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ORIGINAL RESEARCH

Employment Stress and Mental Health Among College Graduates: Exploring the Mediating Role of Psychological Resilience and Moderating Role of Proactive Personality

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Purpose: Previous research has established a strong correlation between employment stress and mental health; however, the internal mechanisms underlying this relationship remain underexplored. The present study aimed to elucidate the mediating role of resilience in the relationship between employment stress and mental health, as well as the moderating effect of proactive personality.

Methods: We conducted a cross-sectional questionnaire survey with 2348 college graduates from Central China. Mediation and moderated mediation analyses were employed to investigate the roles of psychological resilience and proactive personality in the relationship between employment stress and mental health.

Results: Employment stress significantly predicted negative outcomes in mental health among these graduates. Mediation model analysis revealed that resilience mediated the relationship between employment stress and adverse mental health. Furthermore, analysis of moderated mediation model suggested that proactive personality moderated the mediation pathway and also served as a moderator for the direct relationship between employment stress and mental health. Specifically, individuals with a high proactive personality exhibited a reduction in the adverse effects of employment stress on mental health.

Conclusion: The moderated mediation model of psychological resilience and proactive personality contributes to the existing literature by providing additional insights into the link between employment stress and mental health and by exploring potential intervention strategies to mitigate the impact of employment stress.

Keywords: employment stress, psychological resilience, proactive personality, mental health, college graduates

Introduction

Employment stress refers to individuals' subjective feelings and stress responses to both internal and external stressors encountered during the job-seeking process.[1–3] It has long been recognized as a significant external source of psychological stress for college graduates in numerous countries.[4–6] The challenging employment landscape, further exacerbated by the COVID-19 pandemic, has intensified these pressures among graduates.[2,6] The report indicates that the employment rates for Chinese university graduates were only 57.6% and 55.5% in 2023 and 2024, respectively.[7] Nearly half of these graduates struggle to secure suitable job positions immediately after graduation. In comparison to other countries, such as the United States and those in Europe, the employment rate of Chinese university graduates is notably low.[8,9] As the number of university graduates in China continues to rise annually, surpassing 10 million,[7] competition in the job market becomes increasingly intense. Furthermore, a significant reduction in job opportunities in certain regions and industries, driven by various complex factors, has exacerbated the employment challenges for graduates.[10] Overall, the employment stress on Chinese graduates remains exceptionally high. The theory of stress and coping posits that while

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individuals mobilize their physiological and psychological resources to manage stress, prolonged or extreme exposure can lead to maladaptive physical and mental health issues.[11] Previous research has established that employment stress significantly affects the mental health of college graduates. For instance, Byun and Park found a positive correlation between employment stress and depression among college students.[4] Similarly, Lee demonstrated that employment stress was negatively associated with hope, personal growth, mindset, and overall well-being.[12] Additionally, Peng et al reported that employment stress had strong positive correlations with anxiety (r = 0.735) and depression (r = 0.530) in college students, highlighting the robust relationship between these variables.[2] These findings suggest that employment stress adversely affects not only the mental health of Chinese university students but also that of students in various other countries. Although research has confirmed the direct relationship between employment stress and the mental health of college students, there is a notable lack of studies that thoroughly examine the mechanisms through which employment stress influences this demographic. Specifically, further investigation is needed to determine whether certain significant individual factors play a critical role in this process.

Mediating Role of Psychological Resilience

Psychological resilience refers to the characteristics and abilities that enable individuals to adapt effectively to adverse life circumstances, including stress, frustration, and trauma.[13] Psychological resilience,[14,15] along with positive factors such as hope,[16] optimism,[17] and self-esteem,[18,19] has been confirmed to play a beneficial role in enhancing mental health. The protective role became particularly evident during the COVID-19 pandemic.[20,21] Numerous studies have confirmed the positive effects of psychological resilience on the mental health of college students. For instance, cross-sectional analyses indicate that psychological resilience is a negative predictor of depression.[22,23] Additionally, cross-lagged structural equation modeling analyses demonstrate that psychological resilience significantly predicts mental health status in the short term, particularly during the transition from junior to senior year.[24]

According to the developmental model of resilience, both internal and external protective factors and risk factors substantially influence the development and enhancement of psychological resilience.[25] Various forms of stress can act as risk factors that deplete individuals' psychological resources and weaken their resilience. For example, research by Pourafzal et al established that perceived stress significantly and negatively predicted psychological resilience in undergraduate students.[26] Similarly, Lara-Cabrera et al found that stress not only had a pronounced negative effect on psychological resilience but also predicted depression through the mediating role of resilience.[27] Additionally, Chen et al confirmed that occupational stress directly negatively impacted psychological resilience and can indirectly predict mental health through this mediating pathway.[28] Given that employment stress can significantly predict psychological resilience and that psychological resilience is a significant predictor of mental health, this study hypothesizes that psychological resilience will mediate the relationship between employment stress and mental health (Hypothesis 1).

Moderating Role of Proactive Personality

Proactive personality is characterized by an individual's tendency to demonstrate autonomy and initiative in enacting changes in their external environment, free from external constraints.[29,30] It is a stable trait that significantly influences proactive behaviors.[31,32] Individuals with a proactive personality are more likely to invest significant effort into achieving their goals, thereby enhancing their chances of attaining successful outcomes. Proactive personality is closely linked to various indicators of mental health. Individuals with high levels of proactive personality generally experience lower levels of anxiety and depression[33,34] and report higher levels of life satisfaction and subjective well-being.[34–36]

Proactive personality not only directly enhances mental health but also mitigates the detrimental effects of various negative factors on individuals' mental health. Research has shown that a proactive personality significantly mitigates the impact of work conflict on emotional exhaustion and burnout among young workers, with these effects being less pronounced in individuals exhibiting high levels of proactive personality compared to those with low levels.[37] Furthermore, the effects of challenge stressors on emotional exhaustion and turnover intentions were significantly reduced among proactive individuals.[38] Under employment stress, college graduates with a high level of proactive personality are more likely to utilize effective coping strategies, resulting in less negative impact on their psychological resilience and mental health. Therefore, this study posits that proactive

personality will moderate the direct impact of employment stress on the mental health of college graduates, such that the effect will be less pronounced in graduates exhibiting high levels of proactive personality compared to those with low levels (Hypothesis 2). Furthermore, proactive personality is expected to moderate the indirect effect of employment stress on mental health through psychological resilience, with the mediating effect of psychological resilience being weaker in graduates with high levels of proactive personality than in those with low levels (Hypothesis 3).

The Present Study

In conclusion, the present study employed a moderated mediation model (see Figure 1) to examine the roles of psychological resilience and proactive personality in the association between employment stress and college graduates' mental health. The findings will provide a valuable reference point for comprehending the underlying mechanism through which employment stress is associated with mental health, and for identifying whom the effect of employment stress is stronger. They can also offer insights into enhancing the mental health of college students.

Materials and Methods

Participants

The present study received approval from the Institutional Review Board at the first author's institution. Informed consent was obtained from participating schools, individuals, and their guardians. The present study was conducted from March 2023 to July 2023. A total of 2500 college graduates from universities in Central China were invited to participate in an anonymous survey conducted in classrooms during regular instructional periods. After excluding 152 graduates who either did not complete the questionnaires or provided invalid responses, data from 2348 graduates were included in the formal analysis. Among these participants, 1396 (59.5%) were female and 952 (40.5%) were male. The mean age of the participants was 22.03 years (SD = 0.95). Table 1 presents more detailed demographic information about the participants.

Measurements

Employment Stress

Employment stress was assessed using the Chinese version of the Employment Stress Scale,[39] which consists of twenty-six items that evaluate four dimensions of employment stress: subjective psychological experience, emotional distress, physiological response, and behavioral experience. Participants responded to each item on a five-point Likert scale, where 1 indicates "very inconsistent" and 5 signifies "very consistent". Higher scores indicate greater levels of employment stress, and the scale exhibited strong reliability, with a Cronbach's alpha of 0.97.

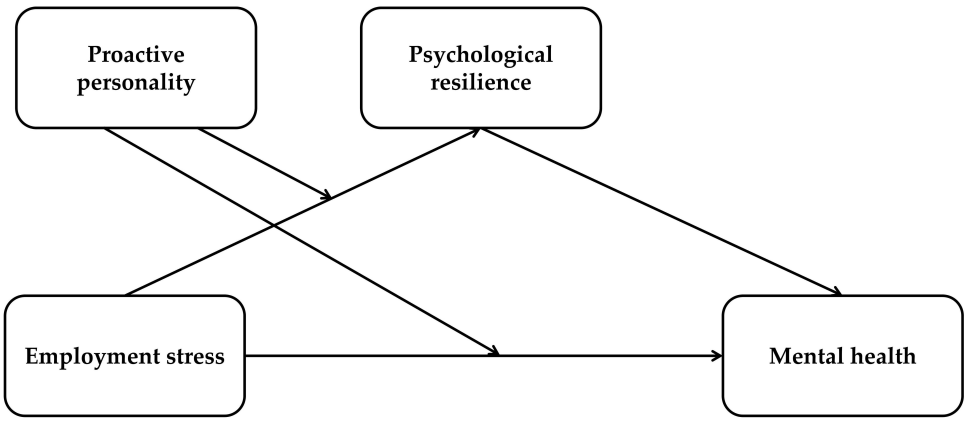

Figure 1 The hypothesized moderated mediation model.

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Table 1 Demographic Information of the Participants

Characteristics	Categories	Number (Percentage)
Gender	Male	952 (40.5%)
	Female	1396 (59.5%)
Age	20 years old	27 (1.1%)
	21 years old	397 (16.9%)
	22 years old	1522 (64.9%)
	23 years old	322 (13.7%)
	24 years and older	80 (3.4%)
Subject major	Liberal Arts	769 (32.8%)
	Natural Sciences	281 (12.0%)
	Engineering and Technology	736 (31.3%)
	Arts	562 (23.9%)
Only child	Yes	644 (27.4%)
	No	1704 (72.6%)
Household Registration (Hukou)	Urban	633 (27.0%)
	Rural	1715 (73.%)

Note: N = 2348.

Psychological Resilience

Psychological resilience was assessed using the revised Chinese version of the Connor-Davidson Resilience Scale (CD-RISC)[40] It comprises twenty-five items, each rated on a five-point Likert scale (1 = never, 5 = always), with higher scores reflecting greater psychological resilience. The scale demonstrated strong internal consistency, as indicated by a Cronbach's alpha of 0.94.

Proactive Personality

Proactive personality was assessed using the revised Chinese version of the Proactive Personality Scale (PPS)[41] which consists of eleven items rated on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). Higher scores indicate a greater level of proactive personality. The measure exhibited excellent internal consistency, with a Cronbach's α of 0.95.

Mental Health

The SCL-90 score is a widely used instrument for assessing clinical psychiatric symptoms and mental health status, specifically designed for individuals aged 16 and older.[42] The questionnaire prompts respondents to evaluate their psychological and physical conditions over the past week by responding to 90 items across nine dimensions. Although the SCL-90 is primarily utilized as a unidimensional measure, it demonstrates sufficient item measure invariance, making it a valuable tool for screening college students for overall psychopathology. Each item is rated on a five-point scale (1 = none, 5 = serious), with higher scores indicating poorer psychological health. Accordingly, we designated the variable represented by the SCL-90 scores as "Adverse Mental Health". Furthermore, the measure exhibits high internal consistency, with a Cronbach's α of 0.99.

Main Statistical Analyses

Descriptive statistics and Pearson correlation analysis were conducted to examine the intercorrelations among the core variables. Mediation analysis was performed using the PROCESS macro for SPSS[43] to investigate whether psychological resilience mediates the relationship between employment stress and psychological health. Additionally, a moderated

mediation model analysis was conducted to determine if proactive personality moderates both the direct and indirect effects of employment stress. To control for the potential confounding effect, gender was included as a covariate in both the mediation and moderated mediation model analyses.

Results

Preliminary Analysis

The results (see Table 2) indicated that employment stress exhibited a significant negative correlation with resilience ($r = -0.273$, $p < 0.01$) and proactive personality ($r = -0.167$, $p < 0.01$), while demonstrating a significant positive correlation with adverse mental health ($r = 0.495$, $p < 0.01$). Moreover, resilience was significantly negatively correlated with adverse mental health ($r = -0.265$, $p < 0.01$) and positively correlated with proactive personality ($r = 0.325$, $p < 0.01$). Additionally, there was a significant negative correlation between proactive personality and adverse mental health ($r = -0.258$, $p < 0.01$).

Mediation Analysis

Model 4 from the SPSS macro PROCESS developed by Hayes[43] was employed to analyze the mediating effect of resilience on the relationship between employment stress and adverse mental health. The results (see Table 3) indicated that employment stress had a significant positive predictive effect on adverse mental health ($\beta = 0.50$, $p < 0.001$). Conversely, employment stress was found to have a significant negative predictive effect on resilience ($\beta = -0.27$, $p < 0.001$). When the mediating variables were introduced, the negative predictive effect of psychological resilience on adverse mental health remained significant ($\beta = -0.15$, $p < 0.001$), while the direct predictive effect of employment stress on adverse mental health also retained significance ($\beta = 0.45$, $p < 0.001$). The mediating effect of resilience, indicated by a coefficient of 0.04 ($p < 0.001$) and a 95% bootstrap confidence interval of (0.03, 0.05), suggests that psychological resilience partially mediates the relationship between employment stress and mental health.

Table 2 Intercorrelations Between Variables

Variables	Mean	SD	1	2	3	4
1. Employment stress	2.11	0.81	–			
2. Psychological resilience	3.40	0.58	−0.273***	–		
3. Adverse mental health	1.39	0.52	0.495***	−0.265***	–	
4. Proactive personality	5.07	1.19	−0.167***	0.325***	−0.258***	–

Notes: N = 2348. ***$p < 0.001$.
Abbreviation: SD, standard deviation.

Table 3 Analysis of the Mediating Effect of Psychological Resilience

Independent Variable	Dependent Variables	R^2	*F*	Effect	*t*-values	Boot LLCI	Boot ULCI
Adverse mental health	Gender	0.25	760.62***	−0.03	−1.38	−0.12	0.02
	Employment stress			0.50	27.58***	0.46	0.53
Psychological resilience	Gender	0.09	111.49***	−0.23	−5.67***	−0.31	−0.15
	Employment stress			−0.27	−13.90***	−0.31	−0.24
Adverse mental health	Gender	0.26	281.26***	−0.08	−2.30***	−0.15	−0.01
	Employment stress			0.45	24.67***	0.42	0.49
	Psychological resilience			−0.15	−7.83***	−0.18	−0.11

Notes: N = 2348. ***$p < 0.001$.
Abbreviations: R^2, coefficient of determination; *F*, values of F-test; Boot, Bootstrap; LL, low limit; CI, confidence interval; UL, upper limit.

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Table 4 Moderated Mediating Model of Psychological Resilience and Proactive Personality

Independent Variable	Dependent Variables	R^2	*F*	Effect	*t*-values	Boot LLCI	Boot ULCI
Adverse mental health	Gender	0.25	381.40***	0.08	1.32	−0.12	0.02
	Employment stress			0.49	27.56***	0.46	0.53
Psychological resilience	Gender	0.17	123.27***	−0.23	−6.09***	−0.31	−0.16
	Employment stress			−0.22	−11.95***	−0.26	−0.19
	Proactive personality			0.29	15.05***	0.25	0.32
	Interaction			0.07	4.33***	0.04	0.10
Adverse mental health	Gender	0.30	202.95***	−0.06	−1.72	−0.13	0.01
	Employment stress			0.45	24.77***	0.41	0.48
	Psychological resilience			−0.08	−4.52***	−0.12	−0.05
	Proactive personality			−0.15	−8.39***	−0.18	−0.12
	Interaction			−0.11	−7.59***	−0.15	−0.09

Notes: N = 2348. ***$p < 0.001$. Interaction = Employment stress × Proactive personality.
Abbreviations: R^2, coefficient of determination; *F*, values of F-test; Boot, Bootstrap; LL, low limit; CI, confidence interval; UL, upper limit.

Moderated Mediation Analysis

Model 8 from the SPSS macro PROCESS, developed by Hayes,[43] was employed to test the moderated mediation model. The results, presented in Table 4, indicated that employment stress significantly negatively predicted resilience (β = −0.22, $p < 0.001$). Conversely, proactive personality emerged as a significant positive predictor of resilience (β = 0.29, $p < 0.001$). Additionally, the interaction term between employment stress and proactive personality significantly predicted psychological resilience (β = 0.07, $p < 0.001$), demonstrating that proactive personality significantly moderated the relationship between employment stress and psychological resilience. Simple effects analysis revealed (see Figure 2) that at a low level of proactive personality (M-1SD), employment stress had a more pronounced negative impact on psychological resilience (β= −0.30, $p <$

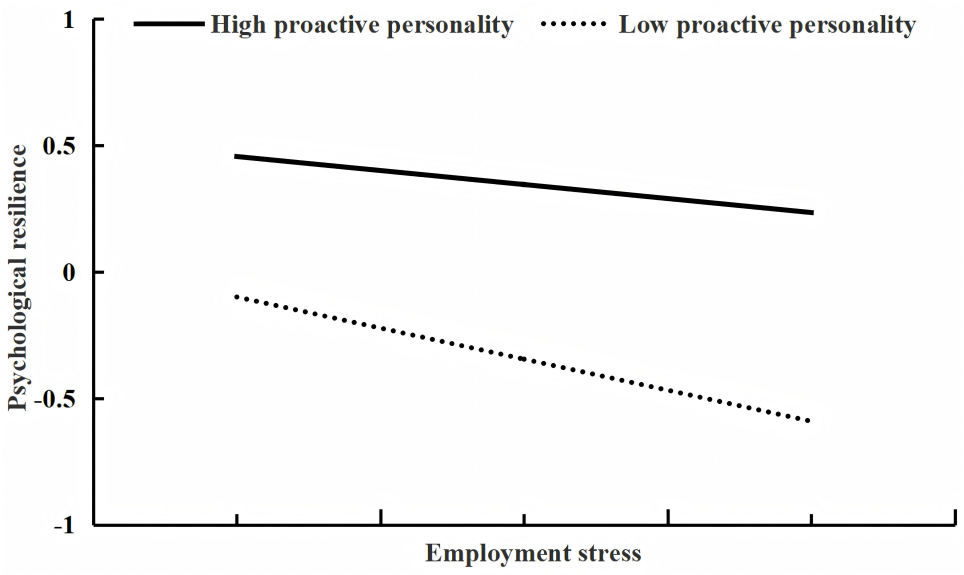

Figure 2 The association between employment stress and psychological resilience at different values of proactive personality.

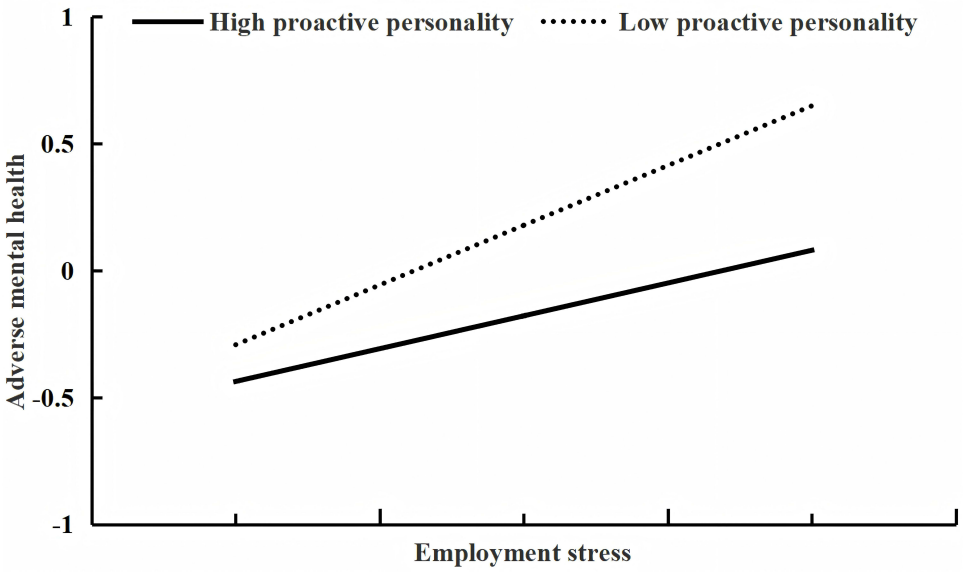

Figure 3 The association between employment stress and adverse mental health at different values of proactive personality.

0.001). Conversely, when proactive personality levels were higher (M+1SD), the negative predictive effect of employment stress on psychological resilience was significantly diminished (β= −0.16, $p < 0.001$).

In the adverse mental health model, employment stress significantly positively predicted adverse mental health (β = 0.45, $p < 0.001$), while resilience significantly negatively predicted adverse mental health (β = −0.08, $p < 0.001$). Additionally, proactive personality was found to significantly negatively predict adverse mental health (β = −0.15, $p < 0.001$). Notably, the interaction term between employment stress and proactive personality also significantly negatively predicted adverse mental health (β = −0.11, $p < 0.001$). These findings indicate that proactive personality plays a significant moderating role in the relationship between employment stress and adverse mental health. Simple effects analysis indicated (see Figure 3) that at a low level of proactive personality (M - 1 SD), the positive predictive effect of employment stress on adverse mental health was significantly stronger (β = 0.56, $p < 0.001$). In contrast, when the level of proactive personality was higher (M + 1 SD), the positive predictive effect of employment stress on adverse mental health diminished (β = 0.33, $p < 0.001$).

Discussion

Employment stress is a significant factor affecting the mental health of college students; however, in-depth research analyzing the underlying mediating and moderating mechanisms is currently lacking. The present study conducted a large-scale online survey involving over 2000 college students, examining the roles of psychological resilience and proactive personality in the relationship between employment stress and mental health. The findings enhance our understanding of how employment stress impacts college students' mental health and whether these impacts vary based on individual personality traits. Furthermore, this research offers practical insights that can inform interventions designed to mitigate the effects of employment stress on college students, especially those in their final year of study.

Consistent with numerous previous studies,[2,4] this research established a significant correlation between employment stress and mental health among college students. Specifically, higher levels of employment stress are associated with poorer mental health outcomes. Prolonged exposure to high-pressure situations can significantly compromise the mental well-being of college students, making them particularly susceptible to feelings of anxiety, depression, as well as physiological reactions like insomnia and appetite loss. In contrast to some earlier research, our study, conducted during the COVID-19 pandemic amidst a surge in the number of Chinese college graduates, offers a more nuanced understanding of the impact of employment stress on college students' mental health. The pandemic has adversely affected the

economy, business development, and job availability, potentially exacerbating the challenges faced by college students. Moreover, the steep increase in the number of Chinese college graduates, surpassing 10 million, has intensified competition in the job market. As the number of graduates continues to rise annually, the employment stress confronting college students is likely to increase correspondingly.

A more significant contribution of our study lies in its in-depth analysis of the mediating mechanism through which employment stress is associated with college students' mental health, thereby confirming the pivotal role of psychological resilience in the underlying intricate process. The research findings offer clarity on the impact pathway of employment stress on college students' mental health: specifically, employment stress first affects college students' psychological resilience, which subsequently influences their overall mental health status. On one hand, our analysis demonstrates that employment stress exhibits a significant negative predictive relationship with college students' psychological resilience, consonant with the developmental model of resilience that underscores the profound impact of both internal and external factors on individual resilience.[25] Prior research has indicated that perceived stress resulting from diverse stressful life events similarly exhibits a significant negative predictive relationship with psychological resilience[26–28] Employment stress, akin to various other pressures encountered by college students in daily life, may consume their psychological resources, and excessive depletion of these resources can potentially compromise resilience.[44,45] Furthermore, the notable predictive role of psychological resilience on college students' mental health within our model aligns with numerous previous studies emphasizing the positive impacts of resilience on mental health.[14,15,22–24] Individuals possessing higher resilience demonstrate a greater capacity to navigate various stressful challenges in life and sustain their mental well-being.[46,47] The mediation model of resilience indicates that employment stress not only directly predicts poorer mental health outcomes in college students but also indirectly influences these outcomes through resilience. Consequently, it is imperative to acknowledge not only the direct impact of employment stress but also the detrimental effects it has on college students' resilience under such pressure. It is worth noting that resilience only partially mediates the relationship between employment stress and college students' mental health, and the predictive effect of employment stress on college students' mental health remains statistically significant even after accounting for resilience. Therefore, there may still be other variables functioning as mediators between employment stress and college students' mental health, suggesting further research avenues to explore the complex interplay.

The present study also introduces an innovative approach by simultaneously analyzing the impact of employment stress on college students' mental health and identifying its moderating mechanisms, specifically confirming the stress-buffering role of proactive personality. The results elucidate variations in the strength of the predictive effect of employment stress on mental health across different populations; specifically, among college students with high levels of proactive personality, this predictive effect is weaker, while it is stronger among those with low levels of proactive personality. Previous research has consistently indicated that higher levels of proactive personality correlate with improved mental health outcomes.[33–36] Building on this foundation, our study further substantiates that proactive personality can mitigate the adverse effects of employment stress on college students' mental health. In confronting employment stress, the characteristics of proactive personality may operate in several beneficial ways. First, individuals with high levels of proactive personality generally possess stronger achievement motives, prompting them to set career goals earlier and proactively prepare through enrollment in training courses, obtaining relevant certifications, or enhancing practical skills. As a result, when facing employment stress, they tend to exhibit a heightened sense of self-efficacy. Second, those with elevated levels of proactive personality actively engage various resources, including personal and social supports. In a competitive job market, they benefit from better information and a broader array of potential employment options, which enables them to make more informed career decisions. Finally, individuals characterized by high proactive personality typically employ more effective emotional regulation strategies. Thus, even in less-than-ideal employment scenarios, they are able to manage their emotions effectively, preventing the onset of negative

feelings and safeguarding their mental health. These critical factors contribute to the ability of proactive personality to not only diminish the direct impact of employment stress on college students' mental health but also to alleviate the indirect consequences of employment stress on mental health through enhanced psychological resilience.

Limitations and Implications

Despite the aforementioned findings, the present study has certain limitations that should be addressed in future research. First, the use of a cross-sectional survey design restricts the ability to establish a definitive causal relationship between employment stress and mental health. A growing body of research on the positive personality traits of Chinese college students has begun to utilize longitudinal tracking designs.[48–50] Future research should incorporate longitudinal tracking to better examine the dynamics between these variables and to explore the mechanisms through which stress impacts individual mental health over time and across different contexts. Second, this study employed an online questionnaire survey for data collection, which may introduce potential selection bias and response bias. Although we endeavored to recruit participants from a diverse range of student groups across various schools and excluded respondents with excessively short response times or repetitive answer patterns, completely eliminating these biases may not be feasible. According to a recent report,[7] the number of university graduates in China reached 11.79 million in 2024, with over 2 million of those graduates located in the Central China region. The sample of more than 2000 university students utilized in our study may not fully represent the population of university students in Central China, thus introducing a potential margin of error. In future research, we will aim to conduct more rigorous data collection involving a larger population to enable a more comprehensive analysis of the relationship between employment stress and mental health. Third, since our study focused on Chinese college graduates, generalizing our findings to other populations of college graduates in different countries should be approached with caution. Future research could benefit from investigating and comparing college graduates from diverse countries and cultural backgrounds. Fourth, in addition to psychological resilience and proactive personality, various other factors may mediate or moderate the relationship between stress and mental health among college students, including self-esteem, self-efficacy, optimism, and coping.[51–53] Future research should further investigate other potential key factors.

The present study, despite certain limitations, carries important theoretical implications and practical significance. Theoretically, it builds upon prior research examining the relationship between employment stress and mental health by elucidating the mediating and moderating mechanisms. The moderated mediation model suggests that the connection between employment stress and the mental health of college students is characterized by complex interaction mechanisms and boundary conditions. In particular, psychological resilience emerges as one of the crucial factors linking employment stress to students' mental health. Furthermore, a proactive personality not only alleviates the direct impact of employment stress on mental health but also diminishes the mediating role of psychological resilience. Our study highlights the importance of considering the intricate interactions among various factors for a more thorough understanding of the relationship between employment stress and the mental health of college graduates. From a practical perspective, our study offers specific recommendations for promoting the mental health of college graduates and supporting them in managing employment stress. First, the government and social institutions can enhance the self-efficacy of college graduates and alleviate intense job competition by striving to provide more job opportunities and conducting targeted vocational skills training, thereby helping to effectively reduce employment stress. Additionally, universities should consistently organize educational seminars and group activities to bolster students' psychological resilience and improve their capacity to manage frustration, thereby mitigating the adverse effects of employment-related stress on mental health. Research has shown that both offline and online group interventions designed to strengthen psychological resilience can significantly enhance resilience levels among college students.[54–56] Furthermore, educators and parents can assist young people in cultivating a proactive personality by encouraging them to establish career goals early and prepare in advance, which boosts their confidence in confronting career-related pressures and mitigates the direct and indirect effects of occupational stress on mental health. These measures are particularly relevant in contexts marked by significant

employment stress; they are applicable not only in China, where the annual number of university graduates continues to rise, but also among graduate populations in other countries and regions.

Conclusion

The present study established a moderated mediation model to explore the relationship between employment stress and mental health among college students. It confirms the mediating role of psychological resilience and the moderating influence of proactive personality. Employment stress negatively predicts psychological resilience, which in turn predicts mental health. However, the direct predictive effect of employment stress on mental health and the mediating effect of psychological resilience are weaker among college students with high levels of proactive personality, whereas they are stronger among those with low levels of proactive personality. The findings contribute to understanding how employment stress is associated with the mental health of college students and in which populations the impact of employment stress is stronger or weaker. The moderated mediation model, centered on psychological resilience and proactive personality, not only encourages future researchers to investigate additional intermediary factors that may play crucial roles in the relationship between employment stress and college students' mental health but also aids educators in equipping students to handle employment stress effectively while safeguarding their mental well-being.

Data Sharing Statement

The datasets used during the current study are available from the corresponding author on reasonable request.

Ethics Statement

All participants in the study provided informed consent, and all the methods and research procedures were conducted in accordance with the Declaration of Helsinki. The study was approved by the Ethical Committee of Hunan University of Science and Engineering (No. 20221125).

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Disclosure

The authors report no conflicts of interest in this work.

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