Work-Family Conflict and Well-being in Chinese Preschools Context: Burnout and Resilience as Mediators

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Abstract: This paper investigated the relationships among work-family conflict, well-being, burnout and resilience for preschool teachers in Chinese preschools. We adopt Work-family Conflict Scale, Burnout Scale, Brief Resilience Scale and Well-being Scale. A total of 42412 preschool teachers were recruited to participate in this study and completed self-report of work-family conflict, well-being, burnout and resilience. Correlation analysis showed that work-family conflict, burnout and resilience could predict well-being. Besides, we built the structural equation model and carried out the mediation analysis to further study the mediating effects of burnout and resilience. This study found out new variables that would mediate the relationship between work-family conflict and well-being, which could be taken into consideration for future teaching practices.

Keywords: Work-family conflict, Burnout, Resilience, well-being, preschool teachers.

1. Introduction

In China, preschool teaching is regarded as work like babysitting which is time and labor consuming [1]. The preschool teachers bear a lot of responsibilities such as meeting demands of children, maintaining early childhood practice and dealing with teaching and non-teaching tasks. They should not only meet job requirement but also deals with personal needs such as child care, domestic duties and interpersonal relationships [2]. Preschool teachers show both strong sense of responsibility of fulfilling family and professional roles at the same time. They are in face of the chronic lack of energy required to take care of their children and becoming a good teacher [3]. Attitudes and behaviors of employee would be influenced by some family-related variables [4]. Age, the number of children and spouse support were common variables that will influence employees. And the challenge of balancing demands associated with work and family is prevalent with the result that work-family conflict is common. The role conflict theory explains how people manage to balance multiple roles [5]. Individuals are required to fulfill various roles, with each role demanding time, energy and knowledge. However the scarcity hypothesis of role theory declares that the time and energy of individuals are fixed [6]. Too much demands at one time on a person makes it difficult or impossible to fulfill all roles satisfactory. Conflicts occur when people cannot meet the expectations of all roles and have to give up some roles. Stress and anxiety would arise as the result of the scarcity of energy. People would perceive a low level of well-being and bad performance if they are faced by role-conflict and overload[7].

This study focuses on the way how does work-family conflict correlate to well-being of Chinese preschool teachers. The following paragraphs investigate previous research on work-family conflict and its correlation to well-being.

1.1. Well-being

As an umbrella term, well-being is used to describe experience or feelings based on subjective evaluation of life [8]. These subjective assessments include judgments and feelings about life satisfaction and they can be both positive and negative. For example, it includes emotional responses such as joy and sadness about life events, interest and engagement. It also includes work satisfaction, relationships, health, entertainment, meaning and purpose, and other important areas.

People would benefit a lot if they have high levels of well-being. There is growing evidence that high levels of well-being and life satisfaction would significantly improve lives because it can improve our health and longevity, enhance our work performance, increase our income, and improve our social relationships and social benefits[9]. Well-being includes self-confidence, optimism and self-efficacy [10]. People with high level of well-being are friendly to others and they are characterized by good social skills and prosocial behavior. They are more active and energetic. And they would respond effectively to challenges and pressures. Besides, they are more likely to have strong immunity and physical health, as well as originality and flexibility, all of which are conducive to us.

1.2. Work-family conflict and Well-being

The conflict between work and family is a conflict of roles. Work-family conflicts occur when employees are unable to manage role pressures from the work and family at the same time [11]. Work and family conflict has received great attention because it may exert significant influences on well-being of the individuals. Some researchers have defined job satisfaction, career satisfaction, life satisfaction and life stress as four indicators of well-being [12]. Research showed that work and family conflict was linked to psychological well-being [13], psychological strain [14], anxiety of individuals [15]. Besides, decreased job and life satisfaction would result in work-family conflict [16]. Life stress would also increase the chance of work-family conflict. Researcher also found that work conflict would also cause some negative experience and feelings such as depression and poor physical
health [17]. All the said above showed that work-family conflict would have negative effects on well-being.

1.3. The potential mediating effect of burnout

Burnout was a syndrome characterized by emotional exhaustion, depersonalization, and lack of personal accomplishment [18]. A meta-analysis confirmed the too many job demands would cause burnout and the author found that the level of burnout was linked to role conflict, workload, and role ambiguity [19]. Researches showed that burnout is closely related to work-family conflict and work-family conflict is a strong predictor of burnout [20]. Empirical research suggests that work-family conflict can be a mediator to regulate the relationship between work-role traits and burnout [21]. In their research, the job-role characteristics included workload, time line requirements, and perceptions of organizational fairness. Longitudinal studies provided evidence of the spiral effect of loss [22]. Work-family conflict precedes burnout and then reduces employees’ ability to respond to the needs of work roles and rekindles a greater sense of work-family conflict. Preschool teachers feel burnout out when they cannot manage work and their families at the same time.

Previous studies showed that burnout and well-being is negatively associated. Vast amount of researches about burnout and well-being have been done in medical area. For example, a research has been carried out to assess burnout and well-being and examine their relationship with the character trait, grit with samples of emergency medicine residents [23]. Burnout was also verified to be threat to well-being, which shows that burnout can be a predictor of well-being [24]. Another study made new progress in reporting a negative correlation between depersonalization (a sub-scale of burnout) and ability, which may be attributed to mechanisms of distance in difficult interpersonal interactions, which had an impact on teachers’ well-being and ability [25].

Based on the aforementioned research, burnout has strong links to work-family conflict and well-being. We argue burnout may mediate the correlation between work-family conflict and well-being. Preschool teachers with high levels of work-family conflict would experience lower levels of well-being because they perceive high level of burnout.

1.4. The potential mediating effects of resilience

Besides burnout, resilience could be a potential variable which would mediate the correlation between work-family conflict and well-being. During and after a critical incident, a highly-resilient person is able to take advantages of various resources and competencies to cope with, adapt to and develop from the demands and challenges [26]. People with high level of resilience hold the belief that they can exude influence over the event, feel deeply committed to activities of life and view challenge as opportunities to further their growth [27]. The association between work-family and well-being was found in different studies. For example, research showed that highly-resilient professional experienced low work-family conflict, which was an evidence that work-family conflict was negatively correlated to resilience [28]. Other research showed that training of resilience promotion is conducive to the improvement of self-efficacy and reducing work-family conflict [29].

In terms of the relationship between resilience and wellbeing, researcher found that resilience could mediate and influence the relationship of well-being with work-family conflict [28]. A research showed that students psychological well-being would be enhanced by resilience, spirituality and coping strategies in educational settings because they are significant predictors of psychology well-being [30]. Another research showed that three-hour Community Resiliency Model training could improve mental well-being and decreases the secondary traumatic stress and somatic symptoms of front-line workers during the COVID-19 pandemic [31].

Based on the aforementioned literature, resilience bears strong links to both work-family conflict and well-being. Therefore, we suppose that resilience can mediate the relationship between work-family conflict and well-being of preschool teachers with high level of work-family conflict does necessarily experience low level of well-being if they perceive high level of resilience.

2. Chinese Preschool Educational System

In China, preschool education is dominated by women. Preschool teachers are always faced with the disadvantage of maintaining their families and serving as teachers. Compared to the large number of studies conducted in the field of medicine, the sample of Chinese preschool teachers has a huge space for work-family conflict and well-being. Limited research showed that many Chinese preschool teachers have a strong sense of work-family conflict and burnout [32]. Research shows that many teachers are unable to effectively separate their professional and family roles [33]. There is little research to examine how work-family conflicts affect the well-being of preschool teachers in China. That is why we carry out this study.

3. The Present Study

This article is to find out how work-family conflict, burnout, resilience and well-being influence each other in the preschool context of China. A conceptual model was put forward and shown in Fig.1 and we hypothesize that

1) Work-family conflict could negatively predict well-being.
2) Burnout could function as a mediator to influence the relationship between work-family conflict and well-being
3) Resilience could also work as a mediator to influence the correlation between work-family conflict and well-being.

![Figure 1. Conceptual model of the work-family conflict, burnout, resilience and well-being.](image-url)
4. METHOD

4.1. Participants
A total of 51123 questionnaires were received from Shaanxi Province of China and 8711 invalid questionnaires were excluded. Therefore, we got the data sample of 42412. The age of the participated preschool teachers ranged from 18 to 67(M age = 31.4, SD = 7.54); there are 838(2%) males and 41574 (98%) females. The teaching age ranged from 0 to 44 with the average teaching age of 6.65. 20369 participants are from urban area, accounting for 48%. 8027 participants are from the county region, accounting for 18.9% and 14016 participants are from rural area, accounting for 33%.

4.2. Measures

Work-family conflict scale
Armstrong, G. S. et al. originally developed the Work-Family Conflict to measure the level of work-family conflict and we used this scale in our study to assess the level of work-family conflict of the preschool teachers in China. This scale includes three subscales: time-based conflict(five items; e.g.”My job allows me adequate time to be with my family.”), strain-based conflict(ten items; e.g.”My work allows me to still have the energy to enjoy my family and/or social life.”) and behavior-based conflict(three items; e.g.”The behaviors I learn at work help me to be a better parent.”). The participants would choose their answers by using a 5-point Likert scale from 1=(strong disagree) to 5=(strongly agree). The Cronbach’s alpha of this scale was 0.92 in this study while Cronbach’s alpha of the time subscale is 0.85, the Cronbach’s alpha of strain subscale is 0.86 and the Cronbach’s alpha of behavior subscale is 0.92.

Burnout Scale
This study adopted a Chinese version of Burnout Scale to measure the burnout level of preschool teachers. The Burnout Scale has 14 items and it was originally developed by Maslach, C.. The Chinese version includes two subscales: emotional exhaustion and depersonalization. This scale adopts a 7-point Likert scale from 0=(never) to 6=(everyday) and participants would rate these items according to their own experience and fellings. The Cronbach’s alpha of this scale was 0.92 in this study while Cronbach’s alpha of the time subscale is 0.85, the Cronbach’s alpha of strain subscale is 0.86 and the Cronbach’s alpha of behavior subscale is 0.92.

Brief Resilience Scale
This study administrated the Brief Resilience Scale, which is originally developed by Bruce W. Smith etc. This scale has two subscales: brief resilience scale(six items; e.g.”I tend to bounce back quickly after hard times.” ”I have a hard time making it through stressful events.”) and brief resilience coping scale(four items; e.g.”I look for creative ways to alter difficult situations.”). Respondents rated themselves on a a 5-point Likert scale from 1=(strong disagree) to 5=(strongly agree). The Cronbach’s alpha of this scale was 0.83 in this study(0.73 for brief resilience scale, 0.85 for brief resilience coping scale).

Well-being Scale
The Index of Well-Being(IWB)was used to assess wellbeing of the participants. It is made up of Index of General Affect(eight items; e.g.”My feel about life in the past two weeks is a continuum between interesting and boring.”) and Life satisfaction in general(one itemse; e.g.”My overall feel about life in the past two weeks is a continuum between very satisfied and very dissatisfied.”). Respondents rated themselves on a a 7-point Likert scale from 1=(various negative feelings) to 5=(positive feelings). The Cronbach’s alpha of this scale was 0.96 in this study.

Procedures
The research team randomly select kindergartens in Shaanxi Province to participate in this survey. The researchers sent the link of online survey to all the participated preschool administrations. All the teachers in the preschools were encouraged to participate in the study and all the participants finished their questionnaires on their mobile phones or computers. All the participants were informed in advance of the objectives of the project. And all the data collected would be confidential and be used for research only. All the participants would finish the questionnaire without any payment.

5. Results

5.1. Descriptive statistics and correlation analysis
In this paper, we used pearson correlation analysis to test the bivariate correlations of all variables. We can see from Table1 that all the variables were closely correlated. As we can see from Table 1, work-family conflict had a close correlation with burnout(r=0.58, p<0.01), resilience(r=−0.44, p<0.01) and well-being(r=−0.53, p<0.01). Burnout had a significantly negative correlation with resilience(r=−0.40, p<0.01) and well-being(r=−0.53, p<0.01);and resilience was closely correlated to well-being(r=0.48, p<0.01) as well.

<table>
<thead>
<tr>
<th>Measures</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>1. Work-family conflict</td>
<td>0.58**</td>
<td></td>
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<tr>
<td>2. Burnout</td>
<td>-0.44**</td>
<td>-0.40**</td>
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<tr>
<td>3. Resilience</td>
<td>-0.53**</td>
<td>-0.50**</td>
<td>0.48**</td>
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<td>4. Well-being</td>
<td>2.1-14.7</td>
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Table 1. Descriptive analysis and correlations all variables

5.2. Structural Equation Modeling (SEM)
The AMOS software was used to analyze the relationship between the variables. With the conceptual model, we built a Structural Equation Modeling (SEM) of the four variables,
namely, work-family conflict, burnout, resilience, and well-being (see Figure 1). This model has latent variables and the observed variables which is shown in Figure 2. The latent variables were shown as the ovals, including work-family conflict, burnout, resilience, and well-being. And the observed variables were shown as rectangles. Then, we motivated the SEM and carried out our research.

In this paper, we adopted the Tucker-Levis index (TLI), the comparative fit index (CFI), Root Mean Square Residual (RMR) and the root means square error of approximation (RESEA). The model is considered to be acceptable if the values of CFI and TLI are higher than 0.90. And it is considered to be reasonable if the values of RMSEA and SRMR are at or lower than 0.08. In this paper, these values are as follows: CFI = 0.98, TLI = 0.97, RMSEA = 0.03, RMR = 0.07, which shows that this model is reasonable and good.

As we can see from Figure 2, all the proposed paths were at the 0.05 level or better. The paths from work-family conflict to burnout (b = \(-1.19, \text{SE.} = 0.01, \beta = 0.64, p < 0.001\)), and resilience (b = \(-0.45, \text{SE.} = 0.01, \beta = -0.54, p < 0.001\)), the path from burnout to well-being (b = \(-0.29, \text{SE.} = 0.01, \beta = -0.27, p < 0.001\)), and the path from resilience to well-being (b = \(0.94, \text{SE.} = 0.02, \beta = 0.40, p < 0.001\)), were all significant.

### 5.3. Medialional Roles of Burnout and Resilience

A bootstrapping test was conducted to assess the mediating roles of burnout and resilience. If the 95% confidence level does not include zero, it means that there is a significant mediating role at the 0.05 level. As shown in Table 2, the paths from work-family conflict to well-being through burnout (\(-0.12; p < 0.001; 95\% \text{CI:} -0.15 \text{ to } -0.09\)) and through resilience (\(-0.22; p < 0.001; 95\% \text{CI:} -0.25 \text{ to } -0.20\)) while the total indirect effect of work-family conflict on well-being was also statistically significant (\(-0.34; p < 0.001; 95\% \text{CI:} -0.35 \text{ to } -0.31\)) were statistically significant, and the mediation effect was large.

### 5.4. Discussion

This paper examines the correlation between work-family conflict and well-being in the context of preschool education in China. It also explores how do burnout and resilience influence the correlation between work-family conflict and well-being. Correlation analysis showed that all the relative variables were closely correlated with well-being, which validated our hypothesis. Moreover, the structural equation model further suggested that burnout and resilience could function as partial mediators to regulate work-family conflict and well-being. The result showed that high-level work-family conflict could predicate high-level of burnout, which in turn negatively influenced the well-being of preschool teachers. Besides, high level work-family conflict could negatively influence resilience and well-being. The results expand the relationship between work-family conflict and well-being.

The complete path of the relationship between work and family conflict, burnout, resilience, and well-being in our mediation model has never been studied before, especially in the context of preschool in China. But some paths have been previously studied separately. Our findings further consolidated previous studies on the following: (a) work-family conflict could negatively predict well-being [34]. (b) work-family con-flict predicts burnout [35]. (c) Work-family conflict is negatively related to resilience [36]. (d) burnout is negatively related to well-being [37].

Besides, some studies showed that work-family conflict could negatively impact well-being among university employees [38]. German couples [39], or second job holders [40]. Our findings suggest that predictions from work-family conflict to well-being are also established in the context of the education of preschool teachers in China, thus addressing its universality.

### 5.5. Explanation of Burnout as a Mediator

The results of SEM demonstrated that burnout could function as partial mediator to influence the relationship between work-family conflict and well-being. Studies showed that high level of work-family conflict would have negative influence on well-being. According to theoretical
Job Demand-Resource Model (JD-R), job demands are essential predictors of burnout\[41\]. The ambiguity and stress of roles, role conflict, and work pressure are some common role demands which would cause burnout\[41\]. And this has verified that work-family conflict functions as a predictor of burnout since it is a great challenge for preschool teachers to handle family and work at the same time. Therefore, we can say that strong work-family conflict would result in intense burnout.

We adopted the Chinese version of the Burnout Scale, originally developed by Maslach, C. and Jackson, S. E. (1981) and modified by Xinchun Wu etc., to measure the burnout of Chinese preschool teachers. It has two dimensions: emotional exhaustion and depersonalization. We would explain the relationship between burnout and well-being from these two dimensions. As one kind of work-related strain, emotional exhaustion means that the emotional resources of preschool teachers are depleted. It manifested as a general loss of feeling, concern, trust, and interest\[42\]. It also involved the feeling of being used up, fatigue, wearing out, irritability and frustration\[43\]. The previous study showed that multiple roles and work-family conflict could cause emotional exhaustion, which would further influence the well-being\[44\]. People with a high level of emotional exhaustion would experience a low level of well-being. Depersonalization is an alteration in the perception or experience of the self. Sufferers would regard themselves as outside observers and detached their own senses and surroundings. When preschool teachers experience depersonalization, they are prone to hold back and would hold negative attitudes towards work and life, which would reduce their level of well-being.

5.6. Explanation of Resilience as a Mediator

This paper also showed that resilience could serve as a partial mediator to influence work-family conflict and well-being. And we would explain this with the Conservation of Resource Theory\(COR\). COR theory begins with the creed that people strive to acquire, retain, nurture, and protect what they cherish at their core, and what is valued is health, well-being, peace, family, and a positive sense of self\[44\]. This tenet suggests that individuals will engage in behaviors to avoid resource losses because loss can exert profound negative impact on well-being\[45\]. For example, people would react to major stress and develop the ability to resilience.

In particular, resilience can be used to explain why a teacher can get a high level of well-being although they are faced by strong work-family conflict. Teachers with a high level of resilience and teachers with a low level of resilience have very different performances when they are in the face of work-family conflict. Teachers with better and stronger resilience are able to be more resilient and tolerant to stress, anxiety, and depression when meeting challenges, thereby enhancing their coping skills. They are more energetic, more determined, and even face the conflict between work and family. Resilience is seen as a resource that can promote psychological health and positive development in general. People with high level of resilience are more confident irrespective of the levels of stressors brought by work-family conflict. In summary, this study examines work-family conflict and its influence on burnout, resilience, and well-being of Chinese preschool teachers. Compared with the overwhelming amount of work-family conflict and well-being in the medical area. It is of great importance to examine whether the findings are suitable for the Chinese preschool context. Our results confirmed that work-family conflict could predict burnout, resilience, and well-being in the Chinese preschool context.

The study suggests possible implications related to the link between work-family conflict, burnout, resilience and well-being among preschool teachers in China. The results show that work-family conflict would make negative effects on well-being. As the mediator, burnout is positively related to work-family conflict but negatively related to well-being while resilience is negatively correlated with work-family conflict but positively correlated with well-being. Therefore, government and school administration should manage to improve well-being by reducing the level of burnout. Besides, resilience could partially mediate the work-family conflict and well-being. This may mean that school administrators should pay attention to building resilience among preschool teachers to reduce the impact of work-family conflicts on the well-being of preschool teachers. Both the individual and organization should take measures to reduce the level of work-family conflict. As for preschool teachers, they should develop healthy mind. They should be responsible when they work. But they should not have too many demands on themselves. The preschool teachers should resort to other family members and the other family members should provide necessary help. As for school and government, they should pay attention to the group of preschool teachers and know their needs. They organization should provide necessary help for the preschool teachers.

Both the individual and organization can take measures to reduce the level of burnout. As an individual, the preschool teacher should attribute reasonably and try to be an internally controlled individual. They should not attribute bad feelings, conflicts, and unhappiness to external factors. Instead, preschool teachers should discover internal factors that lead to bad feelings, conflicts, and sadness. Then, the preschool teacher should adhere to lifelong learning and improve self-efficacy to overcome burnout. As an enabling factor, self-efficacy can not only prevent burnout but also enhance resilience, which would improve the development of preschool teachers. As for the organization, some measures can be taken to reduce burnout. First, the management and evaluation system of the teacher should focus on the value of life. Because unreasonable management and evaluation system would result in overload and physical and mental exhaustion, the preschool teachers would not receive the recognition of school leaders, the help of colleagues, the care of family members, and the support and credit of students, which would lead to burnout. Therefore, both preschool teachers and the schools should take some measures to reduce the level of burnout and thus enhance the level of well-being.

Both the internal and external protective factors should be taken into consideration to improve the level of resilience. As for the internal factors, preschool teachers should try to develop a cheerful personality, enhance their teaching and management skills, and improve their self-efficacy. Then, attention should be paid to some external factors. The government and the competent education departments should take positive measures to increase investment in preschool education and improve the social status of preschool teachers. And the mental health care system should be set up to provide guidance for preschool teachers. All the said above can improve the level of resilience.

With what have said above, we can enhance the level of
well-being by reducing work-family conflict and burnout and by improving the level of resilience.

5.7. Limitations and Future Direction

Taken together, this study is to explore direct and indirect predictors of preschool teacher well-being in China. The findings suggest that work-family conflict, burnout, and resilience can all predict well-being. Moreover, burnout and resilience could function as partial mediators between work-family conflict and well-being. These findings found more variables that can influence well-being. With this study, we can improve the well-being of preschool teachers by managing work-family conflict, reducing the level of burnout and enhance the level of resilience.

There are some limitations of this study. First, the study was cross-sectional, and the mediating model was insufficient to determine any causal relationship between work-family conflict, burnout, resilience, and well-being. More experimental, prospective, and longitudinal approaches would be carried out to examine causality between these variables in the future.

In addition, participants in this study were recruited from northwestern China, where preschool environments may be different from other parts of China, such as central and eastern China. Future studies can expand the samples to different areas of China. Besides, all of the data was based on the self-evaluation of preschool teachers, which could be subjective.

Multiple methods of assessment is conducive to future studies. Furthermore, only several factors were chosen to explain the mediating mechanism of work-family conflict and well-being. However, well-being is really conflicted, and well-being would inevitably be influenced by many other factors, such as the quality of school life [46] and emotional intelligence [47]. Therefore, more factors should be considered to better understand the correlation between work-family conflict and well-being.

References


P. Elbaz-Lubisch, “Teachers stories: The personal, the professional and what is between them.” Women teachers in Israel, A feminist perspective, pp. 115–133, 2002.

C. Maslach, S. E. Jackson, and M. P. Leiter, Maslach Burnout Inventory. Scarecrow Education, 1997.

