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Social Psychological Factors Affecting University Students' Mental Health: The Mediating Role of Self-Efficacy

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Abstract

Mental health is an important concern among university students facing academic, social, and psychological challenges. This study examines the effects of social psychological factors on mental health and the mediating role of self-efficacy among Chinese university students. A quantitative survey of 426 students was conducted using Structural Equation Modeling (SEM) and bootstrapping techniques. The results indicate that academic stress and traumatic experiences negatively affect mental health, whereas interpersonal interactions and leisure activities have positive effects. Self-efficacy significantly mediates these relationships. The findings provide practical implications for promoting university students' psychological well-being and enhancing self-efficacy.

Keywords

University Students' Mental Health; Academic Stress; Interpersonal Interactions; Traumatic Experiences; Leisure Activities; Self-Efficacy; Structural Equation Modeling

1. Introduction

Mental health has become a major concern among university students due to increasing academic, social, and psychological pressures. In China, mental health problems among university students have received growing attention. Previous studies have identified academic stress, interpersonal interactions, traumatic experiences, and leisure activities as important determinants of mental health. Self-efficacy, which reflects individuals' confidence in managing challenges, is an important psychological resource associated with well-being. This study examines the relationships among social psychological factors, self-efficacy, and mental health status among Chinese university students, with a particular focus on the mediating role of self-efficacy. The findings provide theoretical and practical implications for

promoting university students' mental health and psychological resilience.

2. Literature Review

2.1. Academic Stress and Mental Health

Academic stress refers to the psychological strain caused by academic demands and is a major factor affecting university students' mental health. According to Lazarus and Folkman's Stress and Coping Theory, excessive stress may negatively influence psychological well-being. Chinese university students often experience academic competition and employment pressures, increasing their risk of mental health problems. Previous studies have found that academic stress is negatively associated with mental health and may reduce self-efficacy. Students with higher self-efficacy are generally better able to cope with academic challenges. Therefore, this study proposes the following hypotheses:

H1: Academic stress significantly affects university students' mental health status.

H5: Academic stress significantly affects university students' self-efficacy.

2.2. Interpersonal Interactions and Mental Health

Interpersonal interactions are important for university students' psychological development and mental well-being. Positive social relationships provide emotional support, promote social adjustment, and contribute to better mental health, whereas poor interpersonal relationships may lead to psychological distress. Chinese university students may face difficulties in maintaining healthy interpersonal relationships due to academic and social pressures. Previous studies have shown that positive interpersonal interactions are associated with higher self-efficacy and psychological well-being. Therefore, this study proposes the following hypotheses:

H2: Interpersonal interactions significantly affect university students' mental health status.

H6: Interpersonal interactions significantly affect university students' self-efficacy.

2.3. Traumatic Experiences and Mental Health

Traumatic experiences refer to adverse life events that may negatively affect individuals' psychological and emotional well-being. University students who experience traumatic events are more likely to report anxiety, depression, and psychological distress. Previous studies have shown that traumatic experiences are negatively associated with mental health and may impair emotional adjustment and resilience. Furthermore, traumatic experiences may reduce individuals' self-efficacy by weakening their confidence in managing life challenges. Therefore, this study proposes the following hypotheses:

H3: Traumatic experiences significantly affect university students' mental health status.

H7: Traumatic experiences significantly affect university students' self-efficacy.

2.4. Leisure Activities and Mental Health

Leisure activities are voluntary and enjoyable activities that contribute to individuals' psychological well-being and healthy development. Previous studies have shown that participation in leisure activities can reduce stress, improve emotional well-being, and enhance psychological resilience among university students. Students who actively engage in leisure activities tend to report better mental health outcomes. In addition, leisure activities help strengthen self-efficacy by promoting positive emotions, skill development, and confidence in managing challenges. Therefore, this study proposes the following hypotheses:

H4: Leisure activities significantly affect university students' mental health status.

H8: Leisure activities significantly affect university students' self-efficacy.

2.5. Self-Efficacy and Mental Health

Self-efficacy, proposed by Bandura (1977, 1997), refers to individuals' beliefs in their ability to successfully manage challenges and achieve desired outcomes. Higher self-efficacy is associated with greater psychological resilience, adaptive coping strategies, and better mental health among university students. Previous studies have shown that self-efficacy positively influences psychological well-being and serves as an important mediating mechanism between social psychological factors and mental health outcomes. Academic stress, interpersonal interactions, traumatic experiences, and leisure activities may significantly influence students' self-efficacy, which in turn affects their mental health status. Therefore, this study proposes the following hypotheses:

H9: Self-efficacy significantly affects university students' mental health status.

H10–H13: Self-efficacy mediates the relationships between social psychological factors (academic stress, interpersonal interactions, traumatic experiences, and leisure activities) and university students' mental health status.

2.6. Mental Health Status of University Students

Mental health, as defined by the World Health Organization (WHO), is a state of well-being that enables individuals to cope with life challenges and function effectively. University students are particularly vulnerable to mental health problems due to academic, social, and emotional pressures. In China, increasing academic competition and employment uncertainties have heightened psychological distress among university students. Previous studies have identified academic stress, interpersonal interactions, traumatic experiences, leisure activities, and self-efficacy as important determinants of mental health. This study adopts an integrated social-psychological perspective to examine how these factors influence university students' mental health and highlights the mediating role of self-efficacy in

explaining psychological well-being.

3. Methodology

3.1. Research Design

This study adopted a quantitative research design to examine the relationships among social psychological factors, self-efficacy, and university students' mental health status. Quantitative research was considered appropriate because it enables the systematic collection and statistical analysis of data to test the proposed hypotheses and theoretical framework. The study employed a cross-sectional survey method to collect data from university students in China.

Structural Equation Modeling (SEM) was utilized as the primary analytical technique to investigate both the direct and indirect relationships among the study variables. In addition, bootstrapping procedures were applied to examine the mediating effects of self-efficacy. The quantitative approach provides a comprehensive understanding of the psychological mechanisms underlying university students' mental health and allows for the simultaneous examination of multiple latent constructs within the proposed research model.

3.2. Population and Sampling

The target population of this study consisted of university students in Weifang City, Shandong Province, China. A total of 426 valid questionnaires were collected and analyzed, which met the recommended sample size requirements for Structural Equation Modeling (Hair et al., 2022). Convenience sampling was employed due to its practicality and suitability for data collection among university students.

3.3. Research Instrument

Data were collected using a structured questionnaire consisting of six constructs related to university students' mental health. The questionnaire items were adapted from well-established and validated instruments used in previous studies.

The constructs included:

Table 1. Definitions of the Study Constructs

Constructs	Description
Academic Stress	Academic-related psychological pressure experienced by university students
Interpersonal Interactions	Quality of social relationships and interpersonal communication
Traumatic Experiences	Exposure to adverse or psychologically distressing life events
Leisure Activities	Participation in recreational and stress-relieving activitie
Self-Efficacy	Individuals' beliefs in their capabilities to manage challenges effectively

All questionnaire items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.4. Data Collection Procedures

Data collection was conducted using an online questionnaire survey. Prior to data collection, respondents were informed about the purpose of the study and assured that their responses would remain confidential and be used solely for academic research purposes.

Participation in the study was voluntary, and informed consent was obtained from all respondents before they completed the questionnaire. The online survey method was selected due to its efficiency in reaching university students across different institutions and facilitating accurate data collection.

The collected data were carefully screened to ensure completeness and consistency before being subjected to statistical analyses.

3.5. Reliability and Validity Assessment

The reliability and validity of the measurement instruments were assessed through several statistical procedures. Internal consistency reliability was evaluated using Cronbach's Alpha coefficients. According to Hair et al. (2022), values greater than 0.70 indicate satisfactory reliability.

Confirmatory Factor Analysis (CFA) was conducted to assess convergent validity using standardized factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). Factor loadings greater than 0.50, Composite Reliability values above 0.70, and Average Variance Extracted values exceeding 0.50 indicate acceptable convergent validity.

Discriminant validity was evaluated using the Fornell-Larcker criterion, while multicollinearity was assessed using Variance Inflation Factor (VIF) values. These procedures ensured that the measurement model demonstrated satisfactory psychometric properties before hypothesis testing.

3.6. Data Analysis Techniques

Several statistical techniques were employed to analyze the collected data. Statistical analyses were performed using SPSS Version 27 and AMOS Version 26.

The following analytical procedures were conducted:

Table 2. Data Analysis Technique

Analysis	Purpose
Descriptive Statistics	To summarize respondents' demographic characteristics
Reliability Analysis	To assess internal consistency of the constructs
Confirmatory Factor Analysis (CFA)	To evaluate construct validity
Structural Equation Modeling (SEM)	To examine the hypothesized relationships among variables
Bootstrapping Analysis	To assess the mediating effects of self-efficacy

Analysis	Purpose
Multicollinearity Analysis	To assess potential collinearity issues among variables

Structural Equation Modeling was selected because it allows simultaneous examination of multiple relationships among latent constructs and provides robust statistical evidence for testing theoretical models involving direct and mediating effects.

3.7. Conceptual Framework of the Study

The conceptual framework of this study integrates social psychological factors and self-efficacy to explain university students' mental health status. Academic stress, interpersonal interactions, traumatic experiences, and leisure activities were proposed as the independent variables. Self-efficacy was conceptualized as a mediating variable that explains how social psychological factors influence mental health outcomes. Mental health status was identified as the dependent variable of the study.

The proposed framework provides a comprehensive understanding of the psychological mechanisms influencing university students' mental well-being and serves as the theoretical foundation for the empirical analyses conducted in this study.

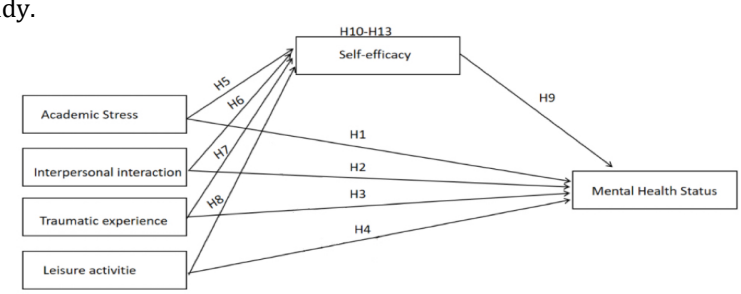


Figure 1. Conceptual Framework of the Study

4. Results and Findings

This chapter presents the findings obtained from the statistical analyses conducted in this study. The results include the demographic characteristics of the respondents, reliability and validity assessments of the measurement model, Structural Equation Modeling (SEM) results, hypothesis testing, and mediation analysis. All statistical analyses were performed using SPSS Version 27 and AMOS Version 26.

4.1. Respondents' Demographic Profile

A total of 426 valid questionnaires were collected from university students in Weifang City, Shandong Province, China. The respondents consisted of male and

female students from different academic disciplines and educational backgrounds. The demographic characteristics of the respondents are presented in Table 1.

Table 3. Distribution of Respondents by Grade Level

Grade Level	Frequency	Percentages
first-year university student	82	19.249
second-year university student	130	30.516
third-year university student	132	30.986
fourth-year university student	82	19.249
first-year university student	82	19.249

4.2. Reliability Analysis

The reliability of the measurement instruments was evaluated using Cronbach's Alpha coefficients. According to Hair et al. (2022), Cronbach's Alpha values greater than 0.70 indicate satisfactory internal consistency.

The findings revealed that all constructs demonstrated excellent reliability. Academic Stress obtained a reliability coefficient of 0.851, Interpersonal Interactions 0.855, Traumatic Experiences 0.864, Leisure Activities 0.834, Self-Efficacy 0.917, and Mental Health Status 0.902. These values indicate that all measurement items possess acceptable internal consistency and are suitable for subsequent analyses.

Table 4. Reliability Analysis of the Study Constructs

Constructs	Cronbach's Alpha
Academic Stress	0.851
Interpersonal Interactions	0.855
Traumatic Experiences	0.864
Leisure Activities	0.834
Self-Efficacy	0.917

4.3. Measurement Model Assessment

Confirmatory Factor Analysis (CFA) was conducted to assess the adequacy of the measurement model. The model fit indices indicated that the measurement model achieved a satisfactory fit with the observed data.The goodness-of-fit indices are presented below.

Table 5. Measurement Model Fit Indices

Index	Value	Recommended Value
CMIN/DF	1.472	< 3.0
RMSEA	0.028	< 0.08
SRMR	0.036	< 0.08
GFI	0.913	> 0.90
AGFI	0.902	> 0.90

The results indicate that all model fit indices exceeded the recommended thresholds, suggesting that the measurement model exhibits an excellent fit and adequately represents the underlying constructs of the study.

4.4. Convergent Validity Analysis

Convergent validity was assessed using standardized factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). According to Hair et al. (2022), factor loadings should exceed 0.50, Composite Reliability values should be greater than 0.70, and Average Variance Extracted values should exceed 0.50.

The CFA results showed that all standardized factor loadings exceeded 0.50. Additionally, all Composite Reliability values were greater than 0.70 and all Average Variance Extracted values exceeded the recommended threshold of 0.50. Therefore, the constructs demonstrate satisfactory convergent validity.

4.5. Discriminant Validity Analysis

Discriminant validity was evaluated using the Fornell-Larcker criterion. The square root of the Average Variance Extracted for each construct was greater than the correlations between constructs, indicating that all latent variables are empirically distinct from one another.

These findings confirm that the measurement model possesses satisfactory discriminant validity.

4.6. Multicollinearity Assessment

Variance Inflation Factor (VIF) values were calculated to determine whether multicollinearity existed among the independent variables.

The VIF values ranged from 1.054 to 1.347, which are substantially lower than the recommended threshold value of 5.0. Therefore, multicollinearity was not a concern in this study.

4.7. Structural Model Assessment

Structural Equation Modeling (SEM) results indicated that all hypothesized relationships were statistically significant ($p < 0.05$). Academic stress and traumatic experiences negatively influenced self-efficacy and mental health, whereas interpersonal interactions and leisure activities positively influenced both variables. Self-efficacy was also found to significantly affect mental health status. These findings demonstrate that social psychological factors and self-efficacy play important roles in explaining university students' mental health outcomes.

4.8. Hypothesis Testing

The SEM analysis supported all hypothesized relationships proposed in this study.

Table 6. Summary of Hypothesis Testing Results

Hypothesis	Result
H1	Supported
H2	Supported
H3	Supported
H4	Supported
H5	Supported
H6	Supported
H7	Supported
H8	Supported
H9	Supported
H10	Supported
H11	Supported
H12	Supported
H13	Supported

The results indicate that all direct and indirect hypotheses proposed in the conceptual framework were statistically supported.

4.9. Mediation Analysis

Bootstrapping procedures with 5,000 resamples were employed to examine the mediating effects of Self-Efficacy.

The findings indicated that Self-Efficacy significantly mediated the relationships between:

Academic Stress and Mental Health Status.

Interpersonal Interactions and Mental Health Status.

Traumatic Experiences and Mental Health Status.

Leisure Activities and Mental Health Status.

The bootstrap confidence intervals did not include zero, indicating that all indirect effects were statistically significant. These findings support the mediating role of Self-Efficacy in explaining how social psychological factors influence university students' mental health.

4.10. Summary of Findings

The findings of this study provide strong empirical support for the proposed theoretical framework. The measurement model demonstrated excellent reliability and validity, while the structural model confirmed the significant relationships among social psychological factors, self-efficacy, and mental health status.

Self-Efficacy was found to function as a significant mediator in explaining how social psychological factors influence university students' psychological well-being. Overall, the proposed model offers a comprehensive understanding of the

psychological mechanisms influencing university students' mental health and contributes to the growing body of literature on social psychological determinants of mental well-being.

5. Conclusion

This study examined the influence of social psychological factors on university students' mental health and investigated the mediating role of self-efficacy among Chinese university students. The findings indicate that academic stress, interpersonal interactions, traumatic experiences, and leisure activities significantly affect mental health outcomes. Self-efficacy was found to play an important mediating role in explaining how these factors influence psychological well-being.

The study contributes to the existing literature by integrating social psychological factors and self-efficacy within a Structural Equation Modeling framework, providing a more comprehensive understanding of university students' mental health. The findings also offer practical implications for higher education institutions and mental health practitioners by emphasizing the importance of mental health education, stress management, and interventions aimed at enhancing students' self-efficacy and psychological resilience.

Although the study is limited by its cross-sectional design and the specific sample of university students in Weifang, China, it provides valuable insights for future research. Overall, promoting positive social and psychological experiences and strengthening self-efficacy are essential for improving university students' mental health and well-being

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References

[1] Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman and Company.

[2] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage Publications.

[3] Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

[4] World Health Organization. (2022). World mental health report: Transforming mental health for all. World Health Organization.

[5] Stallman, H. M. (2010). Psychological distress in university students: A comparison with general population data. Australian Psychologist, 45(4), 249–257.

[6] Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. Journal of Affective Disorders, 173, 90–96.

[7] Misra, R., & McKean, M. (2000). College students' academic stress and its relation to anxiety, time management, and leisure satisfaction. American Journal of Health Studies, 16(1), 41–51.

[8] Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. International Journal of Adolescence and Youth, 25(1), 104–112.

[9] Hefner, J., & Eisenberg, D. (2009). Social support and mental health among college students. American Journal of Orthopsychiatry, 79(4), 491–499.

[10] Chu, P. S., Saucier, D. A., & Hafner, E. (2010). Meta-analysis of the relationships between social support and well-being in children and adolescents. Journal of Social and Clinical Psychology, 29(6), 624–645.

[11] Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. Psychological Inquiry, 15(1), 1–18.

[12] Frazier, P., Greer, C., Gabrielsen, S., et al. (2011). The relation between trauma exposure and psychological adjustment. Journal of Counseling Psychology, 58(1), 17–29.

[13] Iwasaki, Y. (2007). Leisure and quality of life in an international and multicultural context. Social Indicators Research, 82(2), 233–264.

[14] Kleiber, D. A., Walker, G. J., & Mannell, R. C. (2011). A social psychology of leisure (2nd ed.). Venture Publishing.

[15] Schunk, D. H., & DiBenedetto, M. K. (2021). Self-efficacy and human motivation. Advances in Motivation Science, 8, 153–179.