

Parenting Stress in the Relationship between Positive Psychological Capital and Parental Burnout

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Abstract: This research seeks to explore the pathways through which parents' psychological capital affects parental burnout, emphasizing the intermediary function of parenting stress. A questionnaire-based survey was conducted among 461 parents from various provinces and cities across China. The instruments used included the Psychological Capital Questionnaire ($\alpha = 0.90$), the Parenting Stress Scale ($\alpha = 0.89$), and the Parental Burnout Inventory ($\alpha = 0.91$). The results indicated that psychological capital was significantly negatively correlated with parental burnout ($r = -0.459$, $p < 0.001$) and parenting stress ($r = -0.428$, $p < 0.001$), while parenting stress was positively correlated with parental burnout ($r = 0.555$, $p < 0.001$). Mediation analysis using PROCESS Model 4 with bootstrapping revealed that parenting stress partially mediated the relationship between psychological capital and parental burnout, accounting for 40.96% of the total effect. These findings underscore the protective role of psychological resources in reducing parenting stress and preventing burnout among parents. The results also offer valuable insights for developing targeted psychological support interventions aimed at enhancing family well-being.

1. Introduction

1.1 Research Background and Significance

In traditional cultures, parenting is often regarded as a profoundly meaningful and joyful life experience [1]. Society generally holds the parental role in high esteem, viewing it as a source of life purpose, positive emotional experiences, and a sense of social belonging [2,3]. However, the realities of child-rearing frequently diverge from these idealized expectations. Empirical evidence suggests that parents engaged in prolonged and complex caregiving tasks are prone to sustained psychological strain, which may lead to various forms of emotional distress [4]. Against this backdrop, parental burnout has emerged as a central topic in psychological research. Parental burnout refers to a chronic state of emotional exhaustion resulting from prolonged exposure to overwhelming parenting demands that exceed an individual's available coping resources [5]. Earlier research has indicated that parental burnout may give rise to negative behaviors, including

emotional detachment, neglect, and diminished self-regulation.[6,7]. Moreover, it can strain couple relationships, escalate family conflicts, and undermine children's psychological development and social adjustment through negative parenting practices [8,9]. Given the far-reaching implications of parental burnout for family mental health and functioning, identifying psychological resources that can buffer its occurrence is of critical importance. Among these, psychological capital-a developmental and regulatory resource-has garnered growing scholarly attention.

Psychological capital (PsyCap) describes a positive mental state that emerges from personal development and life experiences. It encompasses four core components: hope, optimism, self-efficacy, and resilience [10,11]. These elements collectively enhance goal-directed behavior and emotional recovery in the face of challenges. Empirical studies have demonstrated that PsyCap helps individuals cope with resource depletion, preventing them from falling into a "loss spiral" of psychological and emotional exhaustion. Furthermore, it contributes to improved performance, organizational commitment, and subjective well-being, while also mitigating anxiety, stress, and burnout [12,13]. In the context of parenting, PsyCap plays a similarly vital role. Yue et al. found that mothers with higher levels of PsyCap reported stronger parenting competence, greater emotional stability, and significantly lower risks of burnout [14]. Supporting this, intervention research by Khansari and colleagues revealed that structured training programs aimed at enhancing mothers' levels of hope, self-efficacy, and resilience led to notable improvements in their psychological well-being and reductions in parental burnout [15]. Taken together, PsyCap is increasingly recognized as a malleable psychological resource with protective effects against parental burnout. However, most existing studies have primarily focused on its direct effects, leaving the underlying mechanisms largely unexplored. There remains a pressing need to investigate the indirect pathways and identify potential mediating variables that explain how PsyCap exerts its influence in the parenting context.

1.2 The Role of Parenting Stress

Parenting stress refers to the distress or discomfort experienced by individuals as a result of the multiple demands associated with fulfilling the parental role [16]. When external demands exceed an individual's coping capacity, stress responses are likely to emerge, which-if left unregulated over time-can lead to emotional exhaustion and other adverse outcomes [17]. According to Pareek and Jain's research on parents of children with special needs, psychological capital was found to be a significant negative predictor of parenting stress, implying that elevated PsyCap could help mitigate the stress associated with parenting [18]. Similarly, intervention studies by Khansari et al. demonstrated that enhancing parents' levels of hope, resilience, and optimism effectively reduced parenting stress while also boosting parenting confidence and psychological flexibility [15].

Moreover, a growing body of research has confirmed that parenting stress is a key antecedent of parental burnout. Parents exposed to prolonged and intense parenting stress are more likely to exhibit hallmark symptoms of burnout, including emotional exhaustion, parental detachment, and a diminished sense of parenting efficacy [19]. A longitudinal study by Yang et al. further demonstrated that parenting stress significantly predicts declines in parents' psychological well-being and impairments in emotional regulation, underscoring its central role in the psychological processes underlying burnout [20]. Accordingly, the present study incorporates parenting stress into the proposed model to systematically examine the mediating pathway linking psychological capital, parenting stress, and parental burnout. By elucidating this mechanism, the study aims to deepen our understanding of parents' psychological adjustment processes and offer theoretical support for enhancing the quality of parenting and family life.

1.3 Research Objectives and Hypotheses

This study seeks to explore the link between parental psychological capital and parental burnout, paying special attention to the potential mediating effect of parenting stress. Drawing on the theoretical framework outlined earlier, the study puts forward the following hypotheses:

H1: Parental psychological capital is negatively associated with parental burnout; that is, higher levels of psychological capital are linked to lower levels of burnout.

H2: Parenting stress mediates the relationship between psychological capital and parental burnout; specifically, psychological capital reduces parental burnout indirectly by alleviating parenting stress.

2. Methods

2.1 Subject

This research utilized an online random sampling approach, targeting parents from various provinces and municipalities across China. A total of 465 questionnaires were initially collected. After filtering out responses with anomalous completion times or uniform answer patterns, 461 valid questionnaires remained, yielding a valid response rate of 99.13%. Among these valid respondents, 74 were male (16.1%) and 387 were female (83.9%). Regarding educational attainment, 3.6% ($n = 17$) had completed junior high school or below, 8.2% ($n = 38$) had finished high school, 76.5% ($n = 353$) held a bachelor's degree, and 11.4% ($n = 53$) possessed a master's degree or higher.

2.2 Research Tools

2.2.1 Demographic Information

The first section of the questionnaire collected demographic information, including parental gender, child's age, monthly household income, parental educational level, and child's gender.

2.2.2 Psychological Capital Scale

Psychological capital was measured using the revised Psychological Capital Questionnaire developed by Zhang et al. (2010), which consists of 26 items covering four dimensions: self-efficacy, resilience, hope, and optimism. Participants responded on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), with higher scores indicating greater levels of psychological capital. In the present study, the scale demonstrated excellent internal consistency, with a Cronbach's alpha of 0.90 [21].

2.2.3 Parental Burnout Scale

Parental burnout was measured using the 7-item short form of the Parental Burnout Scale, adapted by Wang et al. (2021). Respondents rated each item on a 7-point Likert scale (1 = never, 7 = every day), where higher scores corresponded to higher levels of parental burnout [22].

2.2.4 Parenting Stress Scale

Parenting stress was assessed using the 15-item short form of the Parenting Stress Scale, revised by Yeh et al. (2001), which captures three dimensions: parental distress, difficulties in parent-child interactions, and child-related challenges. Items were rated on a 5-point Likert scale (1 = strongly

disagree, 5 = strongly agree), with higher scores reflecting increased parenting stress. The scale showed strong internal consistency in this study, with a Cronbach's alpha of 0.89 [23].

2.3 Data Analysis

Data analyses were performed using SPSS 26.0. Initially, descriptive statistics were calculated, and then Pearson correlation analyses were conducted to assess the relationships among the key variables. Mediation analysis was then carried out using Model 4 of the PROCESS macro, with psychological capital designated as the independent variable (X), parenting stress as the mediator (M), and parental burnout as the dependent variable (Y). The indirect effect was estimated using a bootstrapping approach with 5,000 resamples, generating a 95% confidence interval (CI). If the CI did not contain zero, the mediation effect was deemed statistically significant.

3. Results

Table 1: Correlations Among Psychological Capital, Parenting Stress, and Parental Burnout (N = 413)

	1) Parental Gender	2) Parity	3) Education Level	4) Socioeconomic Status	5) Psychological Capital	6) Parenting Stress
5) Psychological Capital	-0.256***	0.024	0.142**	0.263***	--	-0.428***
6) Parenting Stress	0.029	-0.025	-0.032	-0.140**	-0.428***	--
7) Parental Burnout	0.194***	-0.113*	-0.003	-0.046	-0.459***	0.555***

Note:***P<0.001,**P<0.01,*P<0.05.

According to the results presented in Table 1, Pearson correlation analysis revealed that parental psychological capital was significantly negatively correlated with both parental burnout ($r = -0.459$, $p < .001$) and parenting stress ($r = -0.428$, $p < .001$), indicating that higher levels of psychological capital are associated with lower levels of burnout and stress. In contrast, parenting stress was positively associated with parental burnout ($r = 0.555$, $p < .001$), suggesting that increased stress is linked to heightened burnout symptoms. In addition, parental gender showed significant correlations with psychological capital ($r = -0.256$) and parental burnout ($r = 0.194$). Parity showed a negative correlation with parental burnout ($r = -0.113$, $p < .05$), whereas educational level was positively correlated with psychological capital ($r = 0.142$, $p < .01$). Additionally, socioeconomic status exhibited a positive association with psychological capital ($r = 0.263$) and a negative association with parenting stress ($r = -0.140$, $p < .01$).

To investigate the underlying mechanism behind the significant negative relationship between X and Y, the study incorporated M as a mediator within a structural equation modeling framework. Mediation analysis was performed using Model 4 of the PROCESS macro in SPSS, and the bootstrapping approach recommended by Hayes was employed to obtain robust estimates of the indirect effect.

The path coefficients among psychological capital (X), parenting stress (M), and parental burnout (Y) are shown in Figure 1.

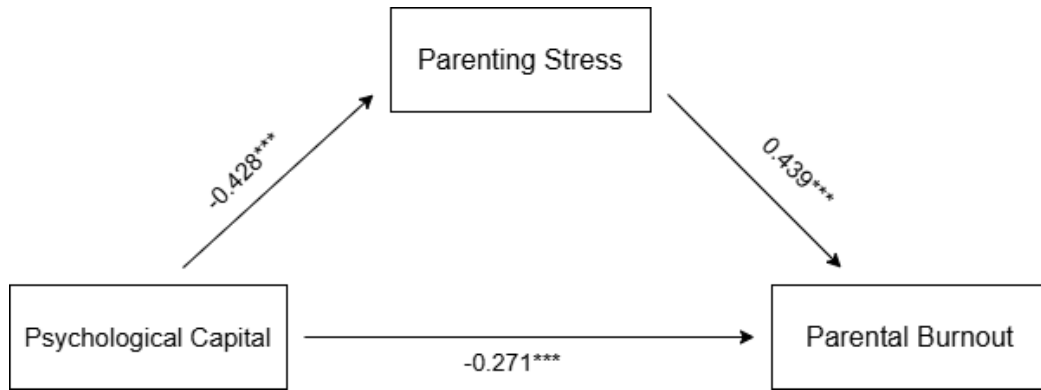


Figure 1: Path Diagram of the Relationships Among Psychological Capital (X), Parenting Stress (M), and Parental Burnout (Y). (Note:***P<0.001,**P<0.01,*P<0.05, Same notation applies hereafter.)

Table 2: Decomposition of Total, Direct, and Indirect Effects

	Effect Value	Se	LLCI	ULCI	Effect Size
Total Effect	-0.459	0.042	-0.540	-0.377	
Direct Effect	-0.271	0.041	-0.351	-0.190	59.04%
Indirect Effect	-0.188	0.027	-0.244	-0.138	40.96%

As indicated in Table 2, the 95% bootstrap confidence intervals for the direct effect of X on Y as well as for the indirect effect through M did not include zero. This finding suggests that X exerted a significant total impact on Y, comprising both a direct influence and a mediated (indirect) pathway. Specifically, the direct effect of X on Y was -0.271, accounting for 59.04% of the total effect (-0.459), while the indirect effect via M was -0.188, accounting for the remaining 40.96%. These findings suggest that X influences Y not only directly but also indirectly through M.

4. Discussion

This study examined the relationship between psychological capital (independent variable), parental burnout (dependent variable), and parenting stress (mediating variable), aiming to explore the underlying mechanism linking these three constructs. The results demonstrated that psychological capital not only directly and negatively predicted parental burnout, but also indirectly alleviated burnout by reducing parenting stress. These findings support the study's hypotheses and offer empirical evidence for the protective role of psychological resources in promoting parental adaptation and well-being.

Specifically, higher levels of psychological capital were associated with lower levels of parental burnout. This finding aligns with the results of Yue et al. [16], who reported that parents with higher PsyCap tend to exhibit greater emotional stability and a stronger sense of parenting purpose. As a malleable psychological resource, PsyCap enhances individuals' ability to cope with stress, thereby reducing the depletion of internal resources and the accumulation of negative emotions. The mediation analysis further revealed that parenting stress partially mediated the relationship between psychological capital and parental burnout, accounting for 40.96% of the total effect. This result provides additional support for the conservation of resources theory, which posits that internal psychological resources can buffer the adverse effects of external stressors [14].

Furthermore, the study revealed that female parents, those with less education, and individuals with lower socioeconomic status were more susceptible to heightened levels of parenting stress and burnout. This is consistent with the findings of Yang et al. [21], who highlighted that mothers tend to bear a heavier psychological burden in caregiving roles. Overall, the results suggest that external

resources, such as socioeconomic support and educational opportunities, may indirectly alleviate parenting-related stress and emotional exhaustion by fostering the development of psychological capital.

5. Limitations and Future Directions

Although this study offers valuable insights, it also has limitations. Primarily, the data relied on self-report questionnaires, which could be influenced by social desirability bias and subjective judgment errors. This is particularly relevant in the assessment of internal psychological states and parent-child relationship experiences, where self-perception may compromise the objectivity and accuracy of the findings. Future research could address this issue by incorporating multi-source data collection methods, such as spousal reports, teacher observations, or behavioral coding techniques. Second, the sample was drawn mainly from selected provinces and cities in China, introducing a degree of geographic limitation. Given that parental perceptions and practices of childrearing may vary across cultural contexts, the generalizability of the findings should be interpreted with caution. Future studies are encouraged to adopt broader sampling strategies or employ cross-cultural comparative designs to examine potential similarities and differences in how psychological capital and parenting stress function across diverse sociocultural settings.

6. Conclusion

This study explored the impact mechanism of parental psychological capital on parental burnout, and confirmed the mediating role of parenting stress in this relationship. The findings revealed that psychological capital not only directly alleviates parental burnout but also indirectly reduces burnout risk by lowering parenting stress, with parenting stress serving as a significant partial mediator between the two variables. These results highlight the critical role of psychological resources in regulating family-related stress and underscore the practical importance of enhancing parental psychological capital in easing parenting burdens and promoting family mental health. In future intervention practices, systematic psychological capital training programs may serve as effective strategies to strengthen parents' stress resilience and prevent the onset of parental burnout.

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