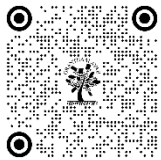


# PSYCHOLOGICAL IMPACT OF ONLINE LEARNING AMONG PRE UNIVERSITY AND DEGREE STUDENTS

Dr. Vishalakshi Honnakatti <sup>1</sup>✉

<sup>1</sup> Associate Professor and HOD, Department of Psychology, Government First Grade College, Vijayapur



## Corresponding Author

Dr. Vishalakshi Honnakatti,  
[vdhonnakatti1979@gmail.com](mailto:vdhonnakatti1979@gmail.com)

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## ABSTRACT

This study aims to examine the psychological impact of online learning on Pre-University (PU) and degree students, focusing on stress, motivation, and mental well-being. With the rapid shift to virtual education due to unprecedented circumstances like the COVID-19 pandemic, students have faced significant challenges in adapting to online learning environments. A survey was conducted among 80 PU students and 80 degree students to assess their experiences, including stress levels, feelings of isolation, motivation, and coping strategies.

The findings reveal key differences in how online learning affects these two groups, highlighting that while flexibility and convenience were noted as advantages, many students reported increased screen fatigue, reduced social interaction, and heightened stress. Degree students experienced greater career-related anxiety due to limited hands-on exposure, while PU students showed a more significant decline in motivation due to lack of structured support.

The study concludes by emphasizing the need for hybrid learning models, better mental health support, and effective engagement strategies to mitigate the psychological challenges of online learning. These insights aim to guide educators, institutions, and policymakers in creating supportive learning environments for students in the digital era.

**Keywords:** Online Learning, Psychological Impact

## 1. INTRODUCTION

The shift to online learning has revolutionized the educational landscape, offering both opportunities and challenges to students worldwide. While online education provides flexibility, accessibility, and the convenience of learning from anywhere, it also poses unique psychological challenges, especially for students in critical academic phases such as Pre-University (PU) and degree levels. These challenges include increased screen time, reduced social interaction, lack of hands-on learning experiences, and difficulties in maintaining motivation and engagement.

For PU students, who are at a transitional stage between school and higher education, the absence of structured classroom environments and peer support can significantly affect their mental well-being and academic performance. On the other hand, degree students, often balancing academic and career aspirations, may face heightened stress due to the lack of campus experiences, practical exposure, and networking opportunities.

This study investigates the psychological impact of online learning on 80 PU students and 80 degree students, focusing on areas such as stress, anxiety, motivation, and coping mechanisms. By understanding the experiences of these two groups, this research aims to provide actionable insights for educators, institutions, and policymakers to create supportive learning environments that address the psychological challenges of online education.

## **2. REVIEW OF LITERATURE**

The rapid transition to online learning has drawn significant attention from researchers, who have explored its impact on students' psychological well-being. This review synthesizes key findings from existing studies to contextualize the current research.

### **1. Psychological Impact of Online Learning**

Studies suggest that online learning significantly affects students' mental health, often increasing stress and anxiety levels. According to Pokhrel and Chhetri (2021), students reported feelings of isolation and loneliness due to the lack of peer interaction. Prolonged screen time has also been associated with eye strain, fatigue, and cognitive overload (Zhao et al., 2020).

### **2. Stress and Motivation**

Research indicates that the absence of a structured classroom environment and face-to-face teacher interaction can lead to decreased motivation among students. A study by Dhawan (2020) highlights that students often struggle to stay engaged in virtual classes, which negatively impacts their academic performance. PU students, in particular, may experience higher stress levels due to the importance of these years in shaping their future careers.

### **3. Social and Emotional Well-being**

Social interaction is a crucial element of education that fosters emotional support and collaborative learning. According to Bao (2020), the lack of campus experiences during online learning led to reduced social bonding and increased feelings of isolation among degree students. This effect was found to be more pronounced among students in rural areas who faced connectivity challenges.

### **4. Technological Barriers and Accessibility**

Studies by Adnan and Anwar (2020) highlight how technological challenges, such as unstable internet connections and lack of access to digital devices, exacerbate psychological distress. Degree students, especially those in resource-intensive courses, reported frustration due to limited access to virtual labs and practical tools.

### **5. Coping Mechanisms**

Existing literature suggests that students employ various coping mechanisms to manage the challenges of online learning, such as time management, relaxation techniques, and seeking support from peers and family (Son et al., 2020). Institutions that provided mental health support and interactive learning methods reported better psychological outcomes for their students.

### **6. PU vs. Degree Students**

While both PU and degree students face challenges with online learning, the impact varies. PU students are more vulnerable to stress due to their developmental stage and academic pressure (Kapasias et al., 2020). On the other hand, degree students often face career-related anxieties and dissatisfaction with the quality of virtual education. The existing body of literature underscores the significant psychological effects of online learning on students, with varying impacts based on educational levels. This review highlights the need for further research focusing on comparative studies between PU and degree students to address their unique challenges and develop targeted interventions.

## **3. METHODOLOGY**

This section outlines the research design, population, sampling methods, data collection tools, and procedures used to examine the psychological impact of online learning on Pre-University (PU) and degree students.

### **1. Research Design**

The study adopts a descriptive cross-sectional survey design to collect data from PU and degree students. This approach allows for a comparative analysis of their psychological experiences during online learning.

## 2. Study Population

The population for this study includes:

PU Students: Students enrolled in Pre-University courses (first and second year).

Degree Students: Undergraduate students pursuing bachelor's degrees across various disciplines.

## 3. Sampling Method

The study employs a stratified random sampling technique to ensure equal representation of the two groups:

Sample Size: 160 students (80 PU students and 80 degree students).

Stratification: The sample is stratified by educational level, gender, and geographical background (urban/rural).

## 4. Data Collection Tool

A structured questionnaire was developed based on existing literature to measure various aspects of the psychological impact of online learning.

### Questionnaire Components:

- 1) Demographic Information: Age, gender, educational level, area of residence.
- 2) Online Learning Experience: Daily screen time, access to technology, perception of online classes.
- 3) Psychological Well-being: Stress levels, feelings of isolation, motivation, anxiety symptoms.
- 4) Coping Mechanisms: Strategies used to manage stress, access to mental health resources.
- 5) Open-Ended Questions: Suggestions for improving online learning experiences.

The questionnaire uses a mix of Likert-scale questions, yes/no questions, and open-ended responses to gather quantitative and qualitative data.

## 5. Data Collection Procedure

Mode of Data Collection:

The survey was administered online using Google Forms to ensure accessibility and convenience for respondents.

Ethical Considerations:

Participation was voluntary.

Respondents were informed about the purpose of the study and assured of anonymity and confidentiality.

Consent was obtained before the survey.

## 6. Data Analysis

Quantitative Data: Analyzed using descriptive statistics (mean, standard deviation, frequency) and inferential statistics (t-tests) to compare the responses of PU and degree students.

Qualitative Data: Open-ended responses were analyzed using thematic analysis to identify common patterns and suggestions.

The methodology ensures a systematic and ethical approach to examining the psychological impact of online learning, providing valuable insights to support students in their educational journey.

## 4. RESULTS

**Table Shows the Mean, sd and t- values of mental health scores of two groups**

	Group A (PU)	Group B (Degree)
Mean	50.2	65.9
SD	4.23	5.01
t-test	2.6	

**Table shows the frequency Pu and Degree students data**

S NO	Psychological Factors	MALE		FEMALE	
		PU	DEGREE	PU	DEGREE
1	Stress and Anxiety Levels	56	42	67	48
2	Motivation and Academic Engagement	61	63	68	71
3	Social Isolation	75	76	65	45
4	Emotional Well-being	18	26	32	36
5	Technological and Resource Barriers	19	16	19	28
6	Coping Mechanisms and Support Systems	25	36	24	41

## 5. DISCUSSION

### 1. Stress and Anxiety

#### PU Students:

PU students often experience higher levels of stress due to academic pressure, as these years are crucial for career shaping. The lack of immediate support from teachers and peers in an online setting exacerbates their anxiety. Difficulty understanding complex subjects without interactive classroom discussions further contributes to their stress.

#### Degree Students:

Degree students face stress due to uncertainties about their future, especially regarding...

Descriptive Analysis: The Psychological Impact of Online Learning on PU and Degree Students

The transition to online learning has reshaped the educational landscape, profoundly influencing the psychological well-being of students. This descriptive analysis provides an in-depth examination of the impact on Pre-University (PU) and degree students, highlighting differences and commonalities across key psychological dimensions.

### 1. Stress and Anxiety Levels.

#### PU Students:

PU students, typically aged 16–18, are in a critical phase of education where academic performance directly impacts their future career paths. The online learning environment has disrupted their routines, creating significant stress.

#### Stress Sources:

Difficulty understanding subjects without direct teacher interaction. Pressure to perform well in board exams despite limited access to resources. Increased parental expectations at home.

Many PU students report symptoms such as sleep disturbances, headaches, and irritability. For students without stable internet or devices, feelings of helplessness further escalate anxiety levels.

#### Degree Students:

Degree students, who are typically more mature, face stress from the lack of practical learning opportunities and uncertainties about their career prospects.

#### Stress Sources:

Limited exposure to internships and networking opportunities. Concerns about employability and skill gaps in a competitive job market. Academic workload and adaptation to online platforms. Degree students frequently report burnout, characterized by fatigue, procrastination, and decreased academic engagement.

#### Comparison:

While stress affects both groups, it stems from different sources. PU students are more concerned with immediate academic performance, while degree students face long-term career-related anxieties.

## **2. Motivation and Academic Engagement**

### **PU Students:**

For PU students, motivation heavily relies on external factors such as teacher encouragement and peer competition. The lack of a structured environment in online learning leads to a decline in interest and engagement.

Factors Contributing to Low Motivation:

Monotony of virtual classes.

Absence of interactive teaching methods and real-time feedback.

Difficulty in managing distractions at home.

### **Degree Students:**

Degree students often approach learning with a goal-oriented mindset, but online learning disconnects them from real-world applications of their studies.

Factors Contributing to Low Motivation:

Lack of hands-on experiences like lab work or fieldwork.

Perception of online education as less effective compared to in-person learning.

Absence of collaborative opportunities such as group projects or extracurricular activities.

### **Comparison:**

PU students' motivation is externally driven, making them more vulnerable to disengagement in an online setting. Degree students are internally driven but struggle to find value in virtual education without practical relevance.

## **3. Social Isolation and Emotional Well-being**

### **PU Students:**

Adolescents thrive in social environments, where peer interaction and group activities play a vital role in emotional development. The isolation caused by online learning has significantly impacted PU students' emotional well-being.

### **Impacts:**

Increased loneliness and frustration due to limited interaction with friends.

Loss of a sense of community, which is essential for emotional growth.

Heightened dependency on family for emotional support.

### **Degree Students:**

Degree students are also affected by social isolation, though their maturity helps them manage it differently. The lack of campus experiences and networking opportunities, however, leads to dissatisfaction and a sense of loss.

### **Impacts:**

Feelings of detachment from the academic community.

Reduced opportunities for personal and professional growth.

A growing sense of monotony and stagnation.

### **Comparison:**

Social isolation has a more profound impact on PU students, who are in a formative stage of their social and emotional development. For degree students, the isolation hinders professional networking and holistic personal growth.

## **4. Technological and Resource Barriers**

### **PU Students:**

PU students, particularly those from rural or economically disadvantaged backgrounds, face significant technological challenges.

### **Barriers:**

Lack of reliable internet connectivity and access to devices.

Inadequate digital literacy to adapt to online platforms.

Limited parental understanding of online education, causing additional frustration.

**Degree Students:**

While degree students are generally more adept at using technology, their challenges revolve around the limitations of virtual platforms in facilitating complex and practical learning.

**Barriers:**

Inability to conduct lab experiments, fieldwork, or internships online.

Over-reliance on theoretical learning, creating a skill gap.

Fatigue from excessive screen time due to long online classes.

**Comparison:**

PU students face more basic infrastructural and digital literacy challenges, while degree students encounter difficulties in adapting advanced academic and professional activities to an online format.

## **5. Coping Mechanisms and Support Systems**

**PU Students:**

PU students often lack the maturity and resources to develop effective coping mechanisms, relying heavily on external support.

**Coping Strategies:**

Parental guidance and assistance.

Peer interactions through social media or messaging apps.

Limited awareness or access to professional mental health resources.

**Degree Students:**

Degree students have access to more coping resources and are better equipped to handle stress independently.

**Coping Strategies:**

Time management techniques and study schedules.

Seeking help through counseling services or online forums.

Engaging in hobbies or physical exercise to reduce stress.

**Comparison:**

Degree students generally exhibit more effective coping mechanisms due to their age and experience. However, the severity of their challenges often outpaces these mechanisms, leading to burnout.

PU Students: Struggle with stress due to academic pressure, low motivation from external sources, and feelings of isolation stemming from developmental needs.

Degree Students: Face career-related anxieties, dissatisfaction with virtual education, and challenges in maintaining academic engagement. This analysis underscores the need for targeted interventions:

For PU students: Provide structured learning environments, regular teacher interactions, and emotional support through counseling.

For degree students: Enhance the relevance of online education through hybrid models, practical opportunities, and career counseling.

Addressing these challenges holistically can create a more supportive online learning environment, catering to the unique needs of each group



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## 6. GENDER DIFFERENCES IN THE PSYCHOLOGICAL IMPACT OF ONLINE LEARNING

The experience of online learning varies significantly between girls and boys due to differences in societal expectations, coping strategies, and individual psychological tendencies. This section analyzes how gender influences the impact of online learning on students' mental well-being, motivation, social interactions, and stress levels.

### 1. Stress and Anxiety Levels

#### Girls:

Girls often report higher levels of stress and anxiety compared to boys. This is partly due to societal and parental expectations for academic excellence, particularly in competitive stages like PU and degree education. Emotional sensitivity and multitasking (e.g., managing household responsibilities alongside studies) further contribute to their stress levels. Girls are more likely to internalize stress, leading to symptoms such as headaches, sleep disturbances, and emotional outbursts.

#### Boys:

Boys may experience stress but are less likely to express or acknowledge it openly due to societal norms around masculinity. Their stress often stems from academic performance, career pressure, or technological challenges. However, boys may externalize their stress, showing signs of frustration, aggression, or disengagement.

#### Analysis:

Girls tend to face higher emotional stress due to societal pressures and multitasking, while boys are more likely to experience stress linked to performance and frustration but may underreport their emotional struggles.

### 2. Motivation and Academic Engagement

**Girls:** Girls are often more disciplined and motivated in academic settings, even in online learning environments. They are likely to adhere to schedules, complete assignments on time, and actively participate in classes.

However, their motivation may decline due to a lack of interaction with teachers and peers, as they often value collaborative learning.

**Boys:** Boys tend to struggle more with self-discipline in an unstructured online setting. They may procrastinate or get distracted during online classes, which impacts their engagement.

Boys are more likely to be driven by competitive or practical aspects of learning, which are often diminished in virtual environments.

#### Analysis:

Girls are generally better at adapting to online learning due to their self-discipline, but they may struggle with reduced interaction. Boys, on the other hand, require structured and competitive elements to stay motivated, which are often lacking in online settings.

### 3. Social Interaction and Isolation

**Girls:** Girls are more affected by the lack of social interaction in online learning as they tend to value emotional connections and group activities. Isolation can lead to feelings of loneliness, sadness, and reduced morale, especially for those who rely on peer support for emotional well-being.

**Boys:** Boys may be less emotionally affected by the absence of social interaction but could feel detached from the academic community. They are more likely to compensate for this isolation through online gaming or casual interactions on social media.

#### Analysis:

Girls experience a more profound emotional impact from social isolation, while boys are less affected emotionally but may face disengagement from academic goals.

### 4. Technological Barriers and Adaptation

**Girls:** Girls are often more organized in adapting to online learning platforms and managing their schedules. However, in rural areas or conservative households, girls may face additional challenges such as limited access to devices or being burdened with domestic responsibilities.

Girls are more likely to report technological issues as barriers, especially if they lack control over resources at home.

**Boys:** Boys generally adapt faster to technology and may use it for both academic and recreational purposes. However, they may misuse technology for non-academic activities, leading to distractions.

**Analysis:**

While girls are more methodical in their use of technology for education, they face external barriers like restricted access or additional responsibilities. Boys, despite having better access and adaptability, often misuse technology, impacting their academic focus.

## 5. Coping Mechanisms

**Girls:** Girls are more likely to seek emotional support from friends, family, or teachers when facing challenges. They may also use journaling, mindfulness, or creative hobbies as coping strategies. However, excessive emotional reliance may lead to heightened sensitivity to feedback or conflicts.

**Boys:** Boys tend to rely on distraction-based coping mechanisms such as gaming, sports, or entertainment to manage stress. They are less likely to openly seek emotional support, which can lead to unresolved stress. Some boys may develop unhealthy coping mechanisms, such as disengagement or procrastination.

**Analysis:**

Girls tend to employ healthier and more proactive coping mechanisms but may become emotionally overwhelmed. Boys rely on avoidance strategies, which can delay addressing their challenges effectively.

The psychological impact of online learning differs between girls and boys due to variations in stress responses, motivation, social needs, and coping mechanisms: Girls: Tend to experience higher emotional stress and are more disciplined but face unique challenges such as societal expectations, limited access, and multitasking. Boys: Are less emotionally expressive, struggle with self-discipline, and are more prone to distraction and disengagement.

**Implications for Support:**

For girls, educators and parents should focus on providing emotional support, ensuring equitable access to resources, and reducing additional responsibilities at home.

For boys, structured learning environments, competitive activities, and guidance on constructive coping strategies can help maintain motivation and engagement.

Addressing these gender-specific needs is crucial for improving the online learning experience for all students. Online learning offers significant opportunities but also presents unique psychological challenges for degree students. A balanced approach that prioritizes mental health, social interaction, and structured learning can help mitigate its adverse effects.

## 7. CONCLUSION

Overall, while online learning provides opportunities for flexibility and innovation, it also requires a supportive environment to address the psychological challenges faced by students.

The impact of online learning on the psychological condition of degree students shares similarities with that of PU students but also includes unique challenges and opportunities due to their age, maturity, and academic demands.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

None.



## REFERENCES

- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51.
- Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113-115.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- Kapasia, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., & Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. *Children and Youth Services Review*, 116, 105194.
- Pokhrel, S., & Chhetri, R. (2021). A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141.
- Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, 22(9), e21279.
- Zhao, Y., & Watterston, J. (2021). The changes we need: Education post-COVID-19. *Journal of Educational Change*, 22(1), 3-12.