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Parental Burnout and Job Burnout in Working Couples: An Actor–Partner Interdependence Model

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Recently, there has been considerable interest in studying parental burnout. Yet, little is known about the relationship and mechanisms underlying different kinds of burnout nor is much known about the dual-earner contexts within which these processes occur. This study aimed to examine the spillover effect of parental burnout on job burnout and the crossover effect between spouses simultaneously. In addition, the mediating effect of work–family conflict was also examined. By taking the family as a unit, data were collected on three different occasions within dual-earner couples. Participants were middle school students' parents ($N = 103$ dyads); both were employed; self-employed or working-at-home parents were excluded from the sample. The results of an actor–partner interdependence model revealed that the spillover effect of parental burnout on job burnout and the mediation effect of work–family conflict were significant. In addition, the partner effects were also significant, in which parental burnout significantly affected their spouses' job burnout, directly or indirectly. The results suggest that parental burnout and job burnout are closely related, and individuals should take a comprehensive perspective when dealing with stress or burnout stemming from family or work areas.

Keywords: parental burnout, job burnout, work–family conflict, actor–partner interdependence model

As the concept of burnout expanded from work areas to others, such as marriage (couple burnout; Pines, 1987) and parenting (parental burnout; Pelsma et al., 1989), few studies examined the relationship between different kinds of burnout. Pines et al. (2011) and Dacey (2019) examined the relationship between couple burnout and job burnout. However, the relationship between parental burnout and job burnout needs further discussion. Researchers have suggested that the role of parents has long been considered a means


of achieving nurturing goals (Mikolajczak & Roskam, 2020). Parents may emphasize their parenting role over other roles. Their experience in the family domain may affect their experience in the workplace, and their stress and burnout symptoms stemming from parenting activities may also affect their work stress and burnout (Wang et al., 2021). However, few studies have focused on the effects and mechanisms of parental burnout on job burnout. Therefore, this study aimed to examine the impact of parental burnout on job burnout and the mediation effect of work–family conflict.

From Job Burnout to Parental Burnout

The conception of “burnout” first emerged in the workplace to describe the extremely exhausted state of people working in human services (Freudenberger, 1974). Maslach and Jackson (1981) defined burnout as a series of symptoms, including emotional exhaustion, depersonalization (or cynicism), and a reduced sense of achievement. The emotional exhaustion component, which is considered the central concept of burnout, refers to feelings of being overwhelmed and depleted of emotional and physical resources. Depersonalization refers to a distant attitude toward the service object of the job. The reduced sense of achievement refers to feelings of incompetence and a lack of achievement and productivity at work. In the past few decades, burnout has attracted considerable attention. Researchers and practitioners have published numerous studies on its measurement, antecedents, consequence variables, and interventions (Awa et al., 2010; Schaufeli et al., 1993; Shirom, 2003).

The concept of burnout has expanded with the rapid development of research on it. Pines and Aronson (1988) indicated that burnout occurs in all areas that can give people a sense of value and meaning. Taking concerted action, researchers began to notice that burnout could happen in parenting activities; the theme of parental burnout has recently aroused considerable interest among researchers (Roskam et al., 2021). Sánchez-Rodríguez et al. (2019) indicated

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The studies involving human participants were reviewed and approved by the Research Ethics Committee of the Institute of Psychology and Behavior, Henan University. Written informed consent to participate in this study was provided by the participants.

All authors listed have made a substantial, direct, and intellectual contribution to the work. Material preparation, data collection, and analysis were performed by Wei Wang, Shengnan Wang, Shen Chen, and Yongxin Li. The first draft of the manuscript was written by Wei Wang and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

The data sets generated for this study are available on request to the corresponding author.

The research plan was not preregistered elsewhere.

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in their review that there were 39 articles regarding parental burnout since the publication of the first empirical study on the theme (Pelsma et al., 1989); most of these were published after 2010. In addition, a special issue concerned with parental burnout was also published in the journal of *New Directions for Child and Adolescent Development* in 2020, which further attracted the attention of researchers and accelerated its development (Mikolajczak & Roskam, 2020).

Parental burnout refers to a series of negative symptoms that result from a chronic imbalance of parenting stress over resources (Mikolajczak & Roskam, 2018). The symptoms include emotional exhaustion from the partnering role; parents get up in the morning and think about facing another day with their children; they feel emotionally drained even if they have not begun to take care of them. Comparing themselves with their past selves, they feel they are no longer the parents they used to be. They feel they are not living up to their parent role, become emotionally distant from their children, and are unable to invest emotional resources in them (Roskam et al., 2018).

The Spillover Effect of Parental Burnout on Job Burnout

The notion of parental burnout stems from job burnout, typically present simultaneously, as indicated in relevant research. Mikolajczak et al. (2020) and Wang et al. (2021) reported that job and parental burnout items were loaded on different factors. Job burnout has more pronounced consequence variables in the workplace, while parental burnout has a stronger predictive effect on the consequence variables in the family domain. In addition, through a multiwave design and cross-lagged model, Wang et al. (2021) explored the causal relationship between jobs and parental burnout. Their results supported the fact that the predictive effect of parental burnout on job burnout was generally stronger than vice versa in both fathers and mothers. Their work suggested that parental burnout and job burnout are two different concepts, and parental burnout may trigger job burnout.

In the working couple family situation, husbands and wives may suffer from parental and job burnout simultaneously. Naerde et al. (2000) indicated that mothers combine professional work and child-care and face higher stress levels, anxiety, and depression. According to the Conservation of Resources (COR) Theory, individuals have limited resources and seek to protect and promote them. Perception of resource loss, threat to resources, or inability to gain new resources can result in stress responses (Hobfoll, 1989). Parents with a long-term imbalance of resources and stressors related to parenting may develop parental burnout (Mikolajczak & Roskam, 2018). In other words, the occurrence of parental burnout means a lack of individual resources. In this situation, they have fewer available resources for the workplace, suggesting parental burnout may have a direct spillover effect on job burnout. People are also becoming increasingly aware of the significance of family. According to the results of the world values survey (WVS), the importance of work centrality has decreased significantly among young people (Lukeš et al., 2019; Twenge & Kasser, 2013). Moreover, the number of people who believe that family is important has increased from 62% in 1990 to 85.7% in 2013. Therefore, in line with the results of prior studies (Wang et al., 2021), Hypothesis 1 proposes that parental burnout would be positively related with job burnout.

The Mediation Effect of Work–Family Conflict

The work–home resources model (ten Brummelhuis & Bakker, 2012) indicates that with limited resources, burned-out parents may find it difficult to allocate resources in the work and family domains and fail to meet the requirements of family and workplace simultaneously. Some researchers indicated that work-related stress may spillover into one's personal or family life by negatively affecting one's physical and emotional interactions with one's family or significant other (Hall et al., 2010). On the contrary, home stress also could lead to work-related stress; for instance, arguments with a spouse could lead to arguments at work, and arguments with children could lead to overloads at home and work (Bolger et al., 1989). In the domain of work–family relationship, the most commonly used variable is work–family conflict. It connects the two fields of family and life. For instance, Ko and Hwang (2021) found that job demands were negatively related with fathers' parenting involvement, and this relationship was mediated by work–family conflict. Furthermore, through a longitudinal design, Kayaalp et al. (2021) reported that the relationship between caregivers' burden and mental health was mediated by work–family conflict. Therefore, with higher parental burnout, working couples may experience a higher level of work–family conflict. Consequently, individuals need to invest more resources to resolve conflicts and restore balance, leading to increased resource consumption. Individuals may have fewer available resources in the workplace and aggravate the symptoms of job burnout. Therefore, the relationship between parental burnout and job burnout may be mediated by work–family conflict. Accordingly, Hypothesis 2 proposes that the relationship between parental burnout and job burnout would be mediated by work–family conflict.

The Crossover Effect Between Spouses

The crossover effects between spouses were also explored in this study. In dual-earner families, both fathers and mothers need to take responsibility for working and parenting. According to family systems theory (Cook & Kenny, 2005), parental burnout may occur in the family system. An individual's parental burnout level may not only be affected by themselves but also by their spouse. Their parental burnout would be highly correlated. Therefore, the consequence of parental burnout may also crossover to their spouse (Nelson et al., 2009). According to the COR theory, burned-out individuals may feel exhausted of their emotional resources, and they have no more resources to invest in family activities. Therefore, their spouses have to devote more resources to the family load, resulting in more work–family conflict and job burnout. Combined with Hypothesis 2, Hypothesis 3 proposes that the parental burnout of one parent would be positively related with the job burnout of the other, and this relationship would be mediated by their and their spouse's work–family conflict.

The dyadic effect of parental and job burnout among working couples is more appropriately portrayed by the actor–partner interdependence model (APIM; Ledermann et al., 2011). Specifically, the APIM allows for simultaneous examination of both actor effects (i.e., spillover effects of parental burnout on their own job burnout) and partner effects (i.e., crossover effects of parental burnout experiences on their spouse's job burnout) and the mediation effect of work–family conflict in the same model.

The Present Study

Above all, the present study aimed to explore the spillover effect of parental burnout on job burnout and the crossover effect between spouses. The present study takes family as the unit, collecting data on three different occasions by a longitudinal study design. Parental burnout is the independent variable (collected at the first time), work–family conflict is the mediating variable (collected at the second time), and job burnout is the dependent variable (collected at the third time). The research framework is illustrated in Figure 1.

Since middle school students are in their adolescent years, their physical development is rapid, while their psychological development is limited. This imbalance between physical and psychological development makes teenagers face various psychological crises (Lin, 2018), which can easily contribute to parents' burnout. Parents of teenagers may therefore face a higher risk of parental burnout. Parents of middle school students are ideal samples for the study of parental burnout.

Method

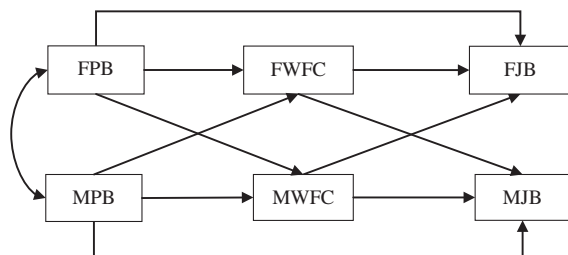
Sample

To calculate the minimum sample size needed for the hypothesized model, the computation of the minimum sample size method based on the model fit proposed by MacCallum et al. (1996) was utilized (Preacher & Coffman, 2006). The significant level (α) was set at .05, degree of freedom was set at 4, the desired power at 0.8, the null root mean square error of approximation (RMSEA) was 0, and the alternative hypothesized RMSEA was set at 0.10; the result showed that 300 samples were needed to conduct the hypothesized model.

Participants were parents of middle school students (from a school located in an urban area in central China). Two versions of questionnaires (for fathers and mothers) were distributed to 614 students during class on three different occasions in June, July, and September 2019. Considering that some students may drop out or transfer schools, parents were asked to fill in their children's names. The names were used to track their data and ensure that is matched. Students were instructed to bring the questionnaire (sealed in an envelope) home and hand them to their parents. Participants were required to sign informed consent. They were informed that the purpose of the survey was regarding family relationships and that

Figure 1

The Framework of the Present Study



Note. FPB = fathers' parental burnout; MPB = mothers' parental burnout; FWFC = father's work–family conflict; MWFC = mothers' work–family conflict; FJB = fathers' job burnout; MJB = mothers' job burnout.

participation was voluntary. It would not cause any loss if they did not want to participate in the survey. They could stop answering at any time. After completing the questionnaire, they were asked to seal it in the reply envelope and hand it to students, who brought them back to school.

A total of 398 fathers and 450 mothers completed the first-round survey, 339 fathers and 368 mothers completed the second-round survey, and 271 fathers and 303 mothers completed the third-round survey. However, because our study focused on working couples, fathers or mothers without jobs (including self-employed or working at home) were removed from the sample. In addition, some of the participants only answered one or two rounds of the survey; they were also excluded. A total of 103 pairs of couples completed the questionnaire. The average age of the fathers was 41.2 years ($SD = 4.00$) and the mothers was 40.22 years ($SD = 3.91$). For the sample of fathers, 53 of them had an education lower than high school, 47 had a bachelor's degree, and three had an education beyond a master's degree; 37 (36.3%) were company employees, 21 (20.6%) were public functionaries, and 19 (18.6%) were teachers. For the sample of mothers, 55 of them had an education lower than high school, 47 had a bachelor's degree, and one had an education beyond a master's degree; 31 (30.4%) were company employees, 25 (24.5%) were teachers, and 20 (19.6%) were doctors or nurses.

Transparency and Openness

This survey was approved by the research ethics committee of the authors' academic institution. The research plan was not preregistered elsewhere. We have reported how we determined our sample size, all data exclusions, and all measures in the study; the data sets generated for this study are available from the corresponding author upon reasonable request.

Measures

Parental Burnout

Parental burnout was measured using the Chinese version of the parental burnout assessment (PBA; Cheng et al., 2020). This was translated from the English version of Roskam et al. (2018) and has satisfactory reliability and validity. It consists of 21 items, and each item is rated using a 7-point Likert scale, ranging from 1 (*Completely inconsistent*) to 7 (*Completely consistent*), with a higher score representing higher burnout. An example was "I feel as though I've lost my direction as a dad/mum"; the Cronbach's α was .941 ($\omega = .941$) for fathers' responses and .940 ($\omega = .940$) for mothers' responses.

Work–Family Conflict

Work–family conflicts were measured using the Chinese version of the work–family conflict questionnaire (Li & Li, 2014), translated from the English version of Netemeyer et al. (1996), with satisfactory reliability and validity. It consists of 10 items, and each item is rated using a 4-point Likert scale, ranging from 1 (*Completely disagree*) to 7 (*Completely agree*), with a higher score representing higher work–family conflict. An example was "The demands of my work interfere with my home and family life." The Cronbach's α

was .852 ($\omega = .852$) for fathers' responses and .869 ($\omega = .869$) for mothers' responses.

Job Burnout

Job burnout was measured using the emotional exhaustion factor of the Chinese Maslach Burnout Inventory (Li, 2005). The emotional exhaustion factor was considered as the core concept of job burnout and has represented job burnout in some prior studies (Schaufeli, 2017). This measurement consisted of five items, each rated using a 7-point Likert scale, ranging from 1 (*Completely inconsistent*) to 7 (*Completely consistent*), with a higher score representing higher burnout. An example was "I feel burned out from my work"; the Cronbach's α was .806 ($\omega = .808$) for fathers' responses and .818 ($\omega = .821$) for mothers' responses.

Demographic Variables

Demographic items, including parents' age, occupation, education level, and child's gender and age, were recorded.

Data Analysis

Data were analyzed using SPSS 23.0 and AMOS 23.0. First, Welch's test was conducted to examine the differences between participants who dropped out and those who did not. Second, independent sample *t*-tests were conducted for all measurements between fathers and mothers. Third, descriptive statistics and correlation analysis were used to preliminarily examine the correlations between parental burnout, work-family conflict, and job burnout. Fourth, the APIM was conducted to analyze the dyadic relationship between parental and job burnout among working couples. Bootstrapping was conducted to examine the mediation effects of work-family conflict (nonparametric sampling method was used to resample the data, $n = 5,000$; bias-corrected bootstrapping was used to calculate the 95% confidence interval [CI]). As the loss rate was higher than expected, a power analysis was conducted after the model analysis. Fifth, the supplemental analysis of a series of multigroup structural equation modeling (SEM) was conducted to examine the differences between fathers and mothers.

Result

Preprocessing the Data

As some participants did not have jobs (self-employed or working at home were removed from the data set), and some remaining participants failed to complete all the questionnaires, the missing data analysis was conducted. Most of the unanswered questionnaires were blank, and the data were considered missing at completely random. Therefore, the answers with missing data were removed from the data set. Welch's test was conducted between the stored and removed data groups. There were no significant differences between the children's age ($t = -0.35$, $df = 213.07$, $p = .73$), gender ($t = -0.36$, $df = 145.15$, $p = .72$), parents' age (fathers: $t = 1.32$, $df = 164.46$, $p = .19$; mothers: $t = -1.29$, $df = 154.98$, $p = .20$), or education level (fathers: $t = 1.44$, $df = 159.41$, $p = .15$; mothers: $t = 0.39$, $df = 241.05$, $p = .70$). Furthermore, the Bayesian imputation method was used to create a complete data set (10 times the original data set). The goodness of model fit, the regression weights, and the

mediation effects of the removed data set and imputed data set did not change meaningfully. These results suggest that removing incomplete questionnaires did not significantly bias our results.

When we checked the distribution of the data, parental burnout scores did not show normal distribution (for fathers' parental burnout, skewness = 2.65, and kurtosis = 9.31; for mothers' parental burnout, skewness = 2.09, and kurtosis = 5.67). In accordance with prior studies (e.g., Mikolajczak & Roskam, 2018), the scores were normalized by log transformations (for fathers' parental burnout, skewness = 1.19, and kurtosis = 1.60; for mothers' parental burnout, skewness = 0.85, and kurtosis = 0.51). When the correlation analysis was conducted with the transformed scores, there were no significant differences between the results of the transformed scores and the original ones; therefore, the results of the original scores were reported.

Descriptive Statistics and Correlation Analysis

Descriptive statistics and correlation matrix are listed in Table 1. Owing to the differences in gender roles existing in China, the independent sample *t*-tests were conducted with all measurements between the samples of fathers and mothers. The result showed that the level of parental burnout was different between them ($t = -3.08$, $df = 324$, $p = .02$, $d = -0.17$), which suggested mothers ($M = 1.78$, $SD = 0.98$) reported higher levels of parental burnout than fathers ($M = 1.62$, $SD = 0.86$), and the level of work-family conflict was different between fathers and mothers ($t = 2.07$, $df = 264$, $p = .04$, $d = 0.14$); fathers ($M = 2.06$, $SD = 0.68$) reported higher levels of work-family conflict than mothers ($M = 1.97$, $SD = 0.64$). However, there were no significant differences between fathers and mothers regarding job burnout ($t = -1.14$, $df = 239$, $p = .25$, $d = -0.07$). The demographic variables were not correlated with job burnout. Further, controlling for too many variables would have decreased the overall analytical power (Becker, 2005). Therefore, these variables were excluded from the subsequent analyses.

The Actor-Partner Interdependence Model

According to the recommended analysis strategy of Kenny and Ledermann (2010) and Ledermann et al. (2011), the hypothesized APIM analysis was conducted with parental burnout as an independent variable, work-family conflict as a mediation variable, and job burnout as the dependent variable. First, the saturated distinguishable model with all the effects was estimated, and the estimates were presented in Table 2.

Second, the indistinguishability of the effect was examined by constraining the fathers' and mothers' actor effects and partner effects to be equal. Moreover, the model goodness of fit was significantly different from the prior saturated distinguishable model ($\Delta\chi^2 = 45.45$, $\Delta df = 6$, $p < .001$), indicating that the data were distinguishable dyads (Kenny & Ledermann, 2010). Third, the *k* parameter and its CI were calculated. Since all the standardized coefficients of the actor effect were above 0.10 (Kenny & Ledermann, 2010), the six *k* parameters were estimated. Six phantom variables were added to the original saturated model (Figure 2). The result showed that k_{a1} ($P_{a1} \rightarrow \text{FWFC}$) = $-.29$, 95% CI $[-.79, .17]$, which suggests that the actor effect was larger than the partner effect regarding fathers' work family conflict; k_{a2} ($P_{a2} \rightarrow \text{MWFC}$) = 2.46 , 95% CI $[.75, 16.57]$, which indicates that the partner effect was

Table 1
The Descriptive Statistics and Correlation Matrix of Each Variable

Variable	M	SD	1	2	3	4	5	6	7	8	9
1. GOC	1.49	0.50	—								
2. AOC	13.83	0.79	-.07	—							
3. AOF	41.99	4.38	-.02	.00	—						
4. AOM	40.88	4.13	.03	.00	.84**	—					
5. FPB	1.64	0.87	-.05	.00	.01	.03	—				
6. MPB	1.79	0.96	-.07	.02	.08	.13**	.49**	—			
7. FWFC	2.08	0.69	-.13*	.04	-.05	-.09	.23**	.12+	—		
8. MWFC	2.00	0.65	-.03	.03	-.01	-.01	.19**	.19**	.41**	—	
9. FJB	3.00	1.43	-.08	.06	-.04	-.08	.20**	.31**	.21**	.36**	—
10. MJB	3.04	1.45	-.14*	.09	-.02	-.01	.13+	.29**	.14+	.29**	.53**

Note. GOC = gender of children; AOC = age of children; AOF = age of fathers; AOM = age of mothers; FPB = fathers' parental burnout; MPB = mothers' parental burnout; FWFC = father's work-family conflict; MWFC = mothers' work-family conflict; FJB = fathers' job burnout; MJB = mothers' job burnout.
+ $p < .10$. * $p < .05$. ** $p < .01$.

about 2.5 times larger than the actor effect regarding mothers' work-family conflict; k_{b1} ($P_{b1} \rightarrow FJB$) = $-.28$, 95% CI [.14, .42], which shows that the actor effect was larger than the partner effect regarding fathers' job burnout; k_{b2} ($P_{b2} \rightarrow MJB$) = $.06$, 95% CI $[-.12, .23]$, which suggests that the actor effect was larger than the partner effect regarding mothers' job burnout; $k_{c'1}$ ($P_{c'1} \rightarrow FJB$) = $.12$, 95% CI $[-.02, .27]$, which demonstrates that the actor effect was larger than the partner effect regarding fathers' job burnout; and $k_{c'2}$ ($P_{c'2} \rightarrow FJB$) = $.07$, 95% CI $[-.10, .24]$, which shows that the actor effect was larger than the partner effect regarding mothers' job burnout.

Furthermore, to simplify the model, the nonsignificant path was removed from the model; the result was shown in Figure 3. A post hoc power analysis was conducted to examine the statistical power of the model (Preacher & Coffman, 2006), and the result showed a medium power of the model (power = .33).

As shown, fathers' parental burnout had a direct effect on job burnout ($\beta = .14$, $p < .01$) and work-family conflict ($\beta = .24$, $p < .01$). Father's work-family conflict was positively related to job burnout ($\beta = .13$, $p < .01$). The relationship between fathers' parental and job burnout was mediated by his work-family conflict,

and the indirect effect was significant (indirect effect = $.100$, $SE = .065$, $p < .05$, 95% CI [.004, .283]). In addition, mothers' parental burnout had a direct effect on job burnout ($\beta = .22$, $p < .01$) and work-family conflict ($\beta = .15$, $p < .01$). Mothers' work-family conflict was positively related to job burnout ($\beta = .16$, $p < .01$). The relationship between mothers' parental and job burnout was mediated by her work-family conflict, and the indirect effect was significant (indirect effect = $.065$, $SE = .053$, $p < .05$, 95% CI [.002, .245]).

Furthermore, fathers' parental burnout was significantly related to mothers' work-family conflict ($\beta = .10$, $p < .01$). The relationship between fathers' parental burnout and mothers' job burnout was mediated by mothers' work-family conflict; the indirect effect was significant (indirect effect = $.121$, $SE = .088$, $p < .05$, 95% CI [.001, .366]). Mothers' parental burnout had a direct effect on fathers' job burnout ($\beta = .25$, $p < .01$).

Supplemental Analysis

Owing to the relative low power of APIM, supplemental analyses of a series of multigroup SEM were conducted. Parental burnout was set as an independent variable, work-family conflict as mediating variable, and job burnout as the dependent variable. The effects of father/mother on himself/herself were examined; three variables were from the same participant, and the results are shown in Figure 4.

The results show the same pattern with the actor effect of APIM, in which parental burnout had a direct effect on their own job burnout (for total sample: $\beta = .20$, $p < .01$; for fathers: $\beta = .23$, $p < .01$; for mothers: $\beta = .18$, $p < .01$) and work-family conflict (for total sample: $\beta = .23$, $p < .01$; for fathers: $\beta = .27$, $p < .01$; for mothers: $\beta = .21$, $p < .01$). Work-family conflict was positively related to their own job burnout ($\beta = .21$, $p < .01$; for fathers: $\beta = .16$, $p < .05$; for mothers: $\beta = .25$, $p < .01$). In addition, there was no gender difference of regression coefficient (for PB \rightarrow JB: $t = 0.96$, $p = .34$; for PB \rightarrow WFC: $t = 0.97$, $p = .33$; for WFC \rightarrow JB: $t = -1.11$, $p = .27$).

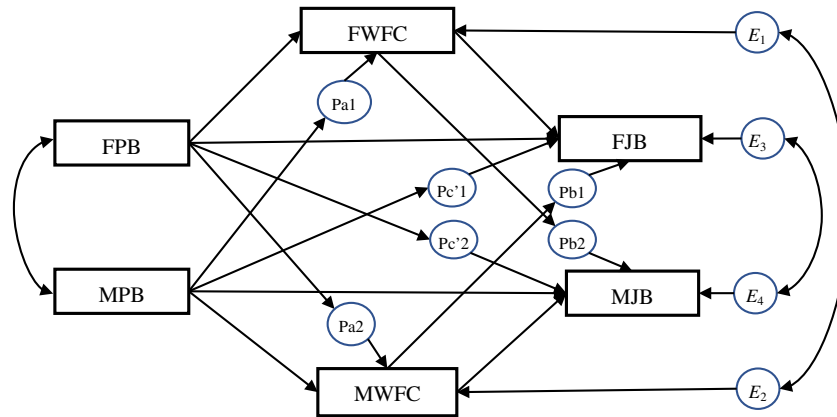
Then, the effects of father/mothers' parental burnout on his/her spouse were examined. Specifically, respondents of work-family conflict and job burnout were spouses of the respondents of parental burnout. The results generally showed the same pattern with the

Table 2
Effect Estimates for Saturated Distinguishable Model

Effect	Estimate	SE	p	Standard estimate
FWFC \leftarrow FPB	0.310	0.064	<.001	.286
MWFC \leftarrow MPB	0.092	0.041	.025	.131
MWFC \leftarrow FPB	0.226	0.057	<.001	.232
FWFC \leftarrow MPB	-0.090	0.046	.050	-.116
FJB \leftarrow FWFC	0.229	0.115	.045	.103
FJB \leftarrow FPB	0.757	0.129	<.001	.312
MJB \leftarrow MWFC	0.626	0.140	<.001	.262
MJB \leftarrow MPB	0.179	0.098	.068	.107
MJB \leftarrow FPB	0.155	0.140	.267	.067
FJB \leftarrow MPB	0.213	0.090	.018	.122
MJB \leftarrow FWFC	0.137	0.125	.272	.064
FJB \leftarrow MWFC	0.684	0.129	<.001	.275

Note. FWFC = father's work-family conflict; FPB = fathers' parental burnout; MWFC = mothers' work-family conflict; MPB = mothers' parental burnout; FJB = fathers' job burnout; MJB = mothers' job burnout.

Figure 2
The Sketch Map of Actor–Partner Interdependence Mediation Model



Note. FPB = fathers’ parental burnout; MPB = mothers’ parental burnout; FWFC = father’s work–family conflict; MWFC = mothers’ work–family conflict; FJB = fathers’ job burnout; MJB = mothers’ job burnout. See the online article for the color version of this figure.

partner effect of APIM, in which mothers’ parental burnout showed a direct positive relation with mothers’ job burnout ($\beta = .31, p < .01$), and mothers’ parental burnout did not relate with fathers’ work–family conflict significantly ($\beta = .01, ns$). However, fathers’ parental burnout showed a marginally significant effect on their spouses’ work conflict ($\beta = .14, p < .10$). In addition, there was no gender difference (for PB → JB: $t = -1.29, p = .20$; for PB → WFC: $t = 1.45, p = .15$; for WFC → JB: $t = 0.47, p = .64$).

Discussion

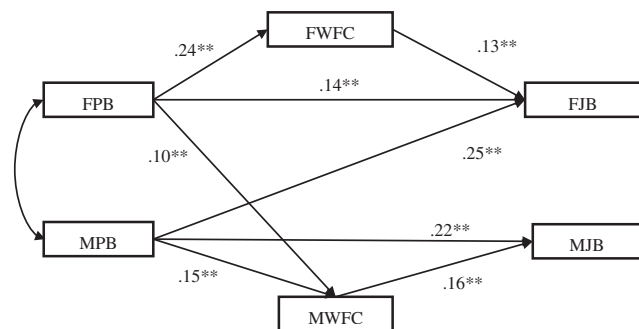
In the literature on industrial and organizational psychology, the effects of family domains on the work domain have been less studied than the effects of the work domain on the family domain. However, some studies showed that the effects of the family domain on the

work domain may be stronger than vice versa (Wang et al., 2021). Especially in Chinese culture, people may emphasize their family role more than others. According to the 2012 Chinese Workplace Balance Index Research Report, more than half of the post-1990s generation prioritized family over work. In addition, some researchers indicated that the ultimate function of marriage is to execute the cultural assignment of continuing the vertical lineage of family and clan (Lu & Lin, 1998), indicating that parents may be more concerned about their descendants (Liu & Wu, 2018). Therefore, they may emphasize their parenting role more than others (e.g., working, spouse, etc.), and their parenting experience may have an important effect on their job experience. Based on the APIM, this study aimed to examine the effect of parental burnout on job burnout and the mediation effect of work–family conflict; the results generally supported the hypothesized model.

Mothers’ parental burnout was higher than fathers’, which is in line with prior studies (Roskam & Mikolajczak, 2020). In China, although a growing number of fathers are involved in parenting activities, mothers are still mainly responsible for parenting children and are more involved in parenting activities than fathers (Zhang, 2010). Therefore, mothers may experience more pressure and burnout in their interactions with their children. However, the level of job burnout did not show significant differences between couples. These results suggest that in the dual-earner family, mothers may be at risk of experiencing a higher level of total burnout from family and work areas.

The model analysis showed that the actor effect of parental burnout and job burnout existed in both fathers and mothers. Several prior studies have focused on the effects of work-related stress on other areas; for instance, Dacey (2019) indicated that feelings of burnout at work can lead to feelings of burnout in one’s relationship. Hall et al. (2010) indicated that work-related stress interacts with one’s family or significant others and negatively affects their family life. Few studies have examined the effects of family-related stress on work (Aryee, 1992; Hammer & Zimmerman, 2011). The present study provides new evidence in the literature on the spillover effect of burnout. Specifically, it examined the direct effect of parental

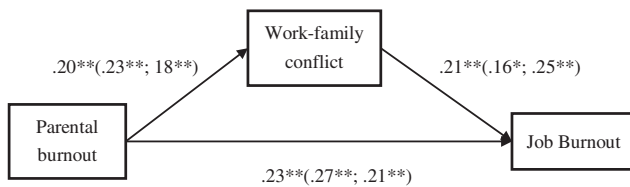
Figure 3
The Result of Actor–Partner Interdependence Model



Note. FWFC = father’s work–family conflict; MWFC = mothers’ work–family conflict; FJB = fathers’ job burnout; MJB = mothers’ job burnout; GFI = goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual. The covariance of FWFC and MWFC, FJB, and MJB was not present in the figure. $\chi^2 = 67.38, df = 4, p < .001, GFI = .996, CFI = .989, RMSEA = .053, SRMR = .02$.

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Figure 4
The Result of SEM Multigroup (Within Gender)



Note. SEM = structural equation modeling. The number outside of brackets shows the results of the total sample ($N = 355$), and that inside the brackets shows the results of father ($n = 160$) and mother ($n = 195$).

burnout on job performance. It provided empirical support that work is a means to obtain material and cultural demand, and job burnout may stem from the lack of resources in life. Future research could conduct from a comprehensive perspective to explore the relationship between couple burnout and parental burnout from family areas, job burnout from work areas, and academic burnout in children's developmental areas.

The model analysis showed that the actor effects of the mediation were also significant, in which the relationship between parental burnout and job burnout was mediated by work–family conflict. Under the work–family conflict model (Carlson et al., 2000), demands from both work and home are incompatible, and participation in one of those roles is made more difficult by participating in the other. Bolger et al. (1989) found that couples could bring their stress home with them; therefore, arguments occurred more at home than at work. Similarly, the results of Meeussen and Van Laar (2018) showed that work–family conflict is one of the bridges connected to family factors and the workplace. Although existing studies have shown that job burnout may affect family experience through work–family conflict (Carlson et al., 2000), the results of this study show that parental burnout experienced in families may also affect job burnout through work–family conflict. However, whether the results could only be supported in China or whether it could be replicated in other cultures needs further exploration.

Partner effects of fathers' parental burnout on mothers' work–family conflict and mothers' parental burnout on fathers' job burnout were significant. In addition, the mediation effect of mothers' work–family conflict on the relationship between fathers' parental burnout and mothers' job burnout was also significant. In brief, parental burnout in working couples could affect others' job burnout directly or indirectly. Prior work focused on the crossover of job burnout from husbands to wives (Bakker et al., 2005). In this study, in the family area, the effects of wives' and husbands' parental burnout on others' job burnout are equally important. One possible explanation for this result may be that fathers are less involved in parenting activities (Zhang, 2010). When a father experiences burnout in parenting, he may pull himself out of parenting activities. Hence, mothers have to increase their parenting activities. Therefore, a high level of fathers' parental burnout may trigger higher levels of work–family conflict. On the contrary, since mothers may attribute higher importance to the family role and lower importance to the work role (Cinamon & Rich, 2002), when a mother experiences burnout in parenting, she may regard the parenting or other housework as her primary responsibility, and undertake more parenting activities. Therefore, the father's domestic

work and work–family conflict would not increase. However, mood changes, shifts in activities, or other distress of mothers may easily be perceived by their partners (Bakker et al., 2005). Therefore, mothers' parental burnout can easily transmit to fathers and result in a spillover effect on fathers' parental burnout and a crossover effect on fathers' job burnout. Further research is needed to explore whether this assumption could be supported.

Theoretical and Practical Implications

This study contributes to the theoretical and practical literature in the following aspects. First, it provided new evidence that burnout is a context-free phenomenon, suggesting that burnout could occur in all areas that people deem important (Pines & Aronson, 1988). It further discussed the relationship between different types of burnout, enriching the connotation and denotation of burnout studies. Second, although existing work has discussed the spillover effect of job burnout on other life spheres, only a few have examined the relationship between different types of burnouts. To the best of our knowledge, only two studies have explored the relationship between job burnout and couple burnout (Dacey, 2019; Pines et al., 2011). Therefore, the present study built a bridge between parental burnout and job burnout, increasing our knowledge of the consequences of parental burnout and the antecedents of job burnout. Third, this study discussed the spillover effect of family on work area and the crossover effect of working couples simultaneously. Previous studies have mainly focused on the spillover effect of job burnout on other life spheres (Burke & Greenglass, 2001) and the crossover effects of husbands' job burnout on wives (Bakker et al., 2005). The results not only supported the effects of family on work area but also found that the influence of wives on husbands was also important in the family area. Their relationship was connected by work–family conflict.

From a practical perspective, the results of the present work revealed that the negative experiences from family and the workplace are closely related and inseparable. The burnout symptoms could transfer from one area and can affect others directly or indirectly. When dealing with family or work problems, individuals or organizations should focus on a broader perspective and pay attention to the balance of family and work areas to avoid conflict between them.

Limitation and Future Direction

Although our findings may improve the current understanding of parental burnout, some limitations still need to be noted.

First, the sample of the present study comprised parents of middle school students. Although parents of middle school students are ideal samples for the study of parental burnout, parental burnout may not only occur among parents of adolescents. Future studies should therefore collect data from a broader sample, including parents of children and adolescents of different ages. Second, the present study adopted a time-lagged design instead of the multiwave design, which limited us to control the same variable as the last time. In addition, since July and August were summer vacations, making it difficult for us to collect data at equal intervals, the unbalanced time period of data collecting may also bias our result. Future studies should adopt a more rigorous design to collect all the variables in each time period for estimating the robustness of the results of the present study. Third, because we could not distribute the

questionnaire directly to the dual-earner families, the questionnaires were distributed to all students. The data set included some nondual-earner answers, increasing missing data. We compared the demographic information of missing data with the retained data, then imputed the missing data and compared the results. Furthermore, the supplemental multigroup SEM was conducted, and the result was relatively robust. Future research still needs a more rigorous design to ensure a larger sample and reduce the occurrence of missing values. Fourth, in line with prior studies (Wang et al., 2021), the present study discussed the impact of parental burnout on job burnout. However, work and family are two inseparable spheres, and parental burnout and job burnout may have a bidirectional and negative spiral impact on each other. The relationship between the two types of burnout needs to be further clarified and investigated.

Conclusion

The present study makes a significant contribution in understanding the relationship between parental burnout and job burnout. The spillover effect of family area on job area and the crossover effect between spouses has rarely been studied in the same study. Family unit data with a time-lagged design and the APIM were used to address this gap in the literature. Our findings show that the actor effects of parental burnout on job burnout were significant in both fathers' and mothers' samples, and the mediation effects were also significant. The findings provide support for the work-home resources model by documenting that lack of resources at home potentially increases work-family conflict and results in job burnout. Further, the partner effects were also significant in terms of the direct or indirect effect of parents' parental burnout on job burnout, which supported that the crossover effects were present in both fathers' and mothers' samples. When dealing with family or work problems, individuals should consider the overall situation and not separate the two areas.

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