

# STUDY ON MEDIA USE AND PSYCHOLOGICAL WELL-BEING OF COLLEGE STUDENTS: A CASE STUDY BEFORE AND AFTER THE END OF THE COVID-19 PANDEMIC

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**Abstract:** The impact of media use on life is multifaceted. College students are a group that uses media frequently. Based on survey data collected before and after the end of the COVID-19 pandemic, this study explores the influence of media use on the Psychological Well-being of college students. The investigation reveals significant changes in media usage duration and types before and after the pandemic, along with notable differences in Psychological Well-being, directly correlated with media use.

**Keywords:** Media use; Psychological well-being; College students

## 1 INTRODUCTION

The media contact awareness and usage behavior of college students are significantly influenced by shifts in information channels, communication methods, and the surrounding social environment. Historically, the rise of new media technologies has transformed the way individuals, particularly young adults, access and engage with information. College students, often at the forefront of digital adoption, are particularly susceptible to fluctuations in media consumption patterns due to their frequent use of social media platforms, news websites, and other online tools. Over the years, changes in the media landscape—such as the proliferation of smartphones, increased access to high-speed internet, and the emergence of multimedia content—have continuously reshaped how this demographic interacts with information[1]. Notably, the COVID-19 pandemic marked a critical turning point in media consumption habits, as global lockdowns, social distancing measures, and widespread remote learning led to a surge in the time spent online. For college students, media became a primary means of staying informed, maintaining social connections, and coping with unprecedented changes in their daily lives [2].

Research during the pandemic has highlighted that the increased reliance on media—whether through news, social media, or entertainment platforms—was closely linked to the psychological well-being of students. The heightened exposure to both positive and negative content during this period had direct implications on their emotional states, stress levels, and overall mental health [3]. For example, the constant stream of news regarding the pandemic, combined with extended periods of social isolation, often led to heightened anxiety, uncertainty, and feelings of loneliness. Conversely, for some students, media platforms provided vital social support and entertainment, offering distractions and virtual connections that helped mitigate the adverse effects of isolation [4].

This study aims to delve deeper into the intricate relationship between media use and psychological well-being, particularly in the context of social and environmental changes. By examining survey data collected both before and after the height of the COVID-19 pandemic, the study seeks to understand how shifts in media usage patterns correspond with changes in mental health outcomes. The focus will be on identifying whether media consumption behaviors that emerged during the pandemic have had a lasting impact on students' well-being or if these behaviors reverted to pre-pandemic norms as social restrictions eased. Ultimately, the goal is to contribute to the growing body of literature on the dynamic role of media in shaping psychological well-being, especially in times of crisis and recovery [5].

## 2 RESEARCH DESIGN AND IMPLEMENTATION

### 2.1 Questionnaire Design

This study employs a questionnaire survey method, divided into three parts:

#### 2.1.1 Demographic information

Including gender, university, and place of origin.

#### 2.1.2 Media usage survey

Including the duration of media exposure, types of media usage, purposes of media contact, and categories of media.

#### 2.1.3 Psychological well-being survey

Focusing on:

- (1) The impact of media reports on subjective emotions during the pandemic.
- (2) Measurement of emotional scales before and after the pandemic.
- (3) Measurement of life satisfaction before and after the pandemic.

## 2.2 Data Collection

In October 2023, a large-scale survey was conducted among students from seven universities located in Henan Province, China. The universities included Zhengzhou University, Henan University of Finance and Economics, Henan Normal University, and Anyang Normal University, among others. The aim of this survey was to collect data on students' psychological well-being as part of a broader research effort into mental health trends among young adults in higher education institutions. A total of 554 questionnaires were distributed to the selected universities. Out of these, 525 completed questionnaires were returned, yielding a return rate of approximately 94.76% [6]. However, upon closer examination, 34 of the returned questionnaires were identified as invalid due to incomplete or inconsistent responses, leaving a total of 491 valid responses. This resulted in an effective response rate of 93.5%, which is considered quite high and indicative of the students' engagement and interest in the survey.

The demographic breakdown of the respondents showed a nearly balanced distribution in terms of both geographic origin and gender [7]. Specifically, 53.97% of the participants were from rural areas, while 46.03% came from urban settings. This distribution reflects the overall composition of Henan Province, where rural populations traditionally dominate but urbanization has been increasing. Regarding gender, male students comprised 52.2% of the sample, while female students accounted for 47.38%, which suggests a fairly equitable gender representation in the study. Such a balanced sample enhances the generalizability of the study's findings across different student populations in Henan Province.

The data analysis was conducted using SPSS version 23.0, focusing on the reliability and validity of the Psychological Well-being scales used in the questionnaire [8]. The reliability of the scales was assessed through Cronbach's  $\alpha$ , a widely used measure of internal consistency. The overall Cronbach's  $\alpha$  value for the scale was calculated to be 0.962, significantly higher than the commonly accepted threshold of 0.9, indicating that the scale had excellent reliability. Furthermore, validity was examined using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The KMO value was found to be 0.96, which is considered "superb" according to standard criteria, while the Bartlett test yielded a P-value of less than 0.001. These results confirm that the data were suitable for factor analysis and that the questionnaire exhibited strong construct validity. Thus, the instruments used in the study were both reliable and valid, ensuring that the findings can be trusted and meaningfully interpreted [9].

## 3 RESEARCH RESULTS AND ANALYSIS

### 3.1 Media Usage Among College Students

As shown in Table 1, there are significant differences in media exposure duration before and after the COVID-19 pandemic. Data indicate that during the pandemic, 49.69% of college students engaged with media for over 8 hours, with 79.22% spending more than 6 hours online daily. After the pandemic, the percentage of students using media for over 8 hours dropped to 27.29%, and those spending more than 6 hours online daily decreased to 63.75%, showing a clear downward trend [10].

**Table 1** Survey on Media Usage Among College Students

Survey Content		Survey Data: Number (Percentage %)	
		COVID-19 Pandemic Period	Post-COVID-19 Pandemic
Media Exposure Duration (hours/day)	1-3	22 (4.48)	49(9.98)
	3-6	80(16.29)	129(26.27)
	6-8	145(29.53)	179(36.46)
	8 and above	244 (49.69)	134 (27.29)
	Active Exposure (actively updating, checking, commenting, replying)	225 (45.82)	234(47.66)
Media Exposure Method	Passive Exposure (browsing information, push notifications)	48(9.78)	59 (12.02)
	Active and Passive Exposure	215 (43.79)	195(39.71)
	No Exposure	3(0.61)	3(0.61)

Type of Media Exposure	Central Mainstream Media (People's Daily, Xinhua News Agency, CCTV, etc.)	117 (23.83)	36(7.33)
	News Websites or Information Platforms (Today's Headlines, Tencent, NetEase, etc.)	40(8.15)	39 (7.94)
	Self-Media (Guokr, DXY, etc.)	17(3.46)	23(4.68)
	Social Platforms (Weibo, WeChat, QQ, Douyin, etc.)	286(58.25)	359 (73.12)
	Campus Media (official campus WeChat, Bilibili, etc.)	31(6.31)	34 (6.92)
Purpose of Media Exposure	Dynamic News, Keeping Up-to-Date	200(40.73)	48(9.78)
	Communication and Social Interaction	80(16.29)	155 (31.57)
	Learning Skills, Self-Improvement	59(12.02)	82(16.7)
	Leisure and Entertainment, Passing Time	152(30.96)	206(41.96)

College students exhibited a clear active motivation for media engagement, with no significant differences observed before and after the pandemic. However, a noticeable difference was seen in the purpose of media contact. During the pandemic, 40.73% of respondents indicated that their primary purpose for media engagement was “to keep updated with dynamic news”, which dropped to only 9.78% afterward. Post-pandemic, “leisure and entertainment” and “communication and social interaction” became the main reasons for media use, accounting for 41.96% and 31.57%, respectively, reflecting an increase of 11% and 15.28% compared to the pandemic period.

Significant differences were also evident in the types of media accessed [11]. The proportion of students selecting traditional mainstream and authoritative media dropped from 23.83% during the pandemic to 7.33% afterward, while those choosing social platforms such as WeChat, QQ, and Weibo rose from 58.25% before the pandemic to 73.12%.

### 3.2 Measurement of Psychological Well-being Among College Students

Psychological Well-being is understood as a unique feeling—an overall evaluation derived from an individual's assessment of recent positive and negative emotions[12]. This survey incorporates positive emotions, negative emotions, and life satisfaction as primary dimensions of Psychological Well-being, integrating Diener's Satisfaction with Life Scale (SWLS), the revised Memorial University of Newfoundland Scale of Happiness (MUNSH) by Stones and Kozma, and the Happiness Questionnaire (MHQ) compiled by Miao Yuanjiang.

During the pandemic, 66.53% of respondents reported feeling troubled by media reports, with only 33.46% indicating that their emotions were not affected by media fluctuations. Additionally, the proportions of those reporting “very troubled” and “somewhat troubled” exceeded 35%, indicating that negative emotions among college students during the pandemic were significantly influenced by media usage.

Emotional measurement indices show that significant differences in emotional perception regarding media reports existed before and after the pandemic, primarily evident in emotions such as “happiness”, “anger”, “sadness”, “joy”, “pleasure”, and “worry”. The indices indicated that during the pandemic, “worry” and “gratitude” emotions were notably high, with negative emotional scores elevated. Post-pandemic, averages for “happy”, “joyful”, and “pleased” exceeded 4.8, becoming the emotions with higher scores, thus indicating a significant enhancement in the perception and level of Psychological Well-being among college students.

## 4 RESEARCH CONCLUSIONS AND DISCUSSION

### 4.1 Exploration of the Correlation Between Media Use and Psychological Well-being

During the COVID-19 pandemic, an overwhelming amount of complex information circulated widely, much of which included misinformation, rumors, and conflicting reports. This flood of information not only created confusion but also significantly heightened public anxiety and perceptions of risk. Among those most affected by this situation were college students, whose psychological and emotional states became increasingly volatile. The changes in how students accessed information—through new and often unreliable channels—combined with the uncertainty of the pandemic itself, further exacerbated their mental health challenges. With a shift in their learning environments, often from on-

campus social settings to more isolated online formats, many students found themselves struggling to adapt to both the academic and emotional demands of the pandemic.

Reports consistently show that the demand for psychological services surged during the pandemic, particularly among younger adults aged 18-25. This age group, which includes most college students, experienced notably higher levels of anxiety than other demographic groups. In fact, research findings indicate that their anxiety levels significantly exceeded those of older age cohorts, highlighting the unique pressures faced by young adults. Among the major contributing factors was the heightened uncertainty surrounding the future, coupled with financial and academic stresses. College students, in particular, faced increased survival and living pressures, which led to heightened anxiety levels and a growing sense of vulnerability.

The survey findings underscore the significant impact of these factors. A key measurement item, "Have you felt troubled by media reports about the pandemic?" received an average score as high as 3.02, illustrating the extent to which media consumption contributed to the psychological strain on students. The continuous exposure to alarming and often contradictory news about the pandemic intensified feelings of fear, uncertainty, and frustration, leading to a pervasive sense of unease. As a result, media usage during this period played a critical role in shaping students' psychological well-being, further highlighting the need for effective mental health interventions and support systems tailored to this vulnerable population.

#### **4.2 Discussion of Differences in Media Use and Psychological Well-being Before and After the Pandemic**

Research indicates that during the pandemic, information consumption was characterized by high frequency and short duration, leading to a phenomenon known as "Fear of Missing Out" (FoMO), which refers to the anxiety and concern individuals experience from not being able to access information in a timely manner.

During the COVID-19 pandemic, the prolonged periods of isolation and restrictions on mobility significantly impacted the daily lives of college students. Surveys revealed that nearly 80% of college students were engaging with media for over 8 hours each day, highlighting a drastic increase in media consumption compared to pre-pandemic levels. This substantial rise in media usage can be partly attributed to the students' need to maintain a connection with the outside world, which was severely restricted due to quarantine measures and social distancing guidelines. The phenomenon of Fear of Missing Out (FoMO) became particularly evident within this demographic, as many students developed a strong desire to stay informed and in touch with external events, social circles, and global updates. The need to be constantly connected, combined with the limitations of physical interaction, drove students to spend more time on social media, news platforms, and other digital forms of communication.

The emotional toll of this increased media usage became clear as reports of heightened anxiety during this period surged. The excessive use of media, particularly in the context of social isolation, fostered a sense of reliance on digital platforms that often presented overwhelming or contradictory information. This reliance, while initially serving as a coping mechanism to deal with isolation, soon led to more significant psychological challenges. As students became increasingly absorbed in media consumption, they often found it difficult to concentrate on their academic responsibilities, resulting in a decline in productivity and focus. The constant barrage of information, much of it negative or alarming, also led to feelings of distrust, dissatisfaction, and frustration with the media itself.

Furthermore, the combination of media overload and academic underachievement contributed to escalating levels of anxiety and panic. Students who were unable to filter or critically assess the vast amounts of information they were exposed to became more susceptible to emotional distress. This, in turn, significantly diminished their overall Psychological Well-being. The continuous cycle of media dependency, academic struggles, and emotional strain created a challenging environment for college students, affecting both their mental health and their ability to navigate the already difficult circumstances of the pandemic.

Post-pandemic, the overall situation regarding media consumption among students showed noticeable improvements. According to survey data, the proportion of students engaging with media for more than 8 hours per day decreased to 27.29%, signaling a shift in behavior. This reduction suggests that students are no longer as reliant on media as they were during the peak of the pandemic, possibly due to the resumption of in-person activities, the reopening of schools, and the gradual return to normalcy in their daily routines. This decline in prolonged media exposure aligns with the shifting priorities and purposes behind media engagement.

The motivations for using media transitioned significantly during this period. Whereas before, students primarily consumed media for purposes related to political updates and current affairs — likely influenced by the heightened global uncertainty — their post-pandemic media use has become more centered around communication and leisure activities. A clear preference for entertainment-focused content has emerged, which could be attributed to the need for relaxation and mental relief after prolonged periods of stress and isolation. Additionally, results from the Psychological Well-being survey indicated an improvement in students' emotional states. Specifically, there were notable increases in positive emotional indicators, with higher scores for feelings such as "happy", "joyful", and "pleased". These findings suggest that the reduction in time spent on intense, news-driven media and the shift towards entertainment may have contributed to a more balanced emotional state, further emphasizing the significance of media content in shaping psychological well-being during the post-pandemic recovery phase.

Consequently, this study concludes that media usage is directly correlated with the Psychological Well-being of college students, with notable differences before and after the end of the COVID-19 pandemic. This underscores that changes in

the media ecosystem, social living environments, and the diversification of information channels and media choices can directly lead to shifts in media trust, internal emotions, and life perceptions among youth.

It is also crucial to note that even after the pandemic, 63.75% of college students still reported daily engagement with social platforms exceeding 6 hours. In light of this phenomenon, the study suggests that college students should avoid excessive media reliance to prevent disconnection from broader social life. Furthermore, it is essential to critically evaluate the authenticity of information encountered during media use, ensuring a focus on personal development through appropriate media engagement.

## COMPETING INTERESTS

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