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#### Research Article

# The Double-Edged Sword Effects of Career Calling on Occupational Embeddedness: Mediating Roles of Work—Family Conflict and Career Adaptability



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#### SUMMARY

Based on the conservation of resource theory, we proposed a two-path model to examine the double-edged sword effects of career calling on occupational embeddedness via work—family conflict (WFC) and career adaptability. The proposed theoretical model and hypotheses were tested by structural equation modeling technology with a sample of nurses from five hospitals in China (total N=368). Career calling has a double-edged sword effect on occupational embeddedness via WFC and career adaptability. Career calling has positive effects on WFC and career adaptability, in turn, negatively and positively influence occupational embeddedness, respectively. In addition to the well-established positive effects, career calling may also have adverse effects on occupational outcomes. Given the worldwide shortage of nursing staff, how career calling affects nurses' occupational embeddedness needs to be more understood. This study highlights the importance of career calling and occupational embeddedness. Nurse managers need to improve the level of nurses' career adaptability and reduce their level of WFC and hence increase their occupational embeddedness.

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#### Introduction

Background

Over the past decade, calling has garnered significant growing attention in research on the career development of nurses [1]. Scholars frame career calling as the subjective experience of determination toward one's work. Most of the perspectives agree that a career calling is prosocial, altruistic, meaningful, goal oriented, values driven, and involves suiting to and exploiting one's interests, abilities, and opportunities [2]. Dozens of empirical studies on healthcare professionals have demonstrated that calling has been linked to various work-relevant outcomes (e.g., affective commitment, withdrawal intentions, and job satisfaction [3]) and occupational outcomes (e.g., career identity and occupational choice) [4]. Occupational embeddedness, defined as the aggregate

of forces that restrain employees from leaving their current occupations [5], is an essential outcome in career research. However, little attention has been paid to the relation of career calling and occupational embeddedness. Thus, we take the first aim at exploring the relationship between career calling and occupational embeddedness.

Furthermore, although numerous researchers have shown the beneficial effects of career calling at the workplace, Duff and Dik [4] suggest that calling may not always have positive results. The higher the career calling, the more satisfied and happy are nurses with their work and life. However, pursuing intrinsic calling means sacrificing certain types of interest. Hall [6], for example, found that people who have a calling must sacrifice higher pay, sacrifice leisure time with their families, and demand less for promotion toward pursuing their career calling. Calling might also have negative influences as a result of necessitating personal losses or ultra work investment [7]. To contribute to the body of empirical research on career calling and occupational embeddedness and help address the issue of the mixed empirical evidence, we conducted the present study. This study attempts to add to this line of research by investigating a potentially more intricate relationship (i.e., a

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double-edged sword effect) between career calling and occupational embeddedness among nurses.

Research purpose

Specifically, our study develops a theoretical framework that comprises both beneficial and detrimental effects of nurses' career calling and their occupational embeddedness. On the one hand, we assumed that career calling leads to work—family conflict (WFC) and further negatively influences occupational embeddedness. On the other hand, we suggest that career calling may positively relate to career adaptability and further influence occupational embeddedness.

#### Theoretical grounding and hypothesis development

Conservation of resources theory

Conservation of resources theory (COR), rooted in the stress and strain literature, states that the core view is that "people strive to obtain, retain, and protect that which they value" [8]. Beyond preventing psychological strain outcomes, COR has also been used to understand organizational and occupational behavior [9]. According to Hobfoll's [10] loose definition, resources are objects, conditions, individual characteristics, energy, and anything that people value. From the basic tenet of protecting the current resources and acquiring new resources, COR emerges several principles. The first principle is the primacy of resource loss, "resource loss is disproportionately more salient than resource gain," and the second one is resource investment, "people must invest resources to protect against resource loss, recover from losses, and gain resources" [11].

Career calling and occupational embeddedness: WFC as a mediator

Occupational embeddedness includes fit, links, and sacrifice. Fit is defined as overall compatibility with the specific occupation. For healthcare professionals, what is continually considered important is the value orientation of their particular medical profession. Links refer to multitie with other people/groups/institutes in the occupation. Nurses have many connections in the various aspects of their occupation. If they leave their occupation, these links need to be rearranged. Sacrifice represents forfeit various benefits when changing one's profession. For example, resigning or altering an occupation is likely to cause personal losses (e.g., leaving well-liked peers, an efficient work team, or unique privileges).

Individuals with a feeling of calling in specific careers devote their enormous time and energy to build webs in their work, which they can become stuck in the current occupation. For working adults, more significant endorsement of a career as a calling may view work as more meaningful and more likely to invest in their careers. People may use various types of resources when investing in their careers. First, they can spend time and energy in establishing the relationships with the department, work team, coworkers, and mentor to enhance links in the occupation. Second, they can endeavor to train their knowledge, skills, abilities, personal values, career goals, and vocational plans to fit with their immediate work and the broader occupation culture. Third, people who have a calling would perceive more cost of material (e.g., switching costs, give up perks, health care, or pension plans) and psychological (e.g., give up interesting work or sense of belonging) benefits that may be lost by leaving a particular profession [12]. To sum up, to pursue a career calling, people invest in the occupation, thus increasing occupational embeddedness. Furthermore, to avoid invested resource losses, individuals will engage in reinvest

embedded resources back into work that will maximize their returns. For example, as nurses develop nets, skills, values, pays, status at work, all those are often contributed to professional performance in order to acquire the perception of answer the calling. Some empirical studies have found that when people hold a calling in their work, they are more possibly to achieve psychological career success, career commitment, and career development [3,13]. Sun et al [14] confirmed that psychosocial capital raised nurses' job embeddedness in China.

As already mentioned, if family-work boundary transitions occur, WFC and resource depletion would occur concomitantly. Applying COR, people participate in multiple roles, which results in competing demands on the depletable resources of a nurse's time and spirit. This perspective stresses the interference produced by investing in various roles and different role engagement with undesirable effects. High in career calling is characterized by absorption in work. Nurses with a calling, as a result, could only devote less time and attention to other domains. That is, as they invest more resources (e.g., energy) into the workplace, this may reduce the resources available to fulfill the obligations related to their family role. In order to cope with WFC, nurses must use different types of resources. If people try to fulfill their work and family responsibilities, they have to switch between the two roles. The interruptions of either role or the conversion of two roles consume resources so that no one can transition from one role to another without a cost [15]. Therefore, under the resource-limited circumstances, resource consumption and interference may then decrease the level of job embeddedness of an individual. Thus, we propose the following:

**Hypothesis1**. Career calling is positively related to occupational embeddedness.

**Hypothesis2**. Career calling is positively related to WFC.

**Hypothesis3.** WFC is negatively related to occupational embeddedness.

**Hypothesis4**. WFC mediates the relationship between career calling and occupational embeddedness.

Career calling and occupational embeddedness: career adaptability as a mediator

As a pivotal construct of career construction theory, career adaptability was introduced into the vocational psychology literature for nearly 40 years. Savickas and Porfeli [16] defined it as "a psychosocial construct that denotes an individual's resources for coping with current and anticipated tasks, transitions, traumas in their occupational roles". Four kinds of resources can contribute to coping with the challenges in people's vocational roles, namely career concern, career control, career curiosity, and career confidence [17]. Through career concern, individuals are in preparation for accomplishing their calling in the career future, and career control is a resource that enables an individual to feel that they can pursue their calling in shaping their future career. Career curiosity allows people to engage in exploring future career opportunities that they feel called to do. Career confidence supplies the selfefficacy for people to overcome potential vocational barriers and eventually live out their calling [18]. Although empirical literature on career adaptability is increasing rapidly in recent years, there are few studies on the relationship between calling and career adaptability. To sum up, these four aspects of career adaptability seem to be consistent with Hall and Chandler's [19] competency of adaptability and may be the critical result of career calling [18].

Recent studies on career adaptability among employees have examined its positive effects on occupational outcomes [20]. Guo et al. [17] found that there is a positive correlation between the four elements of adaptive ability and professional competence. Other studies on the relationship between career adaptability and vocational outcomes have found similar results (e.g., employability, career satisfaction, engagement, skill development, career identity) [18]. Concern enables individuals to be aware of the importance and value of a professional network and invest in expanding career networks. Control empowers people to feel responsible for continuing to invest in shaping occupational embeddedness. Curiosity enables employees to proactively explore occupational opportunities and establish ties in different career stages. Confidence lets employees take the initiative to communicate with significant people, thus improving their chances of career success. In sum, we suppose that the four factors in adaptive abilities tend to facilitate occupational embeddedness. Thus, we propose the following:

**Hypothesis 5**. Career calling is positively related to career adaptability.

**Hypothesis 6.** Career adaptability is positively related to occupational embeddedness.

**Hypothesis 7**. Career adaptability plays a mediating role between career calling and occupational embeddedness.

#### Methods

Study design

This study was a descriptive cross-sectional research design.

# Setting and sample

Five public hospitals in the north of China were recruited using convenience sampling. Representatives of the hospital and our research team publicized the survey to the nurses from different units, wards, and departments (e.g., outpatient department, maternity ward, operating theater, children's and pediatrics ward), with asking whether nurses were willing to join in the survey and confirm potential participants. Then, we got the contact information of nurses who wanted to join in our survey. The inclusion criteria of the study were as follows: not having any difficulty in communication and cooperation and working full time for at least one year. The sample size required for calculation was 123, the significant level of multiple regression analysis was 0.01, the median validity was 0.15, the power was 95.0%, and there were 10 predictors (i.e., seven demographic characteristics, career calling, WFC, career adaptability); the G-power 3.1.9 software program was used (Heinrich Heine University, Dusseldorf, Germany). Therefore, the sample size was determined to be 450 participants based on the calculation and assumed a dropout rate of 35.0% at each time. A total of 450 questionnaires were sent to the participants of this study, and we received 368 questionnaires.

### Ethical considerations

Yanshan University's Institutional Review Board approved this study (Approval no. 2019-008). We explained the purpose, procedures, and rules of this study in detail to all participants. In particular, we illuminated the voluntary nature and confidentiality of the research and promised not to reveal their personal information.

#### Measurements

The questionnaire is presented in Chinese. All the English version scales were translated into Chinese following the translation—back-translation procedure [21].

#### Career calling

A 5-point Likert scale was applied for all study items (1 for strongly disagree; 5 for strongly agree). We measured this variable with two items designed by Duffy et al [22]. An example item is "I have a calling to a particular kind of work," and the original Cronbach's  $\alpha$  was .89 at Study 1 and .90 at Study 2. The career calling scale has been widely used in medical personnel, and it has high reliability and validity [23]. Cronbach's  $\alpha$  of career calling in this study is .89.

#### Work—family conflict

We assessed this variable using the 5-item scale of Netemeyer et al [24]'. Topa et al [25] provided support for the construct validity of the WFC scale among nurses. An example item is "The demands of my work interfere with my home and family life," and the original Cronbach's alpha was .88. Cronbach's  $\alpha$  of WFC in this study is .84.

# Career adaptability

Participants were asked to evaluate their career adaptability by using 8 items of CAAS (Career adapt-abilities scale), China version, from the study by Hou et al [26]'. There are a total of 24 items on the initial scale, which are distributed equally into measuring the four components of adaptability. Based on the item loading, we chose two items from each of the subscales, and the original Cronbach's  $\alpha$  was .92. Cronbach's  $\alpha$  of career adaptability in this study is .87. The career adaptability scale has been widely used in student nurses [27].

#### Occupational embeddedness

We assessed this variable using the global scale developed by Crossley et al. [28] 'with 7 items. The occupational embeddedness scale has been widely used among nurses, and it shows high validity [14]. An example item is "I feel attached to this occupation," and the original Cronbach's  $\alpha$  was .89. Cronbach's  $\alpha$  of occupational embeddedness in this study is .86.

# Control variables

We controlled gender (men was coded as 0, women was coded as 1), age (in years), education level (1 = high school or technical secondary school, 2 = junior college, 3 = bachelor's degree, 4 = master's degree or above, marital status (1 = single, 2 = unmarried cohabitation; 3 = married, 4 = divorce or separation), and children status (0 = no, 1 = yes).

#### Data collection

After expressing gratitude for taking part in the survey, we assigned everyone a unique identification code to match nurses' responses at different times. The data were collected between March and July 2019. At Time 1, we sent a link of the first survey to them via WeChat, and demographic information and the measure of career calling were completed. One month later (Time 2), those nurses received a link of the second survey via WeChat. The measures of WFC and career adaptability were completed. Two months later (Time 3), we sent the third questionnaire link. The measure of occupational embeddedness was completed. Each time the participants were asked to fill in the identification code. Finally, we could identify participants' responses at different times by the

same code. As a result, 368 nurses (valid response rate = 87.0%) accomplished three waves of surveys.

#### Analytical techniques

The present study proposed a mediating model (Figure 1). The hypotheses were simultaneously estimated by structural equation modeling with a maximum likelihood estimator. Furthermore, we applied a bootstrapping method to calculate the 95% confidence intervals (CIs) for testing the mediating effect of career networking behavior. Compared with the causal step procedure, for small samples, the bootstrap approach is a more robust method for assessing the indirect effects. Meanwhile, it can avoid the non-normal sampling—related power problems of indirect effects.

#### Results

#### Descriptive statistics

The average age was 31.33 years (standard deviation = 4.78), and 292 of the respondents were women. Of all, 50.3% of them have one or more children. In terms of marital status, 17.1% of them are single and 71.4% are married. In terms of education, 82.9% of them have a bachelor's degree or more. Table 1 presents the means, standard deviations, and correlations of all variables. The bivariate Pearson correlation coefficients (critical values) seem to be consistent with the proposed hypotheses. Career calling correlates positively with WFC (r = .28, p < .01), career adaptability (r = .21, p < .01), and occupational embeddedness (r = .41, p < .01). WFC correlates negatively with occupational embeddedness (r = -.15, p < .05).

#### Confirmatory factor analyses

In addition, confirmatory factor analyses (CFA) confirmed the discriminant validity of the four prime constructs (career calling, WFC, career adaptability, occupational embeddedness). As shown in Table 2, CFA tests showed that the four-factor measurement model fitted data best ( $\chi^2=493.19$ , df = 201, p<.01; Comparative fit index (CFI) = .93, Tucker-Lewis index (TLI) = .92, Root mean square error of approximation (RMSEA) = .06, Standardized root mean square residual (SRMR) = .05), which was superior to a 3-factor model ( $\chi^2=942.05$ , df = 204, p<.01; CFI = .83, TLI = .81, RMSEA = .10, SRMR = .11), a 2-factor model ( $\chi^2=1785.80$ , df = 206, p<.01; CFI = .64, TLI = .60, RMSEA = .14, SRMR = .18), and a 1-factor model ( $\chi^2=2444.84$ , df = 207, p<.01; CFI = .49, TLI = .43, RMSEA = .17, SRMR = .19). Therefore, the empirical result confirmed that the four substantive constructs in the measurement model were distinguishable.

#### Common method variance test

The marker technique of CFA can examine the severity of common method variance (CMV) [29]. We adopted several suggestions in the literature, such as the anonymity of research objects and multiple-source data used in the survey. We assessed the potential CMV effects, nonetheless. To perform the test, we compared the without CMV factor measurement model ( $\chi^2=493.19$ , df = 201 (p<.01), CFI = .93, TLI = .92, RMSEM = .06, SRMR = .05) with substitute models (add an unmeasured latent CMV factor to the measurement model;  $\chi^2=597.32$ , df = 204 (p<.01), RMSEM = .07, CFI = .91, TLI = .90, SRMR = .11) and found that the fit indices of the without CMV factor measurement model were significantly better. We also used Harman's single-factor test to detect the possible impact of CMV. The result was that no unitary factor emerged, and

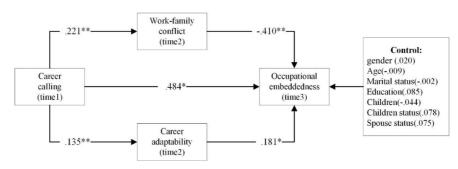


Figure 1. . Hypothesized model test results using structural modeling (SEM).

**Table 1** Means, Standard Deviations, and Bivariate Correlations of Studied Variables (N = 368).

Variable	$M \pm SD$	1	2	3	4	5	6	7	8	9	10
1.Gender	0.87 ± 0.39										
2. Age	$30.59 \pm 4.63$	.26**									
3. Education	$2.95 \pm 0.56$	.01	.04								
4. Marital status	$2.52 \pm 0.83$	.24**	.52**	03							
5. Children	$1.44 \pm 0.05$	.21**	.57**	05	.53**						
6. Children' age	$0.76 \pm 1.04$	.20**	.68**	09	.44**	.81**					
7. Spouse's job	$0.82 \pm 0.72$	.09	.36**	.03	.61**	.43**	.32**				
8. Career calling	$3.25 \pm 0.93$	.02	.00	.08	.00	.01	.01	.01			
9.Work-family conflict	$2.98 \pm 0.68$	04	05	.01	04	05	05	05	.28**		
10. Career adaptability	$1.93 \pm 0.72$	.14**	.08	.16**	.11*	.04	.06	.06	.21**	.10*	
11.Occupational embeddedness	$3.14 \pm 0.80$	.05	.04	.11*	.05	.06	.07	.08	.41**	15*	.20**

Note. M = mean; SD = standard deviation. \*p < .05, \*\*p < .01. M = mean; SD = standard deviation. Gender was dummy coded (men = 0, women = 1). Education was measured on a 4-point scale (1 = high school or technical secondary school, 2 = junior college, 3 = bachelor's degree, 4 = master's degree or above). Marital status was dummy coded (1 = single, 2 = unmarried cohabitation; 3 = married, 4 = divorce or separation). The variable "children" was dummy coded (0 = no, 1 = yes).

Table 2 Comparison of Measurement Models.

Model	Description	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
The baseline four-factor model	CC, WFC, CA, OE	493.19/201	.93	.92	.06	.05
The three-factor model	CC and WFC were combined into one factor, CA, OE	942.05/204	.83	.81	.10	.11
The two-factor model	CC, WFC, and CA were combined into one factor, OE	1785.80/206	.64	.60	.14	.18
The one-factor model	CC, WFC, CA, and OE were combined into one factor	2444.84/207	.49	.43	.17	.19

Note. CA = career adaptability; CC = career calling; CFI = comparative fit index; df = degrees of freedom; OE = Occupational occupational embeddedness; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; TLI = trucker-lewis index; WFC = work-family conflict.

no unitary factor explained >50.0% of the variance of all the relevant items. Particularly, an Exploratory factor analysis (EFA) of all items explained 62.8% of the total variance, while the largest factor explained only 25.7% of the variance. Thus, these results implicated that CMV was not a serious problem in the data and subsequent analysis.

#### Hypothesis testing

H1, which posits that career calling has a positive association with occupational embeddedness, was supported. The result displayed significant positive path coefficient ( $\beta=.48,\,p<.05$ ). H2 states that career calling is significantly related to WFC. As displayed in Figure 1, there is a significantly positive path from career calling to WFC ( $\beta=.22,\,p<.01$ ), lending support for H2. H3, which posits that WFC has a negative association with occupational embeddedness, was supported ( $\beta=-.41,\,p<.01$ ). H5 states that career calling is positively related to career adaptability. As indicated in Figure 1, there is a significant and positive path from career calling to career adaptability ( $\beta=.14,\,p<.01$ ). Therefore, H5 was supported. H6, which posits that career adaptability has a positive association with occupational embeddedness, was supported ( $\beta=.181,\,p<.05$ ).

Next, the mediating role of WFC and career adaptability was tested with nonparametric bootstrapping procedures, which is more suitable than the causal step procedure for a small sample. The bootstrapping method estimates the mediation effect by an estimated 95% of the Cl. The Cl does not include zero, which means the mediation effect is significant. H4 proposes that WFC transmits the effect of career calling on occupational embeddedness. H7 states that career adaptability also mediates the relationship between career calling and occupational embeddedness. As shown in Table 3, the indirect influence of career calling on occupational embeddedness via WFC is -.10 (95% CI = [-.16, -.06]). Thus, Hypotheses 4 is supported. Meanwhile, the indirect influence of career calling on occupational embeddedness via career adaptability is .03 (95% CI = [.01, .05]). Thus, H7 was also supported.

# Discussion

To better comprehend the relationship between career calling and occupational embeddedness, we tested the double-path model of the effects of career calling. We drew on the COR [10] and previous research findings on career calling to argue for the link between career calling and occupational embeddedness. In particular, our findings showed that holding a career calling predicted

**Table 3** Bootstrapping Results for the Mediating Role of Work—family Conflict and Career Adaptability.

Path	Indirect effect	LL 95% CI	UL 95% CI
CC-WFC-OE	10	-0.16	-0.06
CC-CA-OE	.03	0.01	0.05

Note. CA = career adaptability; CC = career calling; LL 95% CI = lower 95% level confidence interval; OE = occupational embeddedness; UL 95% CI = upper 95% level confidence interval; WFC = work-family conflict.

occupational embeddedness through two distinct paths: on the one hand, the extent of nurses' career calling was positively related to WFC, which in turn had a negative influence on their occupational embeddedness. On the other hand, the extent of nurses' career calling was positively associated with career adaptability, which subsequently positively impacted their occupational embeddedness. In so doing, we follow the recommendation for a comprehensive understanding of how calling associates with profession-relevant behavioral outcomes.

Previous studies have been limited to the bright side of career calling. Career calling is positively related to the experience of satisfaction and eudemonic well-being. Nurses with higher career calling are happier and more satisfied with their work and life. However, we contribute to the theory that doubts "established facts" in the vocation field [30]—in particular, paying attention to a feasible dark side of seemingly "bright" career calling. In the present study, we found both the bright side and dark side of career calling. Besides, previous research exploring its impacts has been scarce. The few empirical works of literature investigating career calling have focused on its primary effect on people's behavioral outcomes [3]. As well, we have limited information about the linear fashion network of variables to which career calling is related and the fundamental psychological mechanisms that unfold the course by which career calling impacts people's outcomes. Recently, Xie et al. [31] documented that career adaptability transmitted the influence of calling on work engagement and career satisfaction. However, less clear is whether and in what way engaging in career calling impacts nurses' occupational outcomes. Thus, our study clearly discovers the "black box" link career calling with occupational embeddedness.

Overall, our results contribute to the relevant literature in several aspects. First, the results prompt research on the occupation-related outcomes related to career calling. To the best of our knowledge, this is the first research to empirically examine how perceived career calling impacts occupational embeddedness, especially among nurses. In particular, our findings enrich our knowledge to answer how and via what ways calling relates to occupational embeddedness. The results support antecedent research findings [17,31] by indicating that career calling positively associates with preparing for future duties, taking responsibility for the progress, exploring potential abilities and chances, and believing in solving troubles, which, in turn, positively relates to occupational embeddedness. Meanwhile, our findings reveal that perceived career calling can also negatively relate to occupational embeddedness as a result of its bond to conflict between work and family. In this way, these findings consistent with previous WFC research suggest the expenses of hours spent at work, work centrality, job involvement. Additionally, they respond to prior researches arguing for the vulnerabilities of calling, which may be a link with workaholism, over-identification with work. Duffy et al. [32] note that employees with a strong sense of calling may become very reliant on work and would make sacrifices in the family domain, defending or rationalizing their over-investment in the work domain since they deem it to be a calling. Thus, our findings seem to compensate for a serious omission in previous research that nurses are increasingly distracted between work and family

roles because an understanding of contemporary professional development needs to take into account the close relationship between work and family.

Moreover, our findings indicate that people who have a high calling in their careers are more likely to struggle to balance the demands of work and family roles. Previous research shows that calling is almost related to positive career-related consequences, such as higher job engagement, stronger occupational identification, and a weaker tendency to withdraw the current profession. In contrast, the present study investigated the likelihood that high in calling could also be related to possible negative outcomes. Therefore, our findings expand researchers' understanding of career calling and reveal that its influences are not always positive. Besides, these results build on researches of Duffy et al [33], who are similarly found that employed adults who are perceiving a calling predict decline in well-being. However, while their study was on a diverse group of employees, our study, from a careerbased view, focused on nursing that was much more service oriented.

#### Implications for nursing management

By showing that perceived occupational calling can be positively and negatively related to occupational embedding, we hope to draw the attention of managers to the importance of carefully pursuing and controlling the career calling process. On the one hand, managers may give young nurses opportunities to experiment with various professional self-images and to develop career adaptability. Managers and career counselors could carry out career interventions to improve the professional adaptability of nurses. On the other hand, this study raises the question of whether it is possible to foster a temperate level of career calling in which nurses do not experience the dark side of work-family disturbance. Practically, we suggest that there may be a need for managers to design a program for developing nurses' career adaptability, as well as not increase the conflicts between work and family. Work-family plans, such as on-site day care and nurse assistance/family assistance/health home programs, may be the workable measure to weaken potentially negative influences of career calling. In addition, managers should encourage their nurses to maintain an appropriate balance between work and family and lead them to feel family value.

#### Limitations

The study has some limitations as well. Firstly, the data in this study are based on self-reported questionnaires of the participants. which may raise the problem of CMV. However, research designs that collect data at multiple time points may help reduce CMV. Secondly, due to the limitation of funds and social resources, the present study adopted the method of convenient sampling to select the participants instead of random sampling. Future studies can retest the validity and transportability of the findings in this study in additional samples. Thirdly, in this research, we only identified WFC and career adaptability as an intervening mechanism between career calling and occupational embeddedness, Nevertheless, there may exist other mediators, and future research can explore new transmitting mechanisms based on different theoretical perspectives. Finally, there may be some boundary factors in the relationship between career calling and occupational embeddedness, which need to be further explored in future studies.

# Conclusions

As far as we know, this study is the first to investigate the doubleedged sword effects of career calling on occupational embeddedness among Chinese nurses. Our findings suggest that career calling positively influences WFC and career adaptability. WFC, in turn, negatively influences occupational embeddedness. However, career adaptability is positively correlated with occupational embeddedness. WFC and career adaptability mediate the relationship between career calling and occupational embeddedness.

#### Conflicts of interest

The authors declare no conflict of interest.

#### Acknowledgment

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#### **Appendix**

Work-Family Conflict Scale.

- 1. The demands of my work interfere with my home and family life.
- The amount of time my job takes up makes it difficult to fulfill family responsibilities.
- Things I want to do at home do not get done because of the demands my job puts on me.
- My job produces strain that makes it difficult to fulfill family duties.
- Due to work-related duties, I have to make changes to my plans for family activities.

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