Swami Vivekananda Advanced Journal for Research and Studies
Online Copy of Document Available on: www.svajrs.com
ISSN:2584-105X Pg. 15 - 18

IMPACT OF ATTITUDE TOWARDS ARTIFICIAL INTELLIGENCE ON PSYCHOLOGICAL WELL-BEING AMONG COLLEGE STUDENTS

Dr. Rabab Fatma
Assistant Professor, Department of psychology, SNSRKS COLLEGE, SAHARSA, BNMU

Accepted: 01/08/2025
Published: 05/08/2025

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 well-being, seeking to uncover patterns that contribute to a deeper understanding of individuals' reactions to AI. It will also examine how individual differences, such as gender and attitudes toward artificial intelligence, play a role in these reactions. The study will involve 200 college students and will utilize a two-group design to investigate the differences in psychological well-being between students with positive and negative attitudes towards AI. A t-test will be applied to analyze the data. The results indicate a significant difference in the mean psychological well-being scores between college students with positive and negative attitudes towards artificial intelligence. The review concludes with a summary of the major research findings, along with considerations for future directions and implications for practice and policy.

Keywords: *Psychological well-being, Attitudes towards Artificial Intelligence and College students etc.*

Introduction:

In recent decades, artificial intelligence (AI) has experienced remarkable growth, transitioning from the realm of theoretical concepts to everyday reality. Today, this technology plays a ubiquitous role in modern society, shaping our daily lives through various applications, from smart phones and virtual assistants to sophisticated algorithms governing social media and healthcare systems. The rapid advancement of AI brings numerous benefits but also raises significant questions about its effects on human psychology and social relationships. Research indicates that AI can have complex consequences on mental health, including emotional changes, stress, anxiety, and depression. For instance, Twenge and Campbell (2018) point out that social media use may be associated with increased symptoms of depression and anxiety among adolescents, while Primack et al. (2020) reveal that excessive social media use can lead to feelings of loneliness and a decline in overall mental health.

Psychological well-being:

Having a happy life is essential to a person's mental health. Combination of feeling well and working well is what it's all about. Emotional pain (e.g., disappointment, failure, sadness) is a natural part of life, and the ability to handle these unpleasant or painful emotions (such as self-awareness) is crucial for long-term happiness. A person's psychological well-being is jeopardized, on the other hand, if their negative feelings are very intense or persistent, making it difficult for them to go about their regular activities.

Feeling good encompasses more than just happiness and contentment; it also encompasses a wide range of positive feelings including curiosity, involvement, trust, and affection. Being able to function well (from a psychological standpoint) means realizing one's potential, gaining a sense of agency in one's life, pursuing meaningful endeavors, and cultivating meaningful connections.

In recent years, the research literature has witnessed an exciting transition from an emphasis on illness and dysfunction to an emphasis on well-being and good mental health. Recent psychological studies have shown that this paradigm shift is particularly pronounced. Epidemiologists, social scientists, economics, and policymakers have all taken notice. "A condition of total physical, mental and social well-being and not only the absence of sickness or disability" is defined in the World Health Organization's constitution. "A condition of well-being in which the individual realizes his or her strengths, can cope with the usual pressures of life, can work successfully and fruitfully and is able to make a contribution to his or her community" is how the WHO defines good mental health.

Attitudes toward artificial intelligence:

Given the increasing incorporation of AI into daily life, researchers have become more eager to understand differences in attitudes toward AI. Studies conducted in different fields show that there are individual differences in attitudes toward AI (Sindermann et al., 2022) Differences in attitudes toward AI may arise from the positive and negative consequences experienced after the introduction of AI into daily life. The acceptance or rejection of AI technology may impact its adoption. The use of generative AI allows people to be freed from routine activities and repetitive tasks (Lacity & Willcocks, 2016). Greater acceptance and trust, combined with an increase in knowledge, education, and analytical skills, can turn people's attitudes toward AI in a positive direction. A positive attitude can positively affect AI literacy, known as the ability, to understand and evaluate AI concepts within ethical standards (Long & Magerko, 2020). Therefore, it is important to create positive attitudes and values toward AI systems in terms of the knowledge of AI and the ability to use it. Promoting a deeper understanding and proficiency in AI can reduce negative sentiment around AI technology. Further studies have shown that AI literacy skills make it easier for people to have the basic abilities they need to live, learn, and work in our digital world through these technologies (Steinbauer et al., 2021).

Significant of the study:

In this context, there is a need for research on college students' technological readiness and psychological adoption of AI technologies. This study is important for understanding impact of attitudes towards artificial intelligence on psychological well-being in college students and revealing the relationship between generative AI acceptance and psychological well-being. In line with all this information, the aim of the current research is to examine the relationship between attitudes toward AI on psychological well-being.

Hypothesis: There would be significant different between positive and negative attitude towards artificial intelligence in psychological well-being.

Sample:

Data was collected on a total of 200 college students studying in B.A and M.A classes. Out of 200 students there were 100 boys and 100 girls. Further the age range of the students was 18 to 26 years of age. Only normal students were included in the study. A random sampling technique was used to select the respondents of the study. The students were taken from govt. college of Bihar.

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 psychological well-being of positive attitudes towards AI than negative attitudes towards AI of college students.

Tools:

Psychological well-being Scale:

Psychological well-being was measured by using (Verma & Verma,1989). PGI General Well Being Measure consists of 20 items. The respondents were asked to tick the statement with which they agreed. Counting the number of ticks gave the total score of respondent. The score range from 0 to 20. The scale is in English but its Hindi version is also available by Moudgil, Verma, Kaur and Pal(1986).

Reliability: The split-half coefficient of reliability was measured by Kuder- Richardson(20) formula and was found to be 0.98 ($p<0.01$) (Verma. Dubey and Gupta, 1983), test-retest reliability was 0.91 ($p<0.01$) for the Hindi version.

Validity: It was found to have satisfactory validity and high significant reliability i.e. K.R. 98 and discriminative value. The test was correlated with a number of tests in different studies. The scale showed relative independence of other variables as expected but showed significant relations with another well-being scale, with quality of life scale and to some extent with learned helplessness (Verma, et al., 1983)

The General Attitudes towards Artificial Intelligence Scale (GAAIS):

The General Attitudes towards Artificial Intelligence Scale (GAAIS) developed by Astrid Schepman and Paul Rodway (2020) will be employed to measure attitudes towards AI. GAAIS (2020) includes 20 items within two factors, positive general attitudes with 12 items and negative general attitudes with eight. A five-point Likert-type rating scale is used to rate the items. The Cronbach alpha values for the two factors were 0.88 for positive and 0.82 for negative general attitudes in validation research while they were calculated as 0.84 for positive and 0.80 for negative subscales, both of which represented good internal consistency.

Results and Discussion:

TABLE: 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
Psychological Well-being	Negative attitude toward AI	95	12.55	4.951	2.190	<.05
	Positive attitude toward AI	105	17.86	4.549		

From the results given in the above table it appears that the mean score of two groups positive and negative attitude towards AI group were found to be 17.86 and 12.55 respectively. It means that Positive attitude toward AI group of college students have obtained more mean psychological well-being than negative attitude toward AI group of college students. The standard deviations for male and female school students were 4.549 and 4.951 respectively. The t-ratio between the two means came to be 2.190 which was significant beyond .01 level. These finding suggest that positive attitude toward AI group of college students had significantly better psychological health than negative attitude toward AI group of college students. Hence, the hypothesis-1 which states that "there would be significant different between positive and negative attitude towards artificial intelligence in psychological well-being." was proved true by the finding of the study.

Attitudes towards AI significantly impact psychological well-being, with positive attitudes being linked to increased self-efficacy and overall well-being, while negative attitudes can lead to

anxiety and concerns about job displacement or ethical issues. AI applications in mental health can offer benefits like early detection, personalized treatment, and accessible support, potentially reducing stigma and improving mental health outcomes. However, excessive reliance on AI can also raise concerns about social isolation and the erosion of human skills and relationships. Various factors shape an individual's attitudes towards AI and their contribution to well-being. In a comprehensive study conducted by Park and Woo (2022), personality traits; psychological elements such as inner motivation, voluntariness, and performance expectations; and technological factors like perceived practicality, ease of use, technology complexity, and relative advantage were identified as predictors of individual attitudes towards AI technology. Studies indicate that individuals with high self-efficacy approach AI interactions with confidence, perceiving technology as an opportunity for growth rather than a source of anxiety (Montag et al., 2023). This receptiveness not only facilitates AI technology adoption but also contributes to a sense of accomplishment and well-being as users master new skills (Latikka et al., 2021).

References:

Iftikhar, P., Kuijpers, M. V., Khayyat, A., Iftikhar, A., & De Sa, M. D. (2020). Artificial intelligence: a new paradigm in obstetrics and gynecology research and clinical practice. *Cureus*, *12*(2).

Lacity, M. C., & Willcocks, L. P. (2016). A new approach to automating services. *MIT Sloan Management Review*, *58*(1), 41-49.

Latikka, R., Rubio-Hernández, R., Lohan, E. S., Rantala, J., Nieto Fernández, F., Laitinen, A., & Oksanen, A. (2021). Older adults' loneliness, social isolation, and physical information and communication technology in the era of ambient assisted living: A systematic literature review. *Journal of medical Internet research*, *23*(12), e28022.

Montag, C., Kraus, J., Baumann, M., & Rozgonjuk, D. (2023). The propensity to trust in (automated) technology mediates the links between technology self-efficacy and fear and acceptance of artificial intelligence. *Computers in Human Behavior Reports*, *11*, 100315.

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.

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.

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.

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.

Verma, S. K., & Verma, A. (1989). P G I General Well Being Measure. Ankur psychological agency.

Verma, S. K., Dubey, B. L., & Gupta, D. (1983). PGI General Well Being Scale: Some correlates. *Indian Journal of Clinical Psychology*.

****