



# The International Journal of Human Resource Management

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/rijh20>

## The relationship between gender and work-to-family conflict among Chinese managers: testing a moderated mediation model

Mian Zhang, Jifang Dou, Sharon Foley, Margaret Shaffer & Quan Li

**To cite this article:** Mian Zhang, Jifang Dou, Sharon Foley, Margaret Shaffer & Quan Li (2022) The relationship between gender and work-to-family conflict among Chinese managers: testing a moderated mediation model, *The International Journal of Human Resource Management*, 33:12, 2541-2563, DOI: [10.1080/09585192.2021.1893784](https://doi.org/10.1080/09585192.2021.1893784)

**To link to this article:** <https://doi.org/10.1080/09585192.2021.1893784>



Published online: 16 Mar 2021.



[Submit your article to this journal](#)



Article views: 601




[View related articles](#)



[View Crossmark data](#)

## The relationship between gender and work-to-family conflict among Chinese managers: testing a moderated mediation model

Mian Zhan<sup>a</sup> , Jifan Dou<sup>b</sup>, Sharon Foley<sup>c</sup>, Margaret Shaffer<sup>d</sup> and Quan Li<sup>e</sup>

<sup>a</sup>School of Economics and Management, Tsinghua University, Beijing, China; <sup>b</sup>The Teaching Center for Writing and Communication, Tsinghua University, Beijing, China; <sup>c</sup>Independent Scholar, Philadelphia, Pennsylvania, USA; <sup>d</sup>Michael F. Price College of Business, University of Oklahoma, Norman, Oklahoma, USA; <sup>e</sup>School of Business, Nankai University, Tianjin, China

### ABSTRACT

This study of 390 full-time Chinese managers examined the relationship between gender and work-to-family conflict. Guided by identity theory, we found that work centrality and family centrality mediated the relationship between gender and work-to-family conflict. The findings indicate men follow a work centrality pathway that results in increased work-to-family conflict and women follow a family centrality pathway that also results in higher levels of work-to-family conflict. Gender role attitudes moderated the relationship between gender and work centrality, and the indirect relationship between gender and work-to-family conflict through work centrality was stronger for managers with traditional gender role attitudes than those with non-traditional gender role attitudes. Theoretical and practical implications are discussed.

### Introduction

Is work-family conflict, defined as incompatible demands between the work role and the family role (Greenhaus & Beutell, 1985), a gender issue? The popular press tends to support this view, with the main assumption that women are inevitably more influenced by work-family issues than men (Leslie & Manchester, 2011; Shockley et al., 2017). This gender-related stereotype may put women at a disadvantage in the workplace if practitioners perceive work-family conflict as costly to the organization. Although academic scholars have tried to answer this question about work-family conflict being a women's issue, they have neither corroborated it nor have

they refuted it. Despite an extensive body of work that has included gender as an input to work-family conflict, studies have tended to report inconsistent findings for the effects of gender (e.g. Byron, 2005; Eby et al., 2005; Rajadhyaksha et al., 2015). A recent meta-analysis by Shockley et al. (2017) highlights these inconsistencies, noting that the effects of gender on work-family conflict, while significant, are generally negligible and of little practical significance. Consequently, the paradoxical views of the popular press and science have not been resolved.

To help practitioners avoid viewing work-family conflict as a women's issue, we believe that it is time to reconcile the inconsistent findings by providing a fine-grained explanation of how gender is related to work-family conflict. Work-family conflict comprises two directional aspects: work-to-family conflict (i.e. WFC or work interference with family) and family-to-work conflict (i.e. FWC or family interference with work) (Amstad et al., 2011; Gutek et al., 1991; Netemeyer et al., 1996). Both of these forms of work-family conflict have consistently been associated with a wide range of negative outcomes in the work and family domains (e.g. Amstad et al., 2011; Cloninger et al., 2015). However, in this study, we focus on WFC rather than FWC for two reasons. First, compared to the work boundary, the family boundary is more permeable because work issues intrude into the family domain more readily than family issues into the work domain (Frone, 2003; Somech & Drach-Zahavy, 2007). Thus, WFC occurs more frequently than FWC (Frone, 2003). Second, although meta-analytic studies have found that both domain-specific and cross-domain antecedents account for WFC and FWC, the domain-specific antecedents are the strongest (Byron, 2005; Mesmer-Magnus & Viswesvaran, 2005; Michel et al., 2011). Specifically, demands and resources from the work domain have a more potent influence on WFC, whereas those from the family domain are more salient in predicting FWC. Because organizations have more control over demands and resources in the work domain, managers are better able to manage their employees' WFC (Powell & Greenhaus, 2010); thus the HR implications of our findings with respect to WFC have practical significance for organizations.

Our study aims to examine the underlying mechanism that explains the relationship between gender and WFC. Guided by identity theory, we propose a dual pathway model whereby gender influences WFC *via* both work and family centrality. From infancy, individuals are socialized to adopt gender-specific thoughts, feelings, and behaviors (Tajfel & Turner, 1985). This socialization process contributes to the formation of employees' work and family role identities, and these role identities motivate individuals to behave in ways that support that identity (Stryker & Serpe, 1994). To capture the salience of work and family identities, we assess work and family centrality. Work centrality refers to the importance of the work role

in one's life; family centrality refers to the importance of the family role in one's life (Bagger & Li, 2012; Bagger et al., 2014). Work and family centrality have been conceptually (Erdogan et al., 2019; Rajadhyaksha et al., 2015) and empirically associated with WFC (e.g. Byron, 2005; Erdogan et al., 2019; Michel et al., 2011). In this study, we anticipate that men and women will follow counteracting pathways to WFC. Specifically, we contend that men are more likely to follow a work centrality pathway that results in increased WFC and women are more likely to follow a family centrality pathway that also results in higher levels of WFC.

To further clarify the influence of gender on WFC, we also propose that gender role attitudes moderate the mediation effects of work centrality and family centrality on the relationship between gender and WFC. Socially prescribed gender roles indicate traditional gender role expectations for men and women (i.e. men as breadwinners and women as homemakers) (Eagly, 1987). Gender role attitudes indicate how strongly an individual identifies with traditional gender role expectations (Korabik et al., 2008), reflecting individual differences in accepting socially prescribed gender roles. In this study, we chose gender role attitudes as the moderator because the construct serves to validate the coherence between an individual's gender and work (family) centrality. Specifically, we contend that the indirect relationship between gender and work-to-family conflict through work (family) centrality is stronger for individuals with traditional gender role attitudes than those with non-traditional gender role attitudes.

We conducted our study using a sample of married managers from China. China provides a rich context for exploring work-family conflict issues because studies have found that Chinese managers face the challenges of balancing their work and family roles (e.g. Xiao & Cooke, 2012; Zhao et al., 2019). The context of China is especially suitable for testing gender-related hypotheses because the gender role attitudes of Chinese people have been in a state of flux as a result of the country's economic transition (Zhao et al., 2019). This variation is due to the struggle between gender equality policies promoted by the Chinese government and traditional gender role expectations that stubbornly persist in society (Lai et al., 2016; Liu & Tong, 2014).

Our study contributes to the literature in two aspects. First, we elaborate on the process linking gender to WFC by proposing dual pathways to WFC for men and women *via* work centrality and family centrality, respectively. Although studies have found direct relationships between work/family centrality and work-family conflict (e.g. Byron, 2005; Michel et al., 2011), few studies have examined the mediating role of centrality in the relationship between gender and WFC (Powell & Greenhaus, 2010; Shockley et al., 2017), and none have considered separate pathways for

men and women. As far as we know, we are the first researchers to theoretically and empirically consider the counteracting mediating effects through work centrality and family centrality in the relationship between gender and WFC. Second, by incorporating the moderating role of gender role attitudes in the relationships between gender and two forms of role centrality, we offer a more comprehensive explanation for how gender differences contribute to WFC. In this study, we posit that gender differences in WFC are only salient for individuals with traditional gender role attitudes. With societal development, the number of individuals with non-traditional gender role attitudes is increasing (Leslie et al., 2016). Thus, construing WFC as a gender issue could be incomplete and obsolete.

### Gender issues in China

We conducted our study in China, a country that continues to experience significant economic and social transitions. During the past ten years (2010–2019), China's annual economic growth rate has ranged from 6.1% to 12% compared to low annual economic growth in the rest of the world. Within this context of fast economic growth, overtime work is common in Chinese companies (Lai et al., 2014). Such heavy work demands and the fast pace of work have attracted both researchers and practitioners to focus on how employees can better manage their work and family roles (e.g. Choi, 2008; Zhang et al., 2013).

Gender role expectations in China are changing, but gender role traditions endure. Confucianism encourages husbands to be wage earners and wives to be responsible for family concerns (Bowen et al., 2007). With the establishment of the People's Republic of China in 1949, political ideology and social policies promoted gender equality and the participation of women in the labor force. Chinese law protected women's rights, and recent statistics show that women's labor force participation rate in China (60.45% in 2019) is one of the highest in the world (World Bank Report, 2020). However, a closer look at the experiences of women in China suggests that gender equality has not been realized. For example, women's labor force participation rate in urban areas dropped from a high of 75.8% in 1995 to 49% in 2013 (Lai et al., 2016, p. 28). The main reasons for this drop are that female graduates have more difficulty finding jobs, some women quit the labor market and stay at home to care for the family, and women are more likely to study for a higher education degree than men of the same age (Lai et al., 2016).

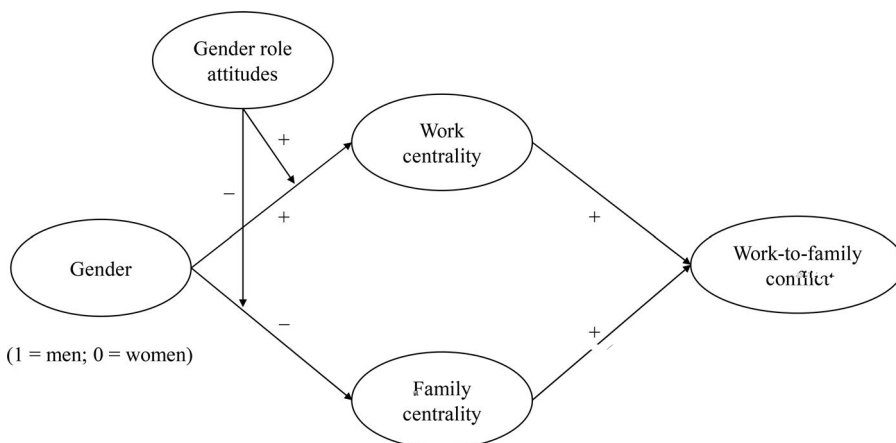
Studies have also found that organizations in China use gendered policies and practices favorable to men (Cooke & Xiao, 2014; Xiao & Cooke, 2012). Using panel data from China's household income survey5 (4r )]

men's income) were 85.9% in 1995, 84.5% in 2002, 73.9% in 2007, and 78.2% in 2013. Using data from the 2010 Chinese Women Social Status Survey, the gender income ratio was 93.04% for entry-level managers, 111.52% for middle-level managers, and 85.9% for top-level managers (Lai et al., 2016, p. 88). Because women face more barriers in managerial jobs than men (Cooke, 2005), some female managers may be overqualified at the middle-level but have no opportunities for promotion.

Chinese people have different attitudes about how work and family roles do and should differ based on gender. Studies have found that women are less likely than men to hold traditional gender role attitudes (Liu & Tong, 2014; Zhao et al., 2019). A married woman is more likely to have non-traditional gender role attitudes if she has higher economic status before marriage, makes a greater economic contribution to the family than her husband, enjoys an occupational status that is at least comparable to her husband, and has an equal or greater share of power in the family compared to her husband (Liu & Tong, 2014). For married women, educational opportunities, occupations and political identity contribute more to the formation of non-traditional gender role attitudes; for married men, sharing the housework equally with their wives contributes more to the formation of non-traditional gender attitudes (Liu & Tong, 2014).

### Theoretical background and hypotheses development

Figure 1 presents our proposed model depicting the relationship between gender and WFC. In the following sections, we draw on identity theory to develop hypotheses for the mediation effects of work and family centrality on the relationship between gender and WFC and for the conditional effects of gender role attitudes on the two pathways.



**Figure 1.** The hypothesized model.

### *The mediating effects through work centrality and family centrality*

According to role identity theory, individuals internalize social role expectations as the standards used for self-regulation (Stets & Serpe, 2013). These role expectations emanate from the early socialization of males and females so when individuals are in a social situation, they interpret social cues and follow rules that are appropriate to their particular gender category (Stets & Serpe, 2013); this process facilitates the formation of role identities. Individuals hold multiple role identities (Stets & Serpe, 2013; Thoits, 1991) such as work role identity and family role identity. Individuals with work (family) role identity value their work (family) role and follow the rules appropriate to that work (family) role. Thus, work role identity and family role identity are important for individuals when choosing their work and family roles, particularly when the two roles are incompatible (i.e. the occurrence of work-family conflict).

Although women's labor participation has increased considerably and men's participation in family activities is gradually increasing, studies have found that traditional gender roles remain (Bianchi & Milkie, 2010; Lai et al., 2016). Identity theory emphasizes the power of the common expectations that others have about actions and thoughts within a particular society in shaping an individual's identities (Stryker, 1980). Cinamon and Rich (2002) have found that men place greater value on work than family, and women place greater value on family than work. Thus, we expect that men tend to have higher levels of work centrality than women, and women tend to have higher levels of family centrality than men. Several studies have found evidence supporting that men's work centrality is higher than women's (e.g. Harpaz & Fu, 1997; Sharabi & Harpaz, 2011), and women's family centrality is higher than men's (e.g. Bagger & Li, 2012; Sharabi & Harpaz, 2011). We anticipate that such gender differences are most likely to exist in this study because our data were collected in China, where traditional gender roles persist (Bowen et al., 2007; Xiao & Cooke, 2012).

We propose that individuals with high levels of work centrality are more likely to experience WFC than those with low levels of work centrality. Individuals with high levels of a specific role centrality are more likely to respond to demands from that role (Bagger & Li, 2012; Stryker & Serpe, 1994). Individuals aim to perform well in their central role because the performance helps them self-verify their role centrality (Stets & Serpe, 2013). Because an individual's resources (e.g. time and energy) are limited, activities in favor of the work role inevitably compete with those in favor of the family role, resulting in WFC (Greenhaus & Beutell, 1985). Consistent with our arguments, meta-analytic studies have found that work centrality is positively related to WFC (Byron,



2005; Michel et al., 2011). Taking the preceding into account, we posit the following hypothesis:

***Hypothesis 1a.** Work centrality mediates the relationship between gender and work-to-family conflict. Specifically, men will experience greater levels of WFC via work centrality than women.*

We expect that individuals with high levels of family centrality are more likely to experience WFC than those with low levels of family centrality. Individuals tend to be sensitive to issues that threaten the role that is central to their self-definition (Pleck, 1977; Shockley et al., 2017). Following the sensitization perspective (Shockley et al., 2017), individuals tend to protect the roles central to their self-definition and thus are more likely to perceive the intrusion of demands from peripheral roles because the demands impede the fulfillment of their central roles. Applying the sensitization perspective, individuals with higher levels of family centrality tend to report more WFC because they are sensitive to the intrusion of demands from the work role (Shockley et al., 2017). Even when individuals spend the same number of hours in paid work, those with higher levels of family centrality are more likely to report WFC because they are more sensitive to the possible intrusion of work demands that impedes the fulfillment of their family role (Korabik et al., 2008; Rajadhyaksha et al., 2015). Thus, we posit the following hypothesis:

***Hypothesis 1b.** Family centrality mediates the relationship between gender and work-to-family conflict. Specifically, women will experience greater levels of WFC via family centrality than men.*

### **The moderating role of gender role attitudes**

Identity theory argues that gender role expectations serve as a ‘master status’ that often influences role identity salience and overrides other personal characteristics (Stryker, 1987; Thoits, 1991). Traditional gender roles prescribe that men emphasize the work role and women focus on the family role (Eagly, 1987). The role differences are formed and institutionalized by conventional labor divisions (Eagly, 1987). Because of changes in the division of labor and the promotion of gender equality ideology, traditional gender roles have been challenged (Leslie et al., 2016). Consequently, individuals vary in their acceptance of traditional gender roles (Korabik et al., 2008; Rajadhyaksha et al., 2015), and this variation of personal gender role identity is critical in explaining differences in work-family conflict (Cinamon & Rich, 2002; Leslie et al., 2016; Somech & Drach-Zahavy, 2007).



As a personal gender role identity, gender role attitudes indicate the extent to which an individual accepts traditional gender role expectations (Korabik et al., 2008). Prior studies labeled this concept as gender role ideology (e.g. Firestone et al., 1999; Somech & Drach-Zahavy, 2007) or gender role orientation (e.g. Livingston & Judge, 2008; Kailasapathy et al., 2014; Zhao et al., 2019). Gender role attitudes fall on a unidimensional continuum ranging from traditional to non-traditional (i.e. those with egalitarian values regarding the division of labor) (Korabik et al., 2008). Because there is an increasing amount of work that requires mental strength rather than physical strength (Eby et al., 2005), women have more opportunities to join the labor market, which increases the number of women with non-traditional gender role attitudes. Gender equality ideology also prompts men to take on more family responsibilities (Korabik et al., 2008), which increases the number of men with non-traditional gender role attitudes.

We propose that gender role attitudes moderate the relationship between gender and work (family) centrality. Individuals have discretion in deciding to what extent they accept socially prescribed expectations (Thoits, 2003). Compared with traditional individuals, non-traditional individuals are less likely to accept prescribed social expectations (Korabik et al., 2008). Non-traditional women tend to view their work role as more important than traditional women, and non-traditional men tend to view their family role more important than traditional men (Korabik et al., 2008). It is possible that a non-traditional woman emphasizes the work role more than a man, and a non-traditional man emphasizes the family role more than a woman. In short, compared to individuals with traditional gender role attitudes, gender differences in work and family centrality will be weaker for those with non-traditional gender role attitudes.

Based on these arguments, we posit the moderated mediation effects in our model. Work centrality mediates the effect of gender on WFC, and the mediated effect depends on how strongly the individual adheres to traditional gender roles. Work centrality indicates that work has greater importance to one's self-concept, suggesting that individuals with high levels of work centrality tend to invest in and protect the work role when the work role and the family role are incompatible (Bagger & Li, 2012; Bagger et al., 2014). Thus, we expect a positive relationship between work centrality and WFC. Because of the variation of gender role attitudes, men do not necessarily have higher levels of work centrality than women. Traditional men tend to experience more WFC than traditional women through work centrality. However, the gender difference may be weak or null because non-traditional individuals may have similar levels of work centrality. Thus, we posit the following hypothesis:

Family centrality indicates that family has stronger importance to one's self-concept, suggesting that individuals with high levels of family centrality tend to invest in and protect the family role when the work

node 4 and 54 (high frequency) are 15.23 (syggle-0703) and 44.47 (561) (5503) (7.436) (41) 3.16 (7.436).

had at least one child. Managerial levels differed, with 54 entry-level managers (13.8%), 265 middle-level managers (67.9%) and 71 top-level managers (18.2%). The managers' average paid work time was 46.54 h per week ( $SD=12.51$ ), and their average family time was 14.63 h per week ( $SD=12.99$ ).

### **Measures**

Participants self-reported their gender from the dichotomous options: man (coded 1) or woman (coded 0). The other variables in the proposed model were measured with well-established scales. We followed the process of back translation (Brislin et al., 1973) because the original language of the scales was English. We used six-point (1 = *totally disagree*; 2 = *disagree*; 3 = *slightly disagree*; 4 = *slightly agree*; 5 = *agree*; 6 = *totally agree*) anchors to assess the items in our study. We used even-number scales to alleviate the mid-point tendency among the Chinese (Wong et al., 2011). Using a Chinese sample, Wong et al. (2011) found that the odd number response format did not show systematic differences when compared with the even number response format.

#### **Work-to-family conflict**

This variable was measured with four items from Netemeyer et al. (1996) scale. One sample item was 'My job or career keeps me from spending the amount of time I would like to spend with my family'. In this study, Cronbach's  $\alpha$  was .89.

#### **Work centrality**

We measured this variable with four items adapted from Carr et al. (2008). One sample item was 'Work should be considered central to life'. In this study, Cronbach's  $\alpha$  was .83.

#### **Family centrality**

We measured this variable with four items adapted from Carr et al. (2008). One sample item was 'In my view, an individual's personal life goals should be family oriented'. The Cronbach  $\alpha$  in the study was .84.

#### **Gender role attitudes**

This variable was measured with five items selected from scales used to measure an individual's gender role attitude in earlier studies (Firestone et al., 1999; Livingston & Judge, 2008). We selected the items because they were most relevant to work-family issues. The items were 'It is much better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and family',

'Most men are better suited emotionally for politics than are women', 'A married woman shouldn't earn money in business or industry if she has a husband capable of supporting her', 'It is more important for a wife to help her husband's career than to have one herself', and 'Being a wife and mother is more important than having a challenging job or career for a woman'. High scores indicate a high level of traditional gender role attitudes (e.g. wives supporting their husbands' careers), while low scores represent non-traditional gender attitudes. In this study, Cronbach's  $\alpha$  was 0.78.

### *Control variables*

We controlled age, hierarchical rank in the organization, and age of children to rule out their potential influences on WFC when testing gender differences (e.g. Choi & Chen, 2006). Age was measured as a continuous variable (recorded in years). Hierarchical rank in organizations was measured with three categories (1= entry level, 2= middle level, 3= top level). The age of children was treated as a continuous variable. As for the participants who did not have any children, we counted zero for this variable. In our sample, 82.8% of respondents had at least one child. For those with more than one child, the age of children was indicated by the age of the youngest child.

We also controlled time commitment to work and family roles because the influence of time commitment on WFC may conflate that of work (family) centrality on WFC. Time commitment to work was measured by average paid work hours per week and time commitment to family was measured by average hours spent on family care per week (recorded in hours). In our study, men invested more time in the work role than women. Although women (Mean = 44.2 h) worked fewer hours than men (Mean = 47.4 h) ( $t = -2.13, p < .05$ ), women (Mean = 21.3 h) spent more hours on family than men (Mean = 12.2 h) ( $t = 5.56, p < .001$ ). When we analyzed a sub-sample of middle-level and top-level managers, we found no gender differences in time commitment to work, even though women spent more hours (Mean = 21.3 h) on family than men (Mean = 12.9 h) ( $t = 4.65, p < .001$ ).

### *Analyses*

The analysis consisted of a two-step process. First, we assessed the potential threat of common method variance in our data, using a series of confirmatory factor analyses (CFA). Second, to test our hypotheses, we conducted MLR-based (maximum likelihood estimation with robust standard errors) path analyses by using Mplus software 7.0 (Muthén & Muthén, 2012), because it can test complex models

that contain both mediation and moderation and get more accurate parameter estimation (Iacobucci et al., 2007). For the mediation hypotheses (H1a and H1b), we applied Monte Carlo parametric bootstrapping procedure (Preacher & Selig, 2012) to test the significance of the indirect effects. In terms of moderated mediation hypotheses (H2a and H2b), we adopted the analytic procedure recommended by Hayes (2013), and also applied Monte Carlo parametric bootstrapping procedure (Preacher & Selig, 2012) to test the significance of the conditional indirect effects.

Because we used self-reported data (i.e. work centrality, family centrality, gender role attitudes, and work-to-family conflict), common method variance (CMV) was a potential threat to our conclusion. Following the methods suggested by prior studies (e.g. Fuller et al., 2016; Podsakoff et al., 2003; Williams & McGonagle, 2016), we conducted Harman's single-factor test and the test of unmeasured latent method construct (ULMC). The results from Harman's single-factor test showed that the single factor only accounted for 24.29% of the total variance for all measures. In addition, the single-factor measurement model had poor fit indices in our study ( $\chi^2=1677.06$ ;  $df=119$ ;  $RMSEA = .18$ ;  $CFI = .35$ ;  $TLI = .25$ ;  $SRMR = .18$ ). The four-factor model, our theoretical model, had the best fit indices ( $\chi^2 = 245.89$ ;  $df=113$ ;  $RMSEA = .06$ ;  $CFI = .94$ ;  $TLI = .93$ ;  $SRMR = .04$ ) and all paths in the measurement model significantly loaded on their respective factors (lowest  $t$  value = 7.28). Regarding the test of ULMC, we added an artificial common method factor into the measurement model with all items loading on it. After adding the common method factor to the measurement model, most fit indices were improved ( $\chi^2 = 154.58$ ;  $df=96$ ;  $RMSEA = .04$ ;  $CFI = .98$ ;  $TLI = .97$ ;  $SRMR = .04$ ). Although the chi-square decrease ( $\chi^2 = 91.31$ ,  $df=17$ ) was statistically significant ( $p < .001$ ), the explained variance extracted by the common source factor was .10, falling below the .50 cutoff indicating the existence of a single latent factor representing the manifest indicators (Hair et al., 1998). Furthermore, the explained variance extracted by our theoretical constructs was .82, more than eightfold the variance explained by the common method factor. Overall, these results suggest that CMV was not a serious threat in our study.

## Results

### *Descriptive information and bivariate correlations*

$p < .001$ ), showing that men reported higher levels of WFC and work centrality than women did. Work centrality was positively associated with WFC ( $r = .28, p < .001$ ). Gender was negatively associated with family centrality ( $r = -.12, p < .05$ ), but family centrality was not associated with WFC ( $r = .03, p > .05$ ). Gender was positively related to gender role attitudes ( $r = .23, p < .01$ ), suggesting that men have higher levels of traditional gender role attitudes than women.

### **Hypotheses testing**

Table 2 shows the path analysis results. Gender was positively related to work centrality ( $b = .30, p < .05$ ) and work centrality was positively associated with WFC ( $b = .28, p < .001$ ). Moreover, the bootstrapping results showed that the indirect effect of gender on WFC *via* work centrality was also significant (*indirect effect* = .08. 95% CI = [.02, .16]). Specifically, men experienced greater levels of WFC *via* work centrality.

Thus, Hypothesis 1a (WFC is higher for men than women) was supported.

*i*

*d*

**Table 2.** Path analysis results.

| Predictors                            | Work centrality | Family centrality | Work-to-family conflict |
|---------------------------------------|-----------------|-------------------|-------------------------|
| <i>Control variables</i>              |                 |                   |                         |
| Age                                   | -.01            | -.00              | -.02                    |
| Age of children                       | .02             | -.01              | .01                     |
| Hierarchical ranks                    | .07             | -.14              | -.01                    |
| Time commitment to work               | .39**           | -.14              | .37**                   |
| Time commitment to family             | -.07            | .08*              | -.27***                 |
| <i>Independent variable</i>           |                 |                   |                         |
| Gender                                | .30*            | -.22*             | .07                     |
| <i>Moderator</i>                      |                 |                   |                         |
| Gender role attitudes                 | .16**           | .13*              |                         |
| <i>Interaction term</i>               |                 |                   |                         |
| Gender $\times$ gender role attitudes | .37**           | -.05              |                         |
| <i>Mediators</i>                      |                 |                   |                         |
| Work centrality                       |                 |                   | .28***                  |
| Family centrality                     |                 |                   | .19**                   |
| $R^2$                                 | .14             | .07               | .22                     |

Notes:  $N = 390$ . Gender 1 = men, 0 = women. All coefficients were unstandardized. We used the logarithmic scores of time commitment to work and family because the transformed scores were normally distributed. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 3.** Conditional indirect effects of gender and work-to-family conflict.

| Mediator          | Moderator                                | Indirect effect | 95% CI      |
|-------------------|--|-----------------|-------------|
| Work centrality   | High gender role attitudes (Mean + 1 SD) | .17             | [.05, .30]  |
|                   | Low gender role attitudes (Mean - 1 SD)  | -.00            | [-.08, .08] |
|                   | Index of moderated mediation             | .10             | [.01, .19]  |
| Family centrality | High gender role attitudes (Mean + 1 SD) | -.05            | [-.12, .02] |
|                   | Low gender role attitudes (Mean - 1 SD)  | -.03            | [-.09, .04] |
|                   | Index of moderated mediation             | -.01            | [-.05, .03] |

Note:  $N = 390$ .

[-.08, .08]). The index of moderated mediation for this path was significant as well (*effect size* = .10, 95% *CI* = [.01, .19]), providing support for Hypothesis 2a.

As shown in Table 3, the indirect effect of gender on WFC *via* family centrality was negative and non-significant (*indirect effect* = -.05, 95% *CI* = [-.12, .02]) among individuals with traditional gender role attitudes, and it was also non-significant for those with non-traditional gender role attitudes (*indirect effect* = -.03, 95% *CI* = [-.09, .04]). Moreover, the index of moderated mediation was non-significant (*effect size* = -.01, 95% *CI* = [-.05, .03]). Thus, Hypothesis 2b was not supported.

To show the moderating role of gender role attitudes in Hypothesis 2a, we plotted a bar chart that illustrates work centrality across gender and gender role attitudes (see Figure 2). We used the bar chart because gender is a dichotomous variable. Traditional men/women include one standard deviation above the mean of men/women's gender role attitudes, and non-traditional men/women include one standard deviation below the mean. We compared the mean values of work centrality across the four groups. T-tests results showed that: (1) traditional men (3.78) had a higher level of work centrality than traditional women (3.11) ( $p < .05$ ), and (2) the difference of work centrality between non-traditional men (3.16) and



non-traditional women (3.39) was not statistically significant ( $p > .05$ ). The results supported the notion that the differences in work centrality between men and women tend to be stronger for individuals with traditional gender role attitudes than those with non-traditional gender role attitudes.

### ***Additional data analyses***

We did not empirically test the causality from role centrality to work-family conflict. To amend this limitation, we followed Hayes's (2013, p. 182-183) suggestion and ran alternative mediation models that proposed WFC as a mediator of the relationship between gender and work (family) centrality. The model fit index for our original model (i.e. WFC as dependent variable) was:  $\chi^2 = 4.35$ ;  $df=2$ ;  $RMSEA = .06$ ;  $CFI = .99$ ;  $TLI = .82$ ;  $SRMR = .02$ . The alternative model (i.e. WFC as mediator) showed a poorer model fit index that was:  $\chi^2 = 24.89$ ;  $df=4$ ;  $RMSEA = .12$ ;  $CFI = .88$ ;  $TLI = .22$ ;  $SRMR = .04$ . Moreover, the

theory (Eby et al., 2005; Leslie et al., 2016). According to social role theory, men are expected to prioritize the work role over the family role and thus experience more WFC than women. However, meta-analytic studies have found a weak or null relationship between gender and WFC (e.g. Byron, 2005; Shockley et al., 2017). The model presented in this study provides a fine-grained explanation of the inconsistent findings from prior studies, suggesting that identity theory has the potential to advance our understanding of WFC and gender. The findings in our study offer the following two contributions to the literature.

First, we elaborate on the process of linking gender to WFC. The results indicate that both work centrality and family centrality mediate the relationship between gender and WFC. Interestingly, the mediation effect *via* work centrality and the mediation effect *via* family centrality are counteracting because the signs of the two mediation effects are the opposite. That is, men follow a work centrality path to WFC and women follow a family centrality path to WFC. The counteracting effects in our study are consistent with two mechanisms (rational mechanism and gender role mechanism) used by other researchers to explain the linkage between gender and work-family conflict (Korabik et al., 2008; Rajadhyaksha et al., 2015). According to the rational mechanism, men tend to spend more time and energy on work than women because fulfilling a work role has a greater utility than fulfilling a family role for men. In contrast, women tend to spend more time and energy on family than men because fulfilling a family role has a greater utility than fulfilling a work role for women (Gutek et al., 1991; Rothbard & Edwards, 2003). Alternatively, according to the gender role mechanism, women tend to perceive more WFC because women are more likely to view work demands as an imposition; men tend to perceive more family-to-work conflict because men are more likely to view family demands as an imposition (Gutek et al., 1991; Pleck, 1977). The rational and gender role mechanisms are counteracting because the rational mechanism posits that men have higher levels of WFC than women, whereas the gender role mechanism proposes women have higher levels of WFC than men.

Our study extends the two mechanisms by differentiating the mediating roles of work centrality and family centrality. Our finding shows that the two counteracting mediation effects function simultaneously. The mediation effect of work centrality prevails because the indirect effect linking gender to WFC through work centrality is stronger than that through family centrality. This finding suggests that the rational mechanism may play a more important role than the gender role mechanism when predicting WFC. Prior meta-analyses have found that there is a statistically significant but small relationship between gender and

WFC (Byron, 2005; Shockley et al., 2017). Our findings shed light on explaining the meta-analytic results. Because there are counteracting effects linking gender to WFC, a weak relationship between gender and WFC can be understood and expected.

Second, responding to the call for more work-family studies focusing on gender role attitudes (Leslie et al., 2016; Korabik et al., 2008), we found that gender role attitudes moderate the relationship between gender and WFC mediated by work centrality. The finding helps us understand why the direct relationship between gender and work-family conflict is mixed in the existing literature. Our findings suggest that the sample composition is important for detecting gender differences. Gender differences are more likely to be found in samples that largely comprise individuals with traditional gender role attitudes and less likely to be found in those that largely include individuals with non-traditional gender role attitudes. Thus, we strongly recommend that future work-family studies include both gender and gender role attitudes when gender differences are the focus of the research.

In contrast with our expectations, gender role attitudes did not moderate the relationship between gender and family centrality, and thus did not moderate the mediating effect of family centrality. We found that there was no difference in family centrality for non-traditional women vs. traditional women, and for non-traditional men vs. traditional men. These findings suggest that social expectations for people's family role are strongly prescribed. With the influence of Confucianism, Chinese people may be uniformly obligated to their family role (Aycaan, 2008), regardless of their gender role attitudes. Future work-family research needs to test whether gender role attitudes moderate the relationship between gender and family centrality in other cultures.

### ***Practical implications***

This study has several practical implications. Some managers make personnel decisions based on traditional gender stereotypes (Korabik et al., 2008). In selection, performance evaluation and promotion, these managers may favor men because they assume that women have more work-family issues that may hinder their work performance. However, this bias associated with traditional gender stereotypes is becoming obsolete. As our findings show, gender differences in WFC do not exist when men and women have non-traditional gender role attitudes. Work-family conflict is detrimental to individuals' well-being and their performance in organizations. A recent study has found that for people with a non-traditional gender role attitude, no matter the gender, when they experience WFC, they tend to blame their work role and perceive

less work achievement (Zhao et al., 2019). Leslie et al. (2016) argued 2016

in China. It is plausible that in a society with gender equality, the relationship between work and family centrality and gender is weak or null. When exploring the issue of gender differences, future meta-analytic studies should take gender equality into account. We expect that gender differences are null for samples from countries with high gender equality such as Finland, Norway, and Sweden; gender differences are more likely to be found in samples from nations such as China, Japan, Korea, and India.

## Conclusion

Previous studies have failed to find a consistent relationship between gender and work-to-family conflict. This puzzling inconsistency inspired us to explore the underlying reasons by testing a moderated mediation model. Our findings suggest that future work-family researchers consider using gender role attitudes as the moderator and role centrality (i.e. work centrality and family centrality) as the mediator when examining gender differences in predicting work-family conflict. In doing so, researchers can build upon our theoretical contribution and contribute to a comprehensive understanding of this complex phenomenon.

## Disclosures; a; emen;

No potential conflict of interest was reported by the authors.

## Funding

This research was supported by the National Natural Science Foundation of China (Project IDs: 71421061, 71672099, and 72002108).

## ORCID

Mian Zhang  <http://orcid.org/0000-0002-0708-9613>

## Data availability; s; a; emen;

The data that support the findings of this study are available from the corresponding author, Dr. Quan Li, upon reasonable request.

## References

- Amstad, F. T., Meier, L. L., Fasel, U., Elfering, A., & Semmer, N. K. (2011). A meta-analysis of work-family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations. *Journal of Occupational Health Psychology*, 16(2), 151–169. <https://doi.org/10.1037/a0022170>

- Aycan, Z. (2008). Cross-cultural approaches to work-family conflict. In K. Korabik, D. S. Lero, & D. L. Whitehead, (Eds.), *Handbook of work-family integration: Research, theory and best practices* (pp. 353–370). Academic Press.
- Bagger, J., & Li, A. (2012). Being important matters: The impact of work and family centralities on the family-to-work conflict-satisfaction relationship. *Human Relations*, 65(4), 473–500. <https://doi.org/10.1177/0018726711430557>
- Bagger, J., Reb, J., & Li, A. (2014). Anticipated regret in time-based work-family conflict. *Journal of Managerial Psychology*, 29(3), 304–320. <https://doi.org/10.1108/JMP-05-2012-0157>
- Bianchi, S. M., & Milkie, M. A. (2010). Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, 72(3), 705–725. <https://doi.org/10.1111/j.1741-3737.2010.00726.x>
- Bowen, C. C., Wu, Y., Hwang, C. E., & Scherer, R. F. (2007). Holding up half of the sky? Attitudes toward women as managers in the People's Republic of China. *The International Journal of Human Resource Management*, 18(2), 268–283. <https://doi.org/10.1080/09585190601102455>
- Brislin, R. W., Lonner, W. J., & Ortndike, R. M. (1973). *Cross-cultural research methods*. Wiley.
- Byron, K. (2005). A meta-analytic review of work-family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169–198. <https://doi.org/10.1016/j.jvb.2004.08.009>
- Carr, J. C., Boyar, S. L., & Gregory, B. T. (2008). The moderating effect of work-family centrality on work-family conflict, organizational attitudes, and turnover behavior. *Journal of Management*, 34(2), 244–262. <https://doi.org/10.1177/0149206307309262>
- Cinamon, R. G., & Rich, Y. (2002). Gender differences in the importance of work and family roles: Implications for work-family conflict. *Sex Roles*, 47(11/12), 531–541. <https://doi.org/10.1023/A:1022021804846>
- Choi, J. (2008). Work and family demands and life stress among Chinese employees: The mediating effect of work-family conflict. *The International Journal of Human Resource Management*, 19(5), 878–895. <https://doi.org/10.1080/09585190801993885>
- Choi, J., & Chen, C. C. (2006). Gender differences in perceived work demands, family demands, and life stress among married Chinese employees. *Management and Organization Review*, 2(2), 209–229. <https://doi.org/10.1111/j.1740-8784.2006.00041.x>
- Cloninger, P. A., Selvarajan, T. T., Singh, B., & Huang, S. (2015). The mediating influence of work-family conflict and the moderating influence of gender on employee outcomes. *The International Journal of Human Resource Management*, 26(18), 2269–2287. <https://doi.org/10.1080/09585192.2015.1004101>
- Cooke, F. L. (2005). Women's managerial careers in China in a period of reform. *Asia Pacific Business Review*, 11(2), 149–162. <https://doi.org/10.1080/1360238042000291216>
- Cooke, L., & Xiao, Y. (2014). Gender roles and organizational HR practices: The case of women's careers in accountancy and consultancy firms in China. *Human Resource Management*, 53(1), 23–44. <https://doi.org/10.1002/hrm.21566>
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Erlbaum.
- Eby, L. T., Casper, W. J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior*, 66(1), 124–197. <https://doi.org/10.1016/j.jvb.2003.11.003>
- Erdogan, I., Ozcelik, H., & Bagger, J. (2019, Online) Roles and work-family conflict: How role salience and gender come into play. *The International Journal of Human Resource Management*. <https://doi.org/10.1080/09585192.2019.1588346>

- Firestone, J. M., Harris, R. J., & Lambert, L. C. (1999). Gender role ideology and the gender-based differences in earnings. *Journal of Family and Economic Issues*, 20(2), 191–215. <https://doi.org/10.1023/A:1022158811154>
- Frone, M. R. (2003). Work–family balance. In J. Campbell (Ed.), *Handbook of occupational health psychology*. (pp. 143–162). American Psychology Association.
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69(8), 3192–3198. <https://doi.org/10.1016/j.jbusres.2015.12.008>
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, 10(1), 76–88. <https://doi.org/10.5465/amr.1985.4277352>
- Gutek, B. A., Searle, S., & Klepa, L. (1991). Rational versus gender role explanations for work–family conflict. *Journal of Applied Psychology*, 76(4), 560–568. <https://doi.org/10.1037/0021-9010.76.4.560>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed.). Prentice Hall.
- Harpaz, I., & Fu, X. (1997). Work centrality in Germany, Israel, Japan, and the United States. *Cross-Cultural Research*, 31, 171–200. <https://doi.org/10.1177/106939719703100301>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Iacobucci, D., Saldanha, N., & Deng, X. (2007). A meditation on mediation: Evidence that structural equations models perform better than regressions. *Journal of Consumer Psychology*, 17(2), 139–153. [https://doi.org/10.1016/S1057-7408\(07\)70020-7](https://doi.org/10.1016/S1057-7408(07)70020-7)
- Kailasapathy, P., Kraimer, M. L., & Metz, I. (2014). The interactive effects of leader–member exchange, gender and spouse's gender role orientation on work interference with family conflict. *The International Journal of Human Resource Management*, 25(19), 2681–2701. <https://doi.org/10.1080/09585192.2014.891637>
- Korabik, K., McElwain, A., & Chappell, D. B. (2008). Integrating gender-related issues into research on work and family. In K. Korabik, D. S. Lero, & D. L. Whitehead (Eds.), *Handbook of work–family integration* (pp. 215–232). Elsevier.
- Lai, D. S., Meng, D. H., Li, C. A., & Wang, Q. (2014). *China labor market development report: Work time in the process of becoming a high-income country*. Beijing Normal University Publishing.
- Lai, D. S., Meng, D. H., Li, C. A., & Wang, Q. (2016). *China labor market development report: Female employment in the process of gender equality*. Beijing Normal University Publishing.
- Leslie, L. M., & Manchester, C. F. (2011). Work–family conflict is a social issue not a women's issue. *Industrial and Organizational Psychology*, 4(3), 414–417. <https://doi.org/10.1111/j.1754-9434.2011.01364.x>
- Leslie, L. M., Manchester, C. F., & Kim, Y. (2016). Gender and the work–family domain: A social role-based perspective. In T. D. Allen & L. T. Eby (Eds.), *The Oxford handbook of work and family* (pp. 53–67). Oxford University Press.
- Liu, A. Y., & Tong, X. (2014). The present situation of gender attitudes and the factors influencing them: Based on the third survey of women's social status in China (in Chinese). *Social Sciences in China*, 35, 116–129.
- Livingston, B. A., & Judge, T. A. (2008). Emotional responses to work–family conflict: An examination of gender role orientation working men and women. *The Journal of Applied Psychology*, 93(1), 207–216. <https://doi.org/10.1037/0021-9010.93.1.207>
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Convergence between measures of work-to-family and family-to-work conflict: A meta-analytic examination. *Journal of Vocational Behavior*, 67(2), 215–232. <https://doi.org/10.1016/j.jvb.2004.05.004>



- Michel, J. S., Kotrba, L. M., Mitchelson, J. K., Clark, M. A., & Baltes, B. B. (2011). Antecedents of work-family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32(5), 689–725. <https://doi.org/10.1002/job.695>
- Muthén, L. K., & Muthén, B. O. (2012). *Mplus version 7 user's guide*. Muthén & Muthén.
- Netemeyer, R. G., Boles, J. S., & Mcmurrin, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology*, 81(4), 400–410. <https://doi.org/10.1037/0021-9010.81.4.400>
- Pleck, J. H. (1977). The work-family role system. *Social Problems*, 24(4), 417–427. <https://doi.org/10.1525/sp.1977.24.4.03a00040>
- Podsako, P. M., MacKenzie, S. B., Lee, J. Y., & Podsako, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Powell, G. N., & Greenhaus, J. H. (2010). Sex, gender, and the work-to-family interface: Exploring negative and positive interdependencies. *Academy of Management Journal*, 53(3), 513–534. <https://doi.org/10.5465/amj.2010.51468647>
- Preacher, K. J., & Selig, J. P. (2012). Advantages of Monte Carlo confidence intervals for indirect effects. *Communication Methods and Measures*, 6(2), 77–98. <https://doi.org/10.1080/19312458.2012.679848>
- Rajadhyaksha, U., Korabik, K., & Aycan, Z. (2015). Gender, gender-role ideology, and the work-family interface: A cross-cultural analysis. In M. J. Mills (Ed.), *Gender and the work-family experience: An intersection of two domains* (pp. 99–117). Springer International Publishing.
- Rothbard, N. P., & Edwards, J. R. (2003). Investment in work and family roles: A test of identity and utilitarian motives. *Personnel Psychology*, 56(3), 699–730. <https://doi.org/10.1111/j.1744-6570.2003.tb00755.x>
- Sharabi, M., & Harpaz, I. (2011). Gender and the relative centrality of major life domains: Changes over the course of time. *Community, Work & Family*, 14(1), 57–62. <https://doi.org/10.1080/13668803.2010.506033>
- Shockley, K. M., Shen, W., DeNunzio, M. M., Arvan, M. L., & Knudsen, E. A. (2017). Disentangling the relationship between gender and work-family conflict: An integration of theoretical perspectives using meta-analytic methods. *The Journal of Applied Psychology*, 102(12), 1601–1635. <https://doi.org/10.1037/apl0000246>
- Somech, A., & Drach-Zahavy, A. (2007). Strategies for coping with work-family conflict: The distinctive relationships of gender role ideology. *Journal of Occupational Health Psychology*, 12(1), 1–19. <https://dx.doi.org/10.1037/0021-9010.90.1.132>
- Stets, J. E., & Serpe, R. T. (2013). Identity theory. In J. DeLamater & A. Ward (Eds.), *Handbook of social psychology* (pp. 31–60). Springer Netherlands.
- Stryker, S. (1980). *Symbolic interactionism: A social structural version*. Benjamin/Cummings.
- Stryker, S. (1987). Identity theory: Development and extensions. In K. Yardley & T. Honess (Eds.), *Self and identity: Psychosocial perspective* (pp. 89–103). Wiley.
- Stryker, S., & Serpe, R. T. (1994). Identity salience and psychological centrality: Equivalent, overlapping, or complementary concepts? *Social Psychology Quarterly*, 57(1), 16–35. <https://doi.org/10.2307/2786972>
- Tajfel, H., & Turner, J. C. (1985). The social identity theory of intergroup behavior. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations*. (Vol. 2, pp. 7–24). Nelson-Hall.
- Moits, P. A. (1991). On merging identity theory and stress research. *Social Psychology Quarterly*, 54(2), 101–112. <https://doi.org/10.2307/2786929>

- oits, P. A. (2003). Personal agency in the accumulation of multiple role-identities. In P. J. Burke, T. J. Owens, R. T. Serpe & P. A. oits (Eds.), *Advances in identity theory and research*. (pp. 179–194). Springer US. [https://doi.org/10.1007/978-1-4419-9188-1\\_13](https://doi.org/10.1007/978-1-4419-9188-1_13).
- Williams, L. J., & McGonagle, A. K. (2016). Four research designs and a comprehensive analysis strategy for investigating common method variance with self-report measures using latent variables. *Journal of Business and Psychology*, 31(3), 339–359. <https://doi.org/10.1007/s10869-015-9422-9>
- Wong, C. S., Peng, K. Z., Shi, J., & Mao, Y. (2011). Differences between odd number and even number response formats: Evidence from mainland Chinese respondents. *Asia Pacific Journal of Management*, 28(2), 379–399. <https://doi.org/10.1007/s10490-009-9143-6>
- World Bank Report (2020). Labor force participation rate, female (% of female population ages 15+). Retrieved 19 May, 2020, from <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>.
- Xiao, Y., & Cooke, F. L. (2012). Work–life balance in China? Social policy, employer strategy and individual coping mechanisms. *Asia Pacific Journal of Human Resources*, 50(1), 6–22. <https://doi.org/10.1111/j.1744-7941.2011.00005.x>
- Zhang, M., Foley, S., & Yang, B. Y. (2013). Work–family conflict among Chinese married couples: Testing spillover and crossover effects. *The International Journal of Human Resource Management*, 24(17), 3213–3231. <https://doi.org/10.1080/09585192.2013.763849>
- Zhao, K., Zhang, M., & Foley, S. (2019). Testing two mechanisms linking work-to-family conflict to individual consequences: Do gender and gender role orientation make a difference? *The International Journal of Human Resource Management*, 30(6), 988–1009. <https://doi.org/10.1080/09585192.2017.1282534>