Work-family Conflict and Job Burnout among Preschool Teachers: The roles of self-efficacy and resilience

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Abstract: The current study investigated the relationship between work-family conflict and job burnout in preschool teachers, with a focus on self-efficacy as a potential mediator and resilience as a moderator. We enlisted 42,412 participants (41,574 females; Mean age = 31.43 years, SD = 7.54 years), all of whom were preschool teachers completing self-reported scales. The findings revealed that increased work-family conflict was associated with higher levels of job burnout through reduced self-efficacy, particularly in individuals with lower resilience. These results highlight the importance of fostering harmonious work-family relationships, as well as enhancing self-efficacy and resilience, to improve job performance among preschool teachers. This has significant implications for early childhood education, as teachers with higher job performance and lower burnout are more likely to provide high-quality education, nurturing environments, and positive interactions, which are crucial for the developmental outcomes of young children.

Keywords: work-family conflict; job burnout; self-efficacy; resilience

1. Introduction

Job burnout refers to one type of state of physical and mental exhaustion produced by individuals under the stress of work, characterized by emotional fatigue, depersonalization, and diminished personal accomplishment. Job burnout has been documented to directly affect the state of work preparation, and leads to a vicious circle of individual unhealthy working condition. Therefore, how to effectively eliminate job burnout is of great significance for stabilizing the workforce and improving job performance.

2. Work-Family Conflict and Job Burnout

In addition to workplace, family or home is another important place in workers' life. Work-family conflict, one type of role conflict that comes from the conflict between roles in two necessary areas of work and family, is a common source of stress for individuals in life. The adverse effects of work-family conflict on job burnout have attracted the attention of some scholars. The job demands-resources model assumed that adequate resources to meet the ongoing demands of the job

are the key to preventing burnout. When the demands of work and family conflict, resources in these areas can be lost or threatened, which can increase the likelihood of burnout. As a result, individuals with high levels of work-family conflict are more likely to experience burnout, which was also supported by numerous empirical studies. In some cross-sectional studies, work-family conflict was found to be positively linked with job burnout across diverse samples (e.g., firefighters, child welfare workers, doctors, psychologists, university teachers, correctional staff, and construction professionals). Similarly, a multilevel analysis study has indicated that work-family conflict was a powerful predictor of job burnout. Furthermore, longitudinal study findings shed light on the stability of this link. Specifically, work-family conflict at baseline can predict job burnout two years later, even after controlling for age, gender, and economic stress. In addition, work-family conflict is one of the most critical factors to predict job burnout among individual job demands. Based on the above literature, we proposed our first hypothesis that there would be a positive link between work-family conflict and job burnout[1].

3. The Mediating Role of Self-Efficacy

Researchers attempt to expand the job demand model by treating self-efficacy as a personal resource. Self-efficacy, a core part of Bandura's social learning theory, is an individual's cognitive assessment of their performance abilities. The current study would use the context-process-outcome model to investigate the relationships between work-family conflict, self-efficacy, and job burnout. The value of this model is to describe how situational factors could influence people's behavior and mental health outcomes through internal processes [2].

First, work-family conflict would predict self-efficacy. Bandura believed that the establishment of individual self-efficacy is inseparable from four sources of information, the individual's direct behavioral experience, alternative experience, social persuasion, and physiological and psychological state. Individuals conduct comprehensive cognitive processing based on these information sources, thereby forming self-efficacy. When individuals cannot balance the two domains of work and family, they may have doubts about their own abilities, which, in turn, affects their self-efficacy. A previous empirical study has also indicated that work-family conflict is significantly associated with self-efficacy.

Second, self-efficacy may predict job burnout. From the perspective of social cognitive theory, self-efficacy is the core mechanism of behavioral motivation, affecting patterns of thinking, behaviors, and emotions. Individuals with low self-efficacy may have negative thoughts about personal development, thus, they are more likely to experience burnout. Consistent with this notion, many empirical studies have found that self-efficacy significantly predicted job burnout. Furthermore, a meta-analysis further confirmed that there is a negative link between self-efficacy and individuals' job burnout. Therefore, based on the above theoretical and empirical evidence, we proposed our second hypothesis that self-efficacy would mediate the association between self-efficacy and job burnout.

4. The Moderating Role of Resilience

The relationships between work-family conflict and job burnout via self-efficacy may vary among individuals. Research has documented that resilience acted as a powerful buffer against the detrimental effects of stressful life events (e.g., work-family conflict) on psychological adjustment (e.g., self-efficacy or burnout). Resilience is conceptualized as the capacity to maintain stable functioning and adaptation in the face of adversity. People with high levels of resilience can better handle environmental difficulties, demands and high pressure without experiencing adverse effects. That is, high resilience may be associated with positive psychological adaption (e.g., self-efficacy). Low resilience, in contrast, has been found to be related to negative results (e.g., job burnout).

Resilience has also been documented as a protective factor in mitigating the impacts of risk factors (e.g., work-family conflict) on individual psychological adaption (e.g., work performance). More specifically, resilience is an ability that

enables people to cope with the challenges of their role (e.g., work-family conflict), which, in turn, buffers the effect of stress on self-efficacy and job burnout. Moreover, according to the meta-model for stress, emotions, and performance, the processes of perception, appraisal, and management influence the association between the environmental stressors and the results of positive or negative responses, and feeling states. In this way, resilience would buffer the effect of work-family conflict on cognitive evaluation (e.g., self-efficacy) and the selection of coping strategies (e.g., job burnout). Specifically speaking, better resilience may help high work-family conflict people recover from negative recognitions or events, which, in turn, relieve the decreasing self-efficacy and tendency to engage in job burnout. Based on the above theoretical and empirical evidence, we proposed the third hypothesis that work-family conflict would be positively connected with job burnout via self-efficacy, especially for individuals with lower resilience.

5. The Current Study

Given this backdrop, the current study investigated the links between work-family conflict and job burnout through self-efficacy, with attention to the potential moderator resilience. First, based on The job demands-resources, it was predicted that work-family conflict was positively connected with job burnout. Second, self-efficacy would mediate this association that work-family conflict would connect with higher job burnout through impaired self-efficacy, consistent with the context-process-outcome model. Finally, according to the meta-model for stress, emotions, and performance, work-family conflict was more likely to be positively linked with job burnout via self-efficacy for individuals with lower resilience.

6. Methods

6.1. Participants and Procedure

The data was collected through the website, and recruited 42,412 preschool teachers ($n_{female} = 41,574$; $n_{male} = 838$) aged from 18 to 67 years old ($M = 31.43$ years, $SD = 7.54$ years). The data collection procedures were approved by the Ethical Review Board at the first author's university and informed consent was obtained from all preschool teachers before the data collection. Questionnaires took approximately 30 min. When all preschool teachers completed the questionnaires, each participant received ¥2 (about $0.31) as compensation.

7. Measures

7.1. Job burnout

Job burnout was measured by the job burnout subscale, developed by Maslach and Jackson (1981) and revised by Wu et al. (2016). It includes 14 items that assess emotional exhaustion (8 items) and depersonalization (6 items). All items were assessed on a 7-point Likert scale ranging from "1= *Never*" to "7= *Always*". A sample item is "I often feel exhausted after a day's work". Mean score of this scale were calculated, with higher average score indicating higher levels of job burnout. This scale has been widely used in Chinese samples with good reliability and validity. In the current study, the Cronbach's *a* was.92.

7.2. Work-family conflict.

Work-family conflict was accessed by the Work-Family Conflict Scales. It includes 18 items that assess time-based conflict (5 items), strain-based conflict (10 items), and behavior-based conflict (3 items). All items were rated on a 5-point Likert scale ranging from "1 = *strongly disagree*" to "5 = *strongly agree*". A sample item is "My job is having a negative effect on my family life." Mean score for eighteen items was calculated, with higher score indicating higher levels of work-family conflict. This scale has been widely used in Chinese samples with good reliability and validity. In the current study, the Cronbach's *a* was.92.

7.3. Self-efficacy.

Self-efficacy was measured by the Self-efficacy Scales, developed and revised by (Pi, 2018). It includes 10 items that assess general teaching efficacy (5 items) and personal teaching efficacy (5 items). All items were assessed on a 4-point Likert scale ranging from "1= *very much like me"* to "4= *not like me at all"*. A sample item is "Generally speaking, what young children become is determined by their families and society, and education is difficult to change". Mean score for ten items was calculated, with higher scores indicating higher levels of self-efficacy. This scale has been widely used in Chinese samples with good reliability and validity. In the current study, the Cronbach's *a* was.79.

7.4. Resilience

Resilience was accessed by two commonly used brief self-report resilience scales, the Brief Resilience Scale (BRS) and the Brief Resilient Coping Scale (BRCS), developed by BW Smith et al. and Vaughn et al. It includes 10 items that assess resilience (6 items) and resilience coping (4 items). All items were assessed on a 5-point Likert scale ranging from "1 = *does not describe me at all"* to "5 = *describes me very well"*. A sample item is "I tend to bounce back quickly after hard times". Mean score for ten items was calculated, with higher scores indicating higher levels of resilience. This scale has been widely used in Chinese samples with good reliability and validity. In the current study, the Cronbach's *a* was.83.

8. Results

8.1. Common Method Biases

We performed Harman's one-factor test to examine common method biases. It extracted twelve eigenvalues greater than one, with the first factor explaining 27.25% of the variance.

8.2. Descriptive Statistics

Descriptive statistics and correlations of all variables are presented in **Table 1**. Work-family conflict was positively linked with job burnout. In contrast, both self-efficacy and resilience were negatively linked with job burnout and work-family conflict, respectively. In addition, given that both gender and age were significantly correlated with job burnout, these variables were used as the covariates in the subsequent analysis.

Table 1. Descriptive statistics and correlations among variables of interest.

Variable	M	SD	1	2	3	4	5	6
1.Gender	-	-	1					
2.Age	31.43	7.54	-.10***	1				
3.Work-family Conflict	2.50	0.71	-.02***	-.08***	1			
4.Job Burnout	1.29	1.18	-.02**	-.07***	.57***	1		
5. Self-efficacy	3.12	0.48	.02**	.03***	-.41***	-.37***	1	
6.Resilience	3.67	0.59	-.01	.07***	-.51***	-.42***	.39***	1
Skewness	-	-	-	-	.01	.98	-.27	.15
Kurtosis	-	-	-	-	-.22	.31	-.22	-.11

Note. Code for gender: 0 = male, 1 = female; * *p* < .05; ** *p* < .01; *** *p* < .001. All correlations with gender are point biserial correlations.

8.3. Testing for Mediation Effect of Self-efficacy

We followed Baron and Kennys' suggestions of the causal steps approach to examine the hypothesis that self-efficacy would mediate the relationship between work-family conflict and job burnout. It mainly includes four steps in establishing a mediation model. In the first step, work-family conflict was significantly positively linked with job burnout after

controlling age and gender, β = .57, t = 143.30, p < .001, 95%CI = [.56,.58]. In the second step, work-family conflict was significantly negatively linked with self-efficacy, β = -.41, t = -91.64, p < .001, 95%CI = [-.42 -.40]. In the third step, self-efficacy was significantly negatively linked with job burnout, β = -.16, t = -37.53, p < .001, 95%CI = [-.17, -.15]. In the fourth step, bootstrap estimates showed that the indirect effect of work-family conflict on job burnout via self-efficacy was significant, β = .065, SE = .002, 95%CI = [.061,.069]. The mediation effect accounted for 11.47% of the total effect.[3]

8.4. Testing for Moderation Effect of Resilience

The current study assumed that resilience would moderate the indirect and direct links between work-family conflict and job burnout via self-efficacy. Model 59 of PROCESS macro was used to examine those hypotheses.

Work-family conflict negatively predicted self-efficacy, β = -.28, t = -56.45, p < .001, 95%CI = [-.29 -.27]. The interaction effect of resilience and work-family conflict were significant on self-efficacy (β = -.03, t = -9.22, p < .001, 95%CI = [-.04 -.03]), which suggested that resilience moderated the relationship between work-family conflict and self-efficacy. For the descriptive purpose, we plotted predicted job burnout against work-family conflict, separately for low and high levels of resilience. Simple slope tests indicated that for individuals with low levels of resilience, work-family conflict was negatively associated with self-efficacy, β_{simple} = -.25, t = -38.91, p < .001. However, for individuals with high levels of resilience, the effect of work-family conflict on self-efficacy became weakened, β_{simple} = -.32, t = -51.36, p < .001. Rresilience significantly interacted with work-family conflict (β = -.08, t = -21.94, p < .001, 95%CI = [-.09 -.07]) and self-efficacy (β = .04, t = 10.19, p < .001, 95%CI = [.03,.05]). First, resilience moderated the relationship between work-family conflict and job burnout. The results of simple slope analysis indicated that for individuals with low levels of resilience, work-family conflict was negatively associated with job burnout, β_{simple} = .53, t = 89.08, p < .001. However, for individuals with high levels of resilience, the effect of work-family conflict on job burnout was still significant but weaker, β_{simple} = .37, t = 62.18, p < .001. Second, resilience moderated the relationship between self-efficacy and job burnout . The results of simple slope analysis indicated that for individuals with low levels of resilience, self-efficacy was negatively associated with job burnout, β_{simple} = -.18, t = -28.78, p < .001. However, for individuals with high levels of resilience, the effect of self-efficacy on job burnout was still significant but weaker, β_{simple} = -.10, t = -16.13, p < .001. In addition, the moderated mediation model contributed 37.94% to the variance of job burnout.

We also examined whether resilience moderated the indirect effect of work-family conflict on job burnout via self-efficacy. Results indicated that for individuals with low resilience, the indirect effect of self-efficacy was significant, β = .044, SE = .002, 95% CI = [.040.048]. For individuals with high resilience, the indirect effect of self-efficacy was still significant but weaker, β = .031, SE = .002, 95% CI = [.027.034]. That is, resilience moderated the indirect relationship between work-family conflict and job burnout via self-efficacy.

8.5. Discussion

Using a large sample, this study clarifies the relationship between work-family conflict and job burnout: work-family conflict exacerbates burnout by reducing self-efficacy, with this effect stronger for individuals with lower resilience. These findings support the context-process-outcome model and stress-emotion-performance meta-model, identifying work-family conflict as a risk factor and resilience as a protective factor for job performance[4].

Consistent with the job demands-resources model and prior studies, work-family conflict correlates positively with burnout. Resolving such conflicts consumes cognitive resources, lowering work enthusiasm. Conversely, balancing work and family through proper time/energy allocation enhances job dedication.

Self-efficacy mediates the conflict-burnout link, aligning with the context-process-outcome model. Chronic failure to manage work-family relations undermines confidence in handling such tasks, reducing self-efficacy in work/family errands and impairing performance. This reflects how life experiences shape self-cognition, which in turn influences behavior.

More interesting, for individuals with more resilience, the detrimental effect of work-family conflict on job burnout via self-efficacy may become lower. Resilience can relieve some negative effects on work performance raised by conflicts

between family and work, though this relief is not thorough. This may illustrate that resilience, as an upbeat personality, provides a certain protection against the negative effects caused by negative life events or pressure. However, if the detrimental effects caused by negative life events or pressure become too great, then the effects may not completely be relieved by resilience. From another perspective, other protective factors may exist besides personality, such as family members, social support from companions, etc.

9. Limitations and Future Directions

These findings need to be carefully interpreted considering several limitations. First, though 42412 samples ensured the stability of the relationship among the variables, the cross-sectional design prevents us from making a causal inference. A longitudinal study should be adopted in future design to examine this relationship ulteriorly. Second, all measures employed a self-reported procedure; future research might benefit from including other measurements, such as a diary measure assessing job burnout. Third, this study used a sample of mainland Chinese adolescents. Prospective research might benefit from examining whether these results would be replicated in non-Chinese participants.

10. Strengths and Implications

Notwithstanding these limitations, this study has notable strengths and practical implications. First, it explores factors influencing work performance from the work-family relationship perspective. Second, it supports and extends the context-process-outcome model and stress-emotion-performance meta-model. Third, the use of a large sample enhances result robustness compared to small-sample studies. Overall, these findings indicate that work-family balance improves individual performance. Thus, enterprises and schools should provide supportive conditions—such as childcare services and meal provisions—to help employees coordinate work and family roles. Additionally, as high self-efficacy boosts performance, organizations should create opportunities to enhance it, for example through incentive systems. Moreover, while resilience cannot fully eliminate negative impacts of life stressors, fostering such positive mental qualities may mitigate harm from poor work-family coordination.
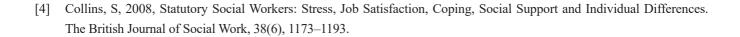
11. Conclusions

The current study expanded our knowledge of the potential relations between work-family relationships and job performance, using a large sample of Chinese populations. More work-family conflict was found to be connected with higher job burnout via impaired self-efficacy, especially for individuals with lower resilience. These findings suggest that harmonious work-family relationships, higher self-efficacy and resilience could promote job performance.

Disclosure statement

The author declares no conflict of interest.

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