Work–Family Conflict, Organizational Identification, and Professional Identification Among Chinese Nurses From a Resource Perspective

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ABSTRACT

Background: The miserable work conditions faced by many nurses around the world make them particularly prone to work–family conflict. Purpose: This study was designed to explain from a resource perspective how and when nurses experiencing work–family conflict are more likely to exhibit decreased levels of organizational identification and professional identification. Methods: A time-separation research design was used, and data were collected from 322 nurses in five hospitals in China. All of the hypotheses were tested using conduct structural equation modeling. Results: The results showed that work–family conflict had negative effects on organizational identification and professional identification via emotional exhaustion. In addition, job meaningfulness may have a buffering effect on the negative impact of work–family conflict on emotional exhaustion, organizational identification, and professional identification. Conclusions/Implications for Practice: The results advance knowledge on how and when work–family conflict damages organizational identification and professional identification. Providing family support, relieving emotional exhaustion, and enhancing job meaningfulness are necessary to support the organizational and professional identification of nurses.

KEY WORDS:
work–family conflict, emotional exhaustion, job meaningfulness, organizational identification, professional identification.

Introduction

The working conditions of nurses in most countries are miserable (Kingma, 2018), with nurses subject to working both day and night shifts, shouldering extreme workloads, earning low salaries, frequently working over 40 hours per week, and experiencing physical exhaustion (H. Y. Chang et al., 2018; Enjian et al., 2020). These conditions impede the ability of nurses to discharge their family responsibilities (e.g., raising children, family caregiving) and thus make them particularly prone to work–family conflicts. Work–family conflict is defined as “a kind of inter-role interference in which the role pressures from the work and family fields are reciprocally incompatible in some way” (Greenhaus & Beutell, 1985, p. 76). In other words, work–family conflict occurs when the responsibilities of one domain (e.g., workplace) restrict the fulfillment of an individual’s obligations in another (e.g., family). One study has reported that around 50% of nurses experience work–family conflicts (Grzywacz et al., 2006). Therefore, examining the work–family conflicts of nurses is essential in terms of related theoretical and practical implications. Although the work–family conflict has been a significant issue of interest to scholars and managers in the nursing field (M. D. Barnett et al., 2019; Cheng et al., 2019), this issue has important areas that remain underresearched (Zhang et al., 2017). The negative outcomes of work–family conflict identified in prior research include workplace consequences (e.g., dissatisfaction, burnout, voluntary turnover intention, and absenteeism; Ekmecki et al., 2021), family domain outcomes (e.g., marital and family satisfaction), and health problems (e.g., depression, anxiety, and mental stress; Maharaj et al., 2018). However, researchers have largely ignored the pervasive and deleterious effects of work–family conflict on organizations and professions, especially in terms of organizational identification and professional identification. Moreover, previous studies have focused on job design and individual characteristics in their explorations of these two categories of identification (Xu et al., 2019). However, the potential impacts of work–family conflict on the self-conception of nurses in terms of the relationship between one’s ego and the organization and profession have not been explored. Thus, this study was

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developed to interpret the mechanisms by which work–family conflict influences organizational identification and professional identification as well as the contingency factors surrounding this influence.

The total amount of resources, such as an individual’s power and energy, is a constant. When work–family conflict happens, additional resources must be devoted to (or invested in) family-related roles. Furthermore, individuals who are more willing to transfer (or borrow) resources required by the organization or occupation field to the family field face a higher risk of weakening their affinity with their organization/occupation. Specifically, we suggest that work–family conflict influences organizational identification and professional identification negatively via emotional exhaustion because of long-term mental and emotional consumption. In addition, to understand when this effect is most impactful, we explore the alternate condition of job meaningfulness (i.e., the sense of meaning derived from a work activity), which represents a form of job resource that relieves the pressure induced by work–family conflict. Furthermore, in this study, we examined emotional exhaustion as a potential psychological mechanism underlying this interactive effect.

Overall, this study helps to enrich the existing literature. First, the empirical research on work–family conflicts among Chinese nurses is enriched, and the scope of potential consequences of work–family conflict beyond job-related, family-related, and health outcomes is developed by scrutinizing work–family conflict as a salient driver of organizational and professional identification in Chinese nurses. Second, a resource-based mechanism is revealed by including emotional exhaustion as a mediator to reveal how work–family conflict affects sense of belonging in nurses with regard to their organization and occupation. Third, this research also contributes to the literature by exploring the boundary conditions that make work–family conflict more or less damaging to nurses’ identification, thus providing a more in-depth understanding of the impacts of work–family conflict on nurses’ identification.

Theoretical Rationale and Hypothesis Development

**Work–family conflict, organizational identification, and professional identification**

Work–family conflict exists when activities in one field (e.g., work overtime) reduce the ability to complete activities in another (e.g., taking care of children). Work–family conflict includes the “work interfering with family” conflict and the “family interfering with work” conflict (Chen et al., 2018). In this study, we focus on the first type of conflict because nurses’ shift work, irregular working hours, and other workloads make the situation of work interfering with family more salient than that of family interfering with work.

Organizational identification is one kind of social identification, “where one person defines him or herself regarding their membership in a special organization” (Mael & Ashforth, 1992, p. 105). Organizational identification indicates a psychological coalition of self and organization (Bednar et al., 2020). Similarly, professional identification refers to the degree to which professionals experience feelings of consistency with their occupation. The existing literature considers that organizational identification has a unique value in manifesting employees’ behaviors and attitudes in organizations, as it refers to the fundamental definition of entities, specifically involving individual and organizational identities (E. S. Lee et al., 2015). The more an individual identifies with an occupation, the more likely he or she is to adopt the viewpoint of, and act in ways that maximally benefit, that occupation (Carper, 2017).

Nurses who encounter work–family tension tend to be less able to participate in family activities (e.g., household) and to perform family duties (e.g., parenting; Ekmecki et al., 2021). Nurses may feel guilt for delegating child-rearing to grandparents or about failing to take responsibility for the family (e.g., taking care of an elderly parent). The conservation of resources (COR) theory posits that people work to acquire, retain, and preserve resources (Hobfoll, 2011). Resources are loosely defined as objects, states, conditions, and other things that people value such as status in an organization (condition resources), self-esteem (personal resources), money and time (energy resources), and material assets (object resources).

According to the COR theory, a person encountering a negative event will feel stressed if a previously invested important resource is threatened, lost, or not gained. In this way, an employee who experiences work–family conflict feels that his or her resources are threatened, leading him or her to engage in coping strategies to prevent further consumption of resources and/or gain new resources to avoid psychological distress (e.g., worry, anxiety, helplessness). As the number of hours and energy an individual spends on work increases, the conflict between the individual’s work and home lives increases, which can negatively influence work outcomes. This is in line with the scarcity hypothesis, which posits that the more roles and identities one occupies and the more one’s time is divided between those roles and identities, the less resources will be available for any specific role/identity (R. C. Barnett & Garrius, 2000). That is, the total amount of resources (e.g., time, energy) available to an individual is limited (Lu & Guy, 2019). Stress stemming from work–family conflicts forces nurses to reinvest their resources (e.g., time, attention, and effort) across multiple work and life domains. When nurses invest more resources in their family roles to solve work–family conflicts, their organizational and professional roles receive fewer of their resources. For example, they choose to spend more time with the family to alleviate pressure from work–family conflicts, which naturally leads to less time spent at work. Conroy et al. (2017) stated that work–family conflict is negatively connected with organizational identification. Therefore, on the basis of the theoretical and empirical literature, the following hypotheses are proposed in this article:

Hypothesis (H) 1a: Work–family conflict is negatively related to organizational identification.
H1b: Work–family conflict is negatively related to professional identification.

Emotional Exhaustion as a Mediator
Increased family demands and decreased resources (arising from dealing with work–family conflict) boost emotional exhaustion in nurses, leading to adverse job-related consequences (Santa Maria et al., 2018). Similarly, although work–family conflict does not directly affect nurses’ identification, the effects of this conflict are transmitted via emotional exhaustion (Liu et al., 2015). Previous research has suggested that the competing demands from work and family, two separate but important areas for individuals, cause negative emotions (Hall et al., 2010; Posig & Kickul, 2004). From the perspective of resources, individuals react to these negative emotions by consuming resources (Ito & Brotheridge, 2003). When an employee expends a significant amount of resources coping with stress from work or life, the risk of experiencing emotional exhaustion increases. Emotionally exhausted nurses usually feel emotionally and psychologically depleted and drained and are more likely to withdraw psychologically from their organization and their organizational and professional identifications. Kemp et al. (2013) found that role stressors and emotional exhaustion damage the organizational identification of employees. Thus, the following hypotheses are proposed in this article:

H2a: When nurses experience more work–family conflict, they are likely to experience more emotional exhaustion.
H2b: When nurses experience more emotional exhaustion, they are likely to have less organizational identification.
H2c: When nurses experience more emotional exhaustion, they are likely to have less professional identification.

H3a: Emotional exhaustion mediates the effect of work–family conflict on organizational identification.
H3b: Emotional exhaustion mediates the effect of work–family conflict on professional identification.

Job Meaningfulness as a Moderator
Although work–family conflict increases emotional exhaustion, job meaningfulness may be regarded as an important resource that moderates this effect (Glazer et al., 2014; Tan et al., 2019). According to the COR theory, individual differences may be considered as resources buffering the negative effects of stressful events on individuals (Hobfoll, 1989). Individuals with more personal resources can cope with the loss of other resources such as resource losses attributable to work–family issues. Job meaningfulness refers to the sense of meaningfulness derived from a job or work (Rodell, 2013). Nursing, as a prosocial occupation, has great moral, social, and personal significance, and the work involved is an end in itself (Gicheva, 2020). Nurses with high self-perceived job meaningfulness tend to regard their work as a calling. Kim et al. (2018) claimed that people with callings have the feeling of personal fulfillment and a sense of purpose in life. If individuals do not perceive their work to be meaningful, they become apathetic toward and detached from their work (Thomas & Velthouse, 1990). As noted above, when nurses perceive that their work interferes with their family, they may spend their time and energies dealing with family issues, resulting in fewer resources available for work activities and, subsequently, increased feelings of stress and emotional exhaustion. It is conceivable that when individuals are faced with threats to resources, they may evaluate these threats differently, depending on the resources available. Nurses who enjoy higher levels of job meaningfulness may be less affected by work–family conflict because job meaningfulness satisfies several of their basic psychological needs (i.e., belongingness and purposefulness) and helps them better regulate their emotional reactions at work. Fürstenberg et al. (2020) argued that finding one’s work meaningful allows a person to more easily access intellectual resources (e.g., seeking out additional information to finish the tasks), social resources (connecting with people in different departments), and psychological resources (e.g., taking up development opportunities that provide them with confidence in their role), all of which help individuals face difficulties. Thus, job meaningfulness may replenish the resources of nurses necessary to mitigate the negative effects of work–family conflict and prevent resource depletion (Blanco-Donoso et al., 2017). The literature on job meaningfulness highlight that people with a sense of mission, guided by an internal compass or destiny, face the challenges in their work with firmness and persistence (Duffy & Sedlacek, 2007). Nurses who perceive more job meaningfulness from their jobs tend to be more motivated to engage in job activities to enhance feelings of esteem and self-fulfillment despite the associated costs or loss of resources caused by work–family conflict. Thus, the following hypotheses are proposed in this article:

H4: Job meaningfulness moderates the relationship between work–family conflict and emotional exhaustion, and the strength of this relationship is negatively related to job meaningfulness.

Methods
The school of economics and management of Yanshan university’s institutional review board granted approval for this study (#IRB18-07-08). The participants were ensured complete confidentiality for their voluntary participation. All study data were collected in October 2019. Participants received 10 RMB in compensation for each completed survey.

Justification of the Methodology
The application of a time-separation design in this study offers several benefits. First, given that causes precede effects, the time-separation design can reveal to some extent the causal relationships among the study variables. This design also avoids deriving correlative conclusions from cross-sectional data. Second, this data collection approach helps reduce
the inflation of correlations experienced when common method variance (CMV) is used. Third, many previous work–family conflict studies have failed to control CMV in the nursing field (e.g., M. D. Barnett et al., 2019). Fourth, the time-delay design can effectively shorten the length of each questionnaire time point, reduce fatigue and default responses, and improve the response rate and accuracy for each answer.

Participants and Procedures
Participants were recruited from five public hospitals in northern China. Specifically, representatives of the target hospitals helped us identify which nurses from their various departments (e.g., outpatient department, maternity ward, operating theater, children’s and pediatrics ward) were willing to participate. Next, we assigned each nurse a unique code based on their contact information that tracked their responses at different times. Data were collected at three time points over 3 months. We sent links to each questionnaire to participants via WeChat. At the first time point (Time 1), demographic information and the measures of work–family conflict were completed. About 1 month later (Time 2), the participants completed the second link, namely, the measure of emotional exhaustion and job meaningfulness. Two months later (Time 3), we sent the third survey link to the participants, and the measure of organizational identification and professional identification was completed. Nurses were asked to fill in the assigned code in each link. Furthermore, the responses of participants at different times were identified by the researchers.

Three hundred twenty-two nurses (valid response rate = 87%) completed all three rounds of the questionnaire survey. Their average age was 31.33 (SD = 4.78) years, 292 were female, and 50.3% had children. In terms of marital status, 17.1% were single, 9% were unmarried or cohabitating, 71.4% were married, and 2.5% were divorced or separated. In terms of education, 82.9% of the participants held a bachelor’s degree or higher.

Measures
The participants responded to all of the measures using a 5-point Likert-type scale (1 = strongly disagree, 5 = strongly agree). Brislin’s (1980) translation/back-translation procedure was used to translate the measures from English into Chinese.

Work–family conflict
Work–family conflict was measured using four items (sample item: “Your job reduces the effort you can give to activities at home”) initially proposed by Wayne et al. (2004). In the original work–family conflict scale, Wayne et al. found evidence for its reliability and good construct validity (Cronbach’s alpha = .82). This scale has subsequently been used in different occupational groups, including nurses, physicians, and teachers (Innstrand et al., 2008). The scale was found to be reliable for this sample, with a Cronbach’s alpha of .809. The results of confirmatory factor analysis (CFA) in this study were $\chi^2/df = 2.797$, root mean square error of approximation (RMSEA) = .075, comparative fit index (CFI) = .991, Tucker–Lewis Index (TLI) = .973, and standardized root mean square residual (SRMR) = .018.

Emotional exhaustion
Karasek’s (1979) three-item scale was used to assess the variable of emotional exhaustion (sample item: “I am completely exhausted in the evening”). This measure has established validity and reliability, and the Cronbach’s alpha of this variable in this study was .841.

Job meaningfulness
Participants were asked to evaluate the meaningfulness of their jobs using Spreitzer’s (1995) three-item scale (sample items: “The work we do is meaningful” and “The work we do is very important”). Spreitzer provided evidence for the reliability of this scale (Cronbach’s alpha = .85), and it has been used widely in the nursing profession with good validity (Walumbwa et al., 2019). The Cronbach’s alpha of this variable in this study was .927.

Organizational identification
Mael and Ashforth’s (1992) six-item scale was used in this study to measure organizational identification (sample item: “When someone praises the organization, it feels like a personal compliment”). Mael and Ashforth documented the established validity and reliability of this scale (Cronbach’s alpha = .87). Topa et al. (2014) found evidence for the construct validity of the organizational identification scale among nurses (Cronbach’s alpha = .89). In this study, the Cronbach’s alpha was .953, and the results of the CFA were $\chi^2/df = 2.696$, RMSEA = .073, CFI = .993, TLI = .987, and SRMR = .012.

Professional identification
In this study, Mael and Ashforth’s (1992) six-item scale was used to measure the extent to which nurses identified with their profession (sample item: “In general, when someone praises nurses, it feels like a personal compliment”). Hekman et al. (2009) found evidence for the reliability of this scale (Cronbach’s alpha = .73), providing support for its construct validity. Katrinli et al. (2008) found evidence for the construct validity of this scale among nurses (Cronbach’s alpha = .80). In this study, the Cronbach’s alpha was .78, and the results of the CFA were $\chi^2/df = 2.088$, RMSEA = .058, CFI = .990, TLI = .975, and SRMR = .023.

Control variables
Gender (0 = male, 1 = female), age (in years), educational level (1 = junior high school or below, 2 = high school or technical secondary school, 3 = junior college, 4 = bachelor’s degree, 5 = master’s degree or above), and children status (0 = no, 1 = yes) were used as control variables.

A reliability assessment involving the examination of (a) individual item’s factor loadings (≥ .7), (b) each construct's
composite reliability (CR; ≥ .6), and (c) each construct’s Cronbach’s alpha coefficient (≥ .6; Bagozzi & Yi, 1988; Fornell & Larcker, 1981; Hair et al., 2010) was conducted. In this analysis, all of these criteria were met (see Table 1), as (a) the factor loadings of all items ranged from .579 to .936 and were statistically significant (p < .001), (b) the CR of all constructs ranged from .806 to .955, and (c) the Cronbach’s alpha coefficients of all constructs ranged from .78 to .953, which provided evidence for the reliability of the study constructs. The average variance extracted value for each of the constructs was above the .5 thresholds and lower than the corresponding CR value (see Table 1), which upheld convergent validity (Hair et al., 2010).

Results

Descriptive Statistics

The means, standard deviations, and bivariate correlations among the variables in this study are shown in Table 2.

Table 1

| Factor Loadings of Construct Items and Reliability of the Constructs |
|-------------------------------------------------|
| Item                             | Factor Loading | CR  | AVE |
| Work–family conflict (WFC)       |                | .806 | .513 |
| WFC 1                           | .709*          |     |     |
| WFC 2                           | .744*          |     |     |
| WFC 3                           | .813*          |     |     |
| WFC 4                           | .579*          |     |     |
| Emotional exhaustion (EE)        |                | .847 | .651 |
| EE 1                            | .868*          |     |     |
| EE 2                            | .851*          |     |     |
| EE 3                            | .689*          |     |     |
| Job meaningfulness (JM)          |                | .929 | .813 |
| JM 1                            | .855*          |     |     |
| JM 2                            | .912*          |     |     |
| JM 3                            | .936*          |     |     |
| Organizational identification (OI)| | .955 | .779 |
| OI 1                            | .901*          |     |     |
| OI 2                            | .871*          |     |     |
| OI 3                            | .889*          |     |     |
| OI 4                            | .863*          |     |     |
| OI 5                            | .924*          |     |     |
| OI 6                            | .844*          |     |     |
| Professional identification (PI) |                | .921 | .665 |
| PI 1                            | .899*          |     |     |
| PI 2                            | .877*          |     |     |
| PI 3                            | .771*          |     |     |
| PI 4                            | .821*          |     |     |
| PI 5                            | .876*          |     |     |
| PI 6                            | .614*          |     |     |

Note. CR = composite reliability; AVE = average variance extracted. *p < .001.

The bivariate Pearson correlation coefficients (critical values) appear to be congruent. In addition, work–family conflict was found to correlate positively with emotional exhaustion (r = .419, p < .01) and negatively with organizational identification and professional identification (r = -.335, p < .01; r = -.367, p < .01). Furthermore, emotional exhaustion was found to correlate negatively with both organizational identification and professional identification (r = -.365, p < .01; r = -.451, p < .01).

Common Method Variance

The self-report measures used in surveys may raise issues of CMV, although several recommendations from Podsakoff et al. (2012) were adopted to reduce the impact of this bias, including highlighting the respondents’ confidentiality and collecting data at different time points. Because the CFA marker technique may be used to detect the severity of CMV (Williams et al., 2010), we used this approach for assessment. To perform the test, we compared (a) the measurement model with the addition of an unmeasured latent CMV factor (χ² = 525.876, df = 205 [p < .01], RMSEA = .070, CFI = .930, TLI = .921, SRMR = .064) and (b) the same measurement model without the CMV factor (χ² = 517.492, df = 199 [p < .01], CFI = .931, TLI = .919, RMSEA = .071, SRMR = .061). The resulting fit indices were not significantly improved (ΔCFI = .001, ΔTLI = .002, ΔRMSEA = .001, and ΔSRMR = .003, respectively; Bagozzi & Yi, 1990). In addition, we explored the potential influence of CMV using Harman’s single-factor test, finding that no single factor accounted for more than 50% of the variance in any of the relevant items (Harman, 1976). Finally, an exploratory factor analysis of all items found that these items explained 76.04% of the total variance and that the largest factor accounted for 31.73% of the variance. The above-described results support that common method bias was not a major issue in the data or subsequent analyses.

Hypothesis Testing

Before testing hypotheses, we conducted a series of CFAs to establish the discriminative validity of key variables used in the research. As shown in the Supplementary Appendix available at http://links.lww.com/JNR/A2, the findings reveal that these variables have good discriminative validity. All of the hypotheses used in the moderated mediation model in this study were tested using the structural equation model. The standardized value of the path coefficients and its significance level, shown in Figure 1, indicates an acceptable overall model fit (χ² = 748.904, df = 352; CFI = .918, TLI = .907, RMSEA = .059, SRMR = .057). H1a and H1b, which posit work–family conflict to be associated negatively with organizational identification and professional identification, were supported. As shown in Figure 1, the result showed the path coefficient to be significant and negative (organizational identification: β = -.297, p < .01; professional identification: β = -.326, p < .01). H2 posits work–family conflict to be
significantly related to emotional exhaustion. As indicated in Figure 1, a significant and positive path from work–family conflict to emotional exhaustion was found ($\beta = .461$, $p < .01$), lending support to H2. H3a and H3b respectively posit emotional exhaustion to relate negatively to organizational identification and professional identification. As illustrated in Figure 1, significant and negative paths from emotional exhaustion to organizational identification and professional identification were found (organizational identification: $\beta = -.240$, $p < .01$; professional identification: $\beta = -.244$, $p < .01$), which support H3a and H3b.

Furthermore, the mediating effect of emotional exhaustion was tested using nonparametric bootstrapping procedures, with the mediating role considered to be significant when the 95% confidence interval does not include zero. H3a posits that emotional exhaustion mediates the relationship between work–family conflict and organizational identification, whereas H3b posits that emotional exhaustion mediates the relationship between work–family conflict and professional identification. The indirect influence of work–family conflict on organizational identification via emotional exhaustion was found to be $-.111$ (95% CI [$-.178, -.050$]), which supports H3a, and the indirect influence of work–family conflict on professional identification via emotional exhaustion was found to be $-.112$ (95% CI [$-.186, -.052$]), which supports H3b.

H4 posits that the interaction between work–family conflict and job meaningfulness is predictive of emotional exhaustion. The results from Figure 1 show the interaction between work–family conflict and job meaningfulness to be significant ($\beta = -.147$, $p < .05$). Moreover, the simple slope diagram in Figure 2 shows that the positive association between work–family conflict and emotional exhaustion increased with decreasing levels of job meaningfulness. As shown in Table 3, the statistical tests further showed the significance of the difference in effects between the effect of

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**Table 2**  
*Means, Standard Deviations, and Bivariate Correlations Among Studied Variables (N = 322)*

| Variable         | M    | SD   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
|------------------|------|------|----|----|----|----|----|----|----|----|
| 1. Gender        | 0.91 | 0.29 |    |    |    |    |    |    |    |    |
| 2. Age           | 31.33| 4.78 | .291**|    |    |    |    |    |    |    |
| 3. Education     | 4.04 | 0.73 | .046| −.010|    |    |    |    |    |    |
| 4. Children status| 1.50 | 0.05 | .152**| .560**| −.069|    |    |    |    |    |
| 5. WFC           | 2.97 | 0.75 | −.007| .123*| −.022| .082|    |    |    |    |
| 6. EE            | 2.83 | 0.86 | .064| .064| .039| −.029| .419**|    |    |    |
| 7. JM            | 3.17 | 1.00 | .046| −.028| .023| −.060| −.001| −.141*|    |    |
| 8. OI            | 3.74 | 1.00 | .037| .040| .085| .051| −.335**| −.365**| .137*|    |
| 9. PI            | 3.16 | 0.59 | −.011| .006| .026| −.037| −.367**| −.451**| .093| .315**|

Note. Gender (0 = male, 1 = female); age (in years); education (1 = junior high school or below, 2 = high school or technical secondary school, 3 = junior college, 4 = bachelor’s degree, 5 = master’s degree or above); children status (0 = no, 1 = yes). WFC = work–family conflict; EE = emotional exhaustion; JM = job meaningfulness; OI = organizational identification; PI = professional identification.  
* $p < .05$. ** $p < .01$.

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**Figure 1**  
*Hypothesized Model Test Results Using Structural Equation Modeling*
work–family conflict on emotional exhaustion at low levels of job meaningfulness and that at high levels of job meaningfulness (difference = −.380, 95% CI [−.697, −.101]), which supports H4.

Finally, the results of the moderated mediation analysis obtained using the bootstrapping method (Preacher et al., 2007) are presented in Table 3. In addition, product indicators were used to perform the moderation analysis (Foldnes & Hagtvet, 2014; Jackman et al., 2011). Although the effects, via emotional exhaustion, of work–family conflict on professional identification at both low and high levels of job meaningfulness were not significant ([−1 SD] = −.001, 95% CI [−.103, .107]; [+1 SD] = .074, 95% CI [−.058, .300]), the difference between the conditional indirect effects was found to be significant (difference = .075, 95% CI [.019, .178]). Thus, job meaningfulness was confirmed in this study to moderate, via emotional exhaustion, the negative, indirect effect of work–family conflict on organizational identification and professional identification.

### Discussion

Drawing from the perspective of resources, models linking work–family conflict to organizational identification and professional identification were examined in this study, with emotional exhaustion examined as a mediating variable and job meaningfulness as a moderating variable. The results indicate that work–family conflict is positively related to emotional exhaustion. However, the linking mechanism of emotional exhaustion helped explain why employees who experience greater work–family conflict have less organizational identification and professional identification. Furthermore, the results documented that job meaningfulness effectively buffers the positive effect of work–family conflict on emotional exhaustion. These results offer glimpses into the mechanisms of the effect of work–family conflict on identification and the boundary conditions surrounding its effectiveness.

### Theoretical and Managerial Implications

First, the findings of this study add significantly to the limited research exploring work–family conflicts in Chinese nurses and enhance scholarly understanding of the identification-related consequences of work–family conflict. Although some researchers have explored the negative effects of work–family

### Table 3

#### Moderated Mediation Analyses

| Moderator                          | Outcome               | Effect  | 95% CI             |
|-----------------------------------|-----------------------|---------|--------------------|
| Moderate analyses                 |                       |         |                    |
| Low job meaningfulness (−1 SD)    | Emotional exhaustion  | .005    | [−.478, 0.510]     |
| High job meaningfulness (+1 SD)   |                       | −.375   | [−1.177, 0.394]    |
| Difference                         |                       | −.380*  | [−0.697, −0.101]   |
| Moderate mediation analyses       |                       |         |                    |
| Low job meaningfulness (−1 SD)    | Organizational identification| −.001 | [−.160, 0.157]    |
| High job meaningfulness (+1 SD)   |                       | .106    | [−.088, 0.427]     |
| Difference                         |                       | .107*   | [0.028, 0.261]     |
| Moderate mediation analyses       |                       |         |                    |
| Low job meaningfulness (−1 SD)    | Professional identification| −.001 | [−.103, 0.107]    |
| High job meaningfulness (+1 SD)   |                       | .074    | [−.058, 0.300]     |
| Difference                         |                       | .075*   | [0.019, 0.178]     |

*p < .05.
conflict on work outcomes in nurses, they have not explained how work–family conflicts affect the organizational identification and professional identification of nurses. For example, AlAzzam et al. (2017) documented that work–family conflict influenced nurses’ job satisfaction, whereas Leineweber et al. (2014) argued that work–family conflict had negative effects on burnout. In addition, despite the proliferation of research on work–family conflict in nurses, some fundamental issues remain unclear. In particular, the bulk of research on work–family conflict has focused on establishing the attitudinal consequences of experiencing work–family conflict and the affective mechanisms and boundary conditions that underlie related experiences. This research identified the affective mechanisms and boundary conditions of the impact of work–family conflict on organizational identification and professional identification. The models linking work–family conflict to organizational identification and professional identification were examined from a resource approach and included job meaningfulness and the quality of emotional exhaustion and job meaningfulness as moderators. The negative effects of work–family conflict on organizational identification and professional identification fit with arguments that refer to the permeability of highly integrated work–family domains and the transferability of resources (Paustian-Underdahl et al., 2016). A nurse who experiences guilt and who worries about their ability to handle family responsibilities will transfer organizational and professional resources to the family domain to deal with the work–family conflict. Work-to-family conflict occurs when individuals invest fewer resources in their family domain and cannot meet the demands of their family roles, which leads to a decrease in nurses’ sense of belonging to the organization and profession. Thus, managers in hospitals should identify the negative effects of work–family conflict and take actions such as encouraging nurses to rationalize their energy to keep a healthy balance between work and family activities to help them deal with work–family conflicts.

Second, this study provides a mechanism to elucidate the role of work–family conflict in organizations and careers. We found that emotional exhaustion mediates the negative effects of work–family conflict on organizational identification and professional identification. As a stressor, work–family conflict constitutes a form of resource loss and taxes the capabilities of each individual to respond to that demand. As noted by R. T. Lee and Ashforth (1996), emotional exhaustion is triggered when individuals with inadequate resources fail to deal effectively with the stressors confronting them. Continuous work–family conflict depletes nurses’ resources, culminating in emotional exhaustion. Moreover, nurses with high emotional exhaustion are more likely to psychologically separate from their organization and work, which decreases their organizational identification and professional identification. Thus, managers should focus greater attention on nurses' emotional exhaustion in the workplace and deploy interventions to help prevent emotional exhaustion at its source. Hospitals may consider providing free consultation and training on emotional management and on how to deal with work–family conflicts.

Third, this research identified the boundary conditions that shape the relationship between work–family conflict and emotional exhaustion in nurses. For a comprehensive understanding of the effects of work–family conflict in nurses, it is important to go beyond examining its consequences and to explore the boundary conditions under which work–family conflict has stronger or weaker impacts on nurses. We found that the extent to which work–family conflict promoted emotional exhaustion in nurses depended on the perceived meaningfulness of their job. Nurses are often referred to as angels in popular and professional literature, on television, and in advertising. Nursing is grounded in self-sacrifice for others and widely perceived as a noble profession. When nurses feel that jobs are more meaningful and a calling, they are less likely to experience emotional exhaustion from work–family conflicts. There is evidence that job meaningfulness can be shaped by work characteristics (Stein et al., 2019), and organizations may also benefit from the process of creating psychological meaning, that is, fostering a sense that one’s work not only is personally fulfilling but also has positive impacts on others. Fostering mutually rewarding interpersonal relationships or helping nurses connect their work to a larger set of goals and values will also link to heightened work meaningfulness and contribute to positive workplace outcomes.

Limitations and Future Research

This research was impacted by several limitations. First, although this study used a time-separation design to collect data at different time points to mitigate the impact of CMV, data collected from the same participants may still be influenced by CMV (Podsakoff et al., 2012). To avoid this problem, future research should consider using other sources of information such as managers, coworkers, and objective data. Second, the research design used in this study limited the ability to make causal inferences. Using a longitudinal or experimental design study in the future will be helpful in verifying that the conclusions in this study reflect causation. Third, the sample used in this study was from China, where cultural values place relatively high importance on familial relationships. Thus, further research may consider the potential impact of cultural differences and test whether our findings are specific to the Chinese cultural context. Finally, in this study, only emotional exhaustion was identified as an intervening mechanism between work–family conflict and organizational identification and professional identification. Future studies may be designed using other theoretical perspectives (e.g., emotional commitment, job stress, job satisfaction; H. Chang et al., 2020) to explore the influence of other potential mechanisms.

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