

# Literature Review of Mental Health Among College Students During the COVID-19 Pandemic

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## Abstract

The purpose of this study is to review academic research on mental health among college students during the COVID-19 Pandemic. The paper provides an overview of the main research topics on mental health among college students during the COVID-19 Pandemic and summarizes the gaps in previous research. This article reviews and analyzes the empirical research topics published in the past five years, and summarizes five themes in total. These five themes are divided as follows. Topic 1: Prevalence of Anxiety and Depression. Topic 2: Risk Factors for Poor Mental Health. Topic 3: Protective Factors and Resilience. Topic 4: The Role of Coping Strategies. Topic 5: Implications for Mental Health Interventions. In the future, attention can be paid to longitudinal studies, effectiveness of intervention, and marginalized groups.

**Keywords:** mental health, college graduates, literature review

## 1. Introduction

The COVID-19 pandemic has had a substantial impact on mental health worldwide, especially among college students. This review synthesizes recent research focused on anxiety, depression, resilience, and other psychological factors affecting college students in China during the pandemic. The findings emphasize the prevalence of mental health issues, identify associated risks and protective factors, and discuss the implications for mental health interventions.

## 2. Results and Discussion

### Topic 1: Prevalence of Anxiety and Depression

Multiple studies reveal a concerning prevalence of anxiety and depression among college

students during the pandemic. For instance, a systematic review and meta-analysis by Li et al. (2021) found that the prevalence of depression was 39% and anxiety was 36% across various studies, with higher rates reported among non-Chinese students compared to their Chinese counterparts. Similarly, Zhou et al. (2021) reported that 37% of students exhibited symptoms of depression, while 24.9% experienced symptoms of anxiety, highlighting widespread mental health challenges.

Furthermore, Roche (2024) examined psychological symptoms among college students, indicating that those in the Spring 2020 sample reported significantly higher levels of stress, depression, and anxiety compared to

students surveyed in 2016. This suggests that the pandemic has uniquely exacerbated mental health issues within this population.

Peng (2024) supports the idea that employment stress significantly impacts final-year students, with 13.2% reporting symptoms of depression during the pandemic. The anxiety related to employment has further intensified existing mental health issues, highlighting the complex nature of the stressors faced by students.

### **Topic 2: Risk Factors for Poor Mental Health**

Several studies have identified common risk factors contributing to anxiety and depression among students. Wang et al. (2020) noted that students with confirmed or suspected COVID-19 cases in their families were at a higher risk of experiencing depression. Other research identified factors such as academic stress, fear of infection, and personal exposure to COVID-19 as significant predictors of psychological distress (Luo et al., 2021; Zhang et al., 2022).

The lifestyle changes brought about by the pandemic have also emerged as a critical factor. Liu et al. (2023) found that irregular diets and disrupted schedules were associated with increased anxiety and depression. Additionally, social support was linked to improved mental health, with higher levels of social support corresponding to lower rates of anxiety and depression (Zhou et al., 2021). These findings align with research by Xu (2023), which suggested that students' mental health is closely related to their family backgrounds and academic performance, indicating the need for targeted interventions.

Arslan (2024) further emphasizes that psychological maltreatment is a significant predictor of psychological distress and substance use among college students. This highlights the importance of considering broader social and personal histories when evaluating student mental health.

### **Topic 3: Protective Factors and Resilience**

Despite the negative impact of the pandemic, some studies have identified factors that can enhance resilience and coping among students. Wu et al. (2020) emphasized the importance of psychological resilience as a buffer against negative coping styles. Additionally, research by Ai (2024) and Han (2023) highlighted the significance of academic support and the need

for tailored interventions to address the unique psychological challenges faced by students.

The introduction of innovative solutions, such as the multimedia system proposed by Zeng (2024), demonstrates how technology can enhance psychological capital and provide comprehensive support for students. These advancements could be instrumental in fostering resilience within the student population.

### **Topic 4: The Role of Coping Strategies**

Coping strategies also played a significant role in mental health outcomes during the pandemic. Research by Zeng (2022) indicated that psychological resilience mediated the relationship between negative emotions and creativity, underscoring the potential benefits of promoting adaptive coping strategies. The integration of intelligent online learning systems, as explored by Xu (2023), can facilitate real-time interventions for students experiencing psychological distress, allowing for timely support.

### **Topic 5: Implications for Mental Health Interventions**

The findings from these studies highlight the urgent need for targeted mental health interventions for college students during and after the pandemic. Strategies may include enhancing social support systems, promoting resilience through psychological education, and providing access to mental health resources (Li et al., 2021; Wang et al., 2020). Furthermore, the focus on employment stress, as highlighted by Peng (2024), underscores the necessity of government and institutional support to help students navigate the job market and its associated pressures.

Regular psychological screenings should be implemented to identify students at risk and facilitate timely interventions (Chen et al., 2020). Innovative approaches, such as the Recommender System with Psychometric Data Analytics (RC-PDA) proposed by Ai (2024) and the robotic coach discussed by Jeong (2023), can enhance the accessibility and effectiveness of mental health support for students.

## **3. Conclusion**

### *3.1 Impact of the Pandemic*

The COVID-19 pandemic has significantly adversely affected the mental health of college students in China, resulting in alarmingly high

levels of anxiety and depression. This situation highlights the urgent need to address mental health challenges within this demographic.

### 3.2 Importance of Identifying Factors

Recognizing both risk and protective factors is crucial for developing effective mental health interventions. By understanding the contributors to mental health issues and the factors that promote resilience, stakeholders can create targeted strategies to provide effective support for students.

### 3.3 Future Directions for Support

Fostering resilience and creating supportive environments are essential for improving psychological outcomes for students during these challenging times. As universities continue to address the ongoing consequences of the pandemic, the findings of this research will play a pivotal role in informing and shaping future mental health strategies that prioritize student well-being.

## 4. Directions for Further Research

### 4.1 Longitudinal Studies

Future research should emphasize the importance of longitudinal studies to assess the long-term effects of the COVID-19 pandemic on college students' mental health. Understanding how the psychological challenges faced during this period evolve over time will provide critical insights into the sustained impact on students' well-being.

### 4.2 Effectiveness of Interventions

Research should focus on evaluating the effectiveness of various intervention strategies, particularly those that utilize technology, such as the Recommender System with Psychometric Data Analytics (Ai, 2024) and multimedia systems for psychological support (Zeng, 2024). Investigating how these interventions can be tailored to meet the diverse needs of students will be essential for enhancing mental health support.

### 4.3 Marginalized Groups

Further studies should explore the specific experiences of marginalized groups within the student population. Examining how intersectional factors such as race, gender, and socio-economic status influence mental health outcomes will help develop more inclusive and effective support systems.

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