & Lee, M. C. C. (2021). Exploring the mediating role of flexible working hours in the relationship of supervisor support, job and life satisfaction: A study of female nurses in China. *Nursing Open*, 8, 2962–2972. <https://doi.org/10.1002/nop2.1008>

# Exploring the mediating role of flexible working hours in the relationship of supervisor support, job and life satisfaction: A study of female nurses in China.

Dousin, O

2021-11

---

<http://hdl.handle.net/10179/17798>

17/01/2023 - Downloaded from MASSEY RESEARCH ONLINE