

A Study of Attitude towards Artificial Intelligence and Mental Health among College Students

Narendra Singh*

Research Scholar, Department of Psychology, Apex University, India.

*Corresponding Author: narendra29399@gmail.com

Citation: Singh, N. (2026). A Study of Attitude towards Artificial Intelligence and Mental Health among College Students. International Journal of Education, Modern Management, Applied Science & Social Science, 08(02(I)), 67–71.

ABSTRACT

Today, AI is an integral part of modern society, influencing our daily lives through various applications, such as smart phones, virtual assistants, and advanced algorithms that manage social media and healthcare systems. While the rapid advancement of AI offers numerous benefits, it also raises important questions about its impact on human psychology and social relationships. This study aims to explore attitudes towards artificial intelligence (AI) and mental health, seeking to uncover patterns that contribute to a deeper understanding of individuals' reactions to AI. It was also examine how gender differences in mental health among college students. The study was involved 200 college students and is utilized a two-group design to investigate the differences in mental health between students with positive and negative attitudes towards AI. A t-test was applied to analyze the data. The results indicate a significant difference in the mean mental health scores between college students with positive and negative attitudes towards artificial intelligence and also find out a significant gender difference on mental health of college students. The review concludes with a summary of the major research findings, along with considerations for future directions and implications for practice and policy.

Keywords: Mental Health, Attitude, Artificial Intelligence, Mental Health, College Students.

Introduction

Over the last several decades, AI has grown exponentially, moving from a theoretical notion to a commonplace reality. From the complex algorithms that control social media and healthcare systems to the omnipresent role that smart phones and virtual assistants play in our everyday lives, this technology is pervasive in today's society. The fast development of artificial intelligence has brought about a multitude of advantages, but it has also brought up substantial concerns over the impact it will have on human psychology and the interactions between people. A number of complicated effects on mental health have been linked to artificial intelligence (AI), including emotional shifts, stress, anxiety, and depression, according to research. To give just one example, Twenge and Campbell (2018) state that the use of social media may be linked to an increase in the symptoms of depression and anxiety among adolescents. On the other hand, Primack et al. (2021) demonstrate that excessive use of social media can result in feelings of isolation and a decline in overall mental health.

Mental Health

The complete and harmonious operation of the whole personality is mental health. According to Strange (1965), mental health is just a distribution of learnt behaviours that are socially acceptable and enable people to deal with life in a suitable manner.

As seen from the point of view of the field of positive psychology or holism, the word "mental health" may be used to refer to either a level of cognitive or emotional well-being or the absence of a mental disease. The capacity of a person to take pleasure in life and strike a balance between the activities of daily life and the efforts made to obtain psychological resilience may be considered to be part of their mental health. The ability to successfully adjust to a variety of challenges is a sign of mental health, which is a reflection of our feelings. A state of well-being that is defined by the World Health Organization as mental health is one in which a person is able to recognise his or her own capabilities, is able to deal with the typical stressors of life, is able to work in a productive and fruitful manner, and is able to make a contribution to the community in which he or she lives. Recent years have seen the emergence of a new discipline known as global mental health. This field has been described as the area of study, research, and practice that focuses an emphasis on achieving equality in mental health for all people around the globe and enhancing mental health. Emotional well-being, the ability to live a life that is rich and creative, and the flexibility to cope with the problems that are to be expected in life are all highlighted in the concept of mental health. In the field of mental health, positive psychology is becoming an increasingly significant field.

When we talk about someone's "mental health," we're referring to their degree of emotional and cognitive stability, or the lack of a mental illness. Looking at it through the lens of positive psychology or holism, we can say that someone is mentally healthy if they are able to enjoy life to the fullest, find a good balance in all their aspects of being, and work to build their psychological resilience. Conversely, a mental disease or sickness is defined as an irrational pattern of thinking or behaving that affects a person in a way that is not typical of their culture or developmental stage and is believed to cause them discomfort or impairment. There are many potential sources of this impairment or suffering, but among the most significant is a person's gender, which has a role in both physical and mental health. The gender-specific factors and processes that foster and preserve mental health and generate resilience in the face of stress and hardship have received much less attention than the morbidity linked with mental illness.

The 'World Health Organization' describes "mental health as a state of complete physical, mental, and social well-being and not purely the absence of disease" (WHO, 1948). This implies that all older adults should have their mental health evaluated since it is essential to their overall health. Feelings of inner peace, self-reliance, self-efficiency, and competitiveness make up the idea of mental health.

"Mental health means development of healthy personality which will scientifically try to fight the onset of any Kind of psychological or mental disorder." - J. C. Coleman (1962)

Attitudes toward Artificial Intelligence

As the use of artificial intelligence (AI) becomes more prevalent in everyday life, academics are becoming more interested in gaining a better understanding of the many perspectives regarding AI. (Sindermann et al., 2022) Research carried out in a variety of domains demonstrates that individuals of diverse backgrounds have varying perspectives toward artificial intelligence. There may be a variety of perspectives about artificial intelligence (AI) as a result of the good and bad outcomes that have been encountered after the implementation of AI into everyday life. Adoption of artificial intelligence technology may be influenced by whether or not it is accepted. Individuals are able to be liberated from mundane activities and duties that are repetitious when they make use of generative artificial intelligence (Lacity & Willcocks, 2016). It is possible for people's opinions regarding artificial intelligence to shift in a favourable manner if they raise their level of acceptance and trust, as well as their level of knowledge, education, and analytical abilities. Long and Magerko (2020) state that having a positive mindset may have a favourable impact on artificial intelligence literacy, which is defined as the capacity to comprehend and assess AI ideas within ethical norms. As a result, it is essential to cultivate favourable attitudes and values toward artificial intelligence (AI) systems, particularly with regard to the understanding of AI and the capability to use it. Negative feelings toward artificial intelligence technology may be mitigated by encouraging a more in-depth study of and competency in AI. Additional research has shown that having the ability to read and write in the field of artificial intelligence makes it simpler for individuals to acquire the fundamental skills they need in order to live, study, and work in our digital environment (Steinbauer et al., 2021).

Significant of the Study

In this context, there is a need for study on the psychological adoption of artificial intelligence technologies as well as the technical preparedness of college students. This research is noteworthy because it reveals the association between acceptance of generative artificial intelligence and mental

health, as well as the influence that attitudes regarding artificial intelligence have on the mental health of college students. In accordance with all of this information, the purpose of the present study was to determine whether or not there is a difference between genders in terms of attitude regarding artificial intelligence and mental health.

Methodology

Hypotheses

- “There would be significant different between positive and negative attitude towards artificial intelligence in mental health”.
- “There would be significant different between male and female in mental health”.

Sample

There were a total of two hundred college students who were enrolled in Bachelor of Arts and Master of Arts programs. When there were a total of 200 pupils, there were 100 males and 100 females. A further point to consider is that the students ranged in age from 18 to 26 years old. For the purpose of the research, only typical pupils were included. For the purpose of selecting the participants in the research, a method known as random sampling was used. Students from the government college in Delhi were selected for this study.

Research Design

In order to test the formulated hypotheses a two group comparative research design (positive attitudes towards AI than negative attitudes towards AI) was used. Present study was to examine the difference between mental health of positive attitudes towards AI than negative attitudes towards AI of college students. And also investigate the gender difference on mental health.

Tools

- **“Mental Health Scale”**

Talesara and Bano (2017) created a psychometric scale to assess mental health. It is comprised of 54 things that include three dimensions. By using the Spearman-Brown Formula, it was discovered that the split-half dependability coefficient for the scale, which was based on both odd-even and first half second half splitting, was found to be .72.

- **“The General Attitudes towards Artificial Intelligence Scale (GAAIS)”**

Astrid Schepman and Paul Rodway (2020) created the General Attitudes towards Artificial Intelligence Scale (GAAIS), which will be used to assess attitudes towards artificial intelligence (AI). The GAAIS (2020) consists of twenty items that are divided into two categories: positive general attitudes, which have twelve items, and negative general attitudes, which have eight items. For the purpose of scoring the items, a rating scale of the Likert type with five points is used. During the validation study, the Cronbach alpha values for the two factors were determined to be 0.84 for positive subscales and 0.80 for negative subscales. Both of these values reflected high internal consistency. The Cronbach alpha values for the two factors were 0.88 for positive general attitudes and 0.82 for negative, respectively.

Results & Discussion

Hypothesis: “There would be significant different between positive and negative attitude towards artificial intelligence in mental health”.

Table 1: “Mean, SD and ‘t’-Value for both Positive and Negative Attitude towards AI Groups on Study Measures”

Variables	Group	N	Mean	SD	t-value	P
Mental Health	Negative attitude toward AI	95	12.55	4.951	2.190	<.05
	Positive attitude toward AI	105	17.86	4.549		

According to the findings shown in the table above, it would seem that the mean score of the two groups with a good attitude toward AI was found to be 17.86, while the mean score of the group with a negative attitude was found to be 12.55. According to the findings, the positive attitude toward the artificial intelligence group of college students has been shown to have a greater impact on mental health than the negative attitude toward the AI group of college students. The group of college students who had a positive attitude toward artificial intelligence had a standard deviation of 4.549, whereas the group with a negative attitude toward AI had a standard deviation of 4.951. It was determined that the t-ratio

between the two means was 2.190, which suggests that it was significant beyond the .01 threshold. Based on these findings, it seems that college students who had a good attitude toward artificial intelligence (AI) had much better mental health than those who had a negative attitude toward AI. Because of this, the first hypothesis, which claims that "there would be significant differences between positive and negative attitude towards artificial intelligence in mental health," was shown to be correct by the findings of the research.

Anxiety and fears about job displacement or ethical dilemmas may be caused by unfavourable attitudes about artificial intelligence (AI), whereas positive views are associated to greater self-efficacy and general mental health. Attitudes around AI have a substantial influence on mental health. This might possibly lead to a reduction in stigma and an improvement in mental health outcomes. Applications of artificial intelligence in the field of mental health could bring advantages such as early identification, personalised therapy, and accessible support. An excessive dependence on artificial intelligence, on the other hand, might give rise to worries over social isolation as well as the diminished value of human talents and connections. There are many different aspects that influence an individual's perspective on artificial intelligence and how it affects their well-being. Phenomenal characteristics, psychological aspects such as inner motivation, voluntariness, and performance expectations, and technological aspects such as perceived practicality, ease of use, technology complexity, and relative advantage were identified as predictors of individual attitudes toward artificial intelligence technology in a comprehensive study that was carried out by Park and Woo (2022). According to research conducted by Montag et al. (2023), persons who have a high level of self-efficacy approach interactions with artificial intelligence with confidence. These individuals feel that technology presents them with a chance for advancement rather than a cause of concern. Not only does this receptiveness make it easier for people to embrace artificial intelligence technology, but it also helps users feel a feeling of success and makes them feel better about themselves as they learn new abilities (Latikka et al., 2021).

Hypothesis 2: "There would be significant different between male and female in mental health".

Table 1: "Means, SDs, and SED and results of t-Ratio of Male and Female College Students on Mental Health Variables"

Mental Health	Groups	N	Mean	SD	SED	t	Sig. Level
	Male	100	125.45	6.516	1.636	2.996	<.05
	Female	100	117.28	8.038			

As can be seen from the data shown in table 1, it would seem that the average scores for mental health among college students who were either male or female were determined to be 125.45 and 117.28, respectively. In other words, male college students have achieved a higher score on the mental health scale than their female counterparts. In the case of college students, the standard deviations for males were 6.516, while those for females were 8.038. There was a significant difference between the two means in terms of mental health ratings, as shown by the t-ratio, which was 4.996. Based on these findings, it seems that males in general had a much higher level of mental health than females. Consequently, the findings of the research indicate that the second hypothesis, which indicates that "there would be significant differences between male and female in mental health," was shown to be correct.

It may be concluded that men are much more mentally healthy than females once the t-ratio became significant. Consistent with other studies conducted in England (Fink et al. 2014), we find that females have a greater rise in depression and anxiety than boys do. However, we did not discover a difference in girls' reports of psychological distress between 2008 and 2013, but males' reports showed a decrease. The significance of studying many facets of mental health and how they are differently associated to gender is highlighted by these contradictory findings. Although the exact reasons why males and girls experience adolescent mental health issues differently remain a mystery, some studies have shown that boys may be less likely to admit they have a problem and more likely to act out their problems, leading to more externalising disorders that affect others negatively, like antisocial personality disorder and substance misuse or dependence (Patel et al., 2007). Internalising illnesses, including anxiety and depression, are more common among girls. Gender norms and expectations provide unique challenges for men and women in various cultures, which may explain why boys and girls behave differently. The prevalence of family violence, abuse, and academic performance pressure is higher among girls, and they are also more likely to suffer from emotional sensitivity (Rosenfield & Mouzon, 2007), to ruminate as a coping mechanism, to feel more limited gender roles and body dissatisfaction, and to suffer from stressors involving significant others, such as the death of friends or relatives.

Conclusion

The aim of study was to explore attitudes towards artificial intelligence (AI) and mental health, seeking to uncover patterns that contribute to a deeper understanding of individuals' reactions to AI. It was also examine how gender differences in mental health among college students. The findings reveal that college students' attitudes toward artificial intelligence (AI) play a crucial role in influencing their mental health. This impact is likely due to the support provided by AI-enabled tools and applications that can assist in mental health management. Furthermore, the research highlights significant gender differences in the perception of AI, suggesting that male and female students may have different experiences and concerns regarding these technologies. As a result of these insights, there is a pressing need to develop tailored AI-based mental health resources that specifically address the negative perceptions some students may hold about artificial intelligence. Additionally, creating specialized support systems that consider the unique needs and viewpoints of different genders could enhance the effectiveness of these mental health resources, promoting a more inclusive and supportive environment for all students.

References

1. Coleman, J. C. (1962). Learning method as a relevant subject variable in learning disorders. *Perceptual and Motor Skills*, 14(2), 263-269.
2. Fink, E., Patalay, P., Sharpe, H., Holley, S., Doughton, J., & Wolpert, M. (2015). Mental health difficulties in early adolescence: a comparison of two cross-sectional studies in England from 2009 to 2014. *Journal of Adolescent Health*, 56(5), 502-507.
3. Lacity, M. C., & Willcocks, L. P. (2016). A new approach to automating services. *MIT Sloan Management Review*, 58(1), 41-49.
4. Long, D., & Magerko, B. (2020, April). What is AI literacy? Competencies and design considerations. In *Proceedings of the 2020 CHI conference on human factors in computing systems* (pp. 1-16).
5. Park, J., & Woo, S. E. (2022). Who likes artificial intelligence? Personality predictors of attitudes toward artificial intelligence. *The Journal of psychology*, 156(1), 68-94.
6. Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet*, 369(9569), 1302-1313.
7. Primack, B. A., Shensa, A., Sidani, J. E., Escobar-Viera, C. G., & Fine, M. J. (2021). Temporal associations between social media use and depression. *American journal of preventive medicine*, 60(2), 179-188.
8. Rosenfield, S., & Mouzon, D. (2007). Gender and mental health. *Handbook of the sociology of mental health*, 277-296.
9. Schepman, A., & Rodway, P. (2020). Initial validation of the general attitudes towards Artificial Intelligence Scale. *Computers in human behavior reports*, 1, 100014.
10. Sindermann, C., Yang, H., Elhai, J. D., Yang, S., Quan, L., Li, M., & Montag, C. (2022). Acceptance and Fear of Artificial Intelligence: associations with personality in a German and a Chinese sample. *Discover Psychology*, 2(1), 8.
11. Steinbauer, G., Kandlhofer, M., Chklovski, T., Heintz, F., & Koenig, S. (2021). A differentiated discussion about AI education K-12. *KI-Künstliche Intelligenz*, 35(2), 131-137.
12. STRANGE, S. (1965). A Guide to Recent Publications in the Soci. *Hypothesis*, 27, 776-796.
13. Talesara, S., & Bano, A. (2017). Mental health scale (MHS). National Phycological Corporation. UG-1, Nirmala Heights, Near Mental Hospital, Agra-282007
14. Twenge, J. M., & Campbell, W. K. (2018). Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventive medicine reports*, 12, 271-283
15. World Health Organization. (1948). Manual of the international statistical classification of diseases, injuries, and causes of death: sixth revision of the international lists of diseases and causes of death, adopted 1948.

