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Original Article

AI ATTITUDE, PSYCHOLOGICAL WELL BEING AND PERCEIVED STRESS AMONG COLLEGE STUDENTS

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Abstract:

The present study aimed to examine the relationship between artificial intelligence attitude, psychological well-being, and perceived stress among college students, and to study gender differences in these variables. A correlational research design was adopted for the study. The sample consisted of 80 college students aged 18–25 years for correlation analysis, while 80 students (40 male and 40 female) were selected for gender comparison using the t-test. The participants were selected through convenience sampling from colleges in Kolhapur, Maharashtra. Data were collected using the Artificial Intelligence Attitude Scale, Psychological Well-Being Scale, and Perceived Stress Scale. Pearson's product moment correlation coefficient and t-test were used for statistical analysis. The findings revealed a positive relationship between attitude toward artificial intelligence and psychological well-being, and a negative relationship between attitude toward artificial intelligence and perceived stress. The results further indicated that there were no significant gender differences in,artificial intelligence attitude, psychological well-being, and perceived stress among college students.

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Introduction:

In today's world, technological development has become one of the strongest forces affecting human life. Among modern technologies, Artificial Intelligence (AI) has obtained special importance due to its vast use in education, healthcare, industry, and daily activities. Artificial intelligence means the ability of machines or computer systems to perform tasks that normally require human intelligence, which includes learning, reasoning, problem-solving, and decision-making. John McCarthy first introduced the term artificial intelligence (1956),

which states it as the science and engineering of making intelligent machines. In recent years, AI has moved ahead of technical fields. It has become an important part of everyday life through smartphones, digital assistants, recommendation systems, and educational platforms.

College students are using AI-based tools more actively. In academic life, students often use AI for note-making, understanding difficult concepts, completing assignments, preparing for examinations, language translation, and managing time. Commonly used applications by students are ChatGPT, AI-based learning platforms, automated evaluation systems, and mental health support apps. These tools provide convenience, save time, and improve academic efficiency. However, their increased use has raised important psychological concerns related to students' which includes thinking patterns, emotional well-being, stress levels, and dependence on technology. It is important to understand how students psychologically experience and respond to it as it has become an important part of education.

The relationship between humans and technology is not only practical but also emotional and cognitive by a psychological point of view. Technology impacts attention, memory, motivation, emotions, and decision-making abilities. Excessive or uncritical use may lead to problems such as reduced independence, mental overload, and emotional pressure even though it supports in learning and productivity. Artificial intelligence is unique from earlier technologies because it replicates human intelligence, which affects how individuals judge their own abilities. College students, dealing with academic pressure, identity development, and future career concerns, interaction with intelligent systems can have a strong psychological impact.

Attitude towards artificial intelligence is one of the important psychological variable considered in AI usage. Attitude means to individual's tendency to evaluate an object, idea, or situation positively or negatively. According to Allport (1935), attitude is a mental and neural state of readiness, shaped by experience, which influences a person's responses to related objects or situations. Students' beliefs about AI, their emotional reactions to it, and their willingness to use or avoid AI-based technologies are included in Attitude towards AI. Students' attitudes are influenced by factors such as perceived usefulness of AI, trust in technology, ethical concerns, fear of dependency, and awareness of its limitations.

How students use these tools in academic and personal life plays an important role in their attitudes toward AI. A positive attitude toward artificial intelligence may increase curiosity, confidence, adaptability, and effective learning strategies. Students with favourable attitudes may view AI as a helpful tool that reduces workload and improves understanding. On the other hand, a negative attitude toward AI may be connected with fear, resistance, anxiety, or excessive dependence, which may results in reduced self-confidence and increase academic stress. Therefore, it is an important factor for understanding students' psychological experiences in modern education.

Psychological well-being refers to an individual's whole emotional and psychological functioning and the extent to which a person experiences fulfillment, purpose, and positive functioning in life. According to Ryff (1989), psychological well-being is a multidimensional construct consisting of six dimensions: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth. Ryff and Keyes (1995) emphasized that psychological well-being represents

positive mental health and is essential for resilience, emotional stability, and adaptive functioning. College students experience better academic performance, coping strategies, and life satisfaction when they have higher psychological well-being.

Perceived stress focuses on the interpretive analysis of life events as stressful. Cohen, Kamarck, and Mermelstein (1983) defined perceived stress as the degree to which individuals appraise situations in their lives as unpredictable, uncontrollable, and overwhelming.

High perceived stress has been linked to anxiety, depression, emotional exhaustion, and decreased psychological well-being among students (Misra& McKean, 2000; Beiter et al., 2015) College students often experience high levels of perceived stress due to academic demands, time pressure, performance expectations, and future uncertainty. The increasing use of artificial intelligence in education has resulted in new sources of stress, such as fear of technological replacement, comparison with peers who use AI more effectively, ethical concerns, and information overload. Students who view AI as threatening may experience higher stress, whereas those who see it as supportive may experience lower stress.

The relationship between attitude towards artificial intelligence, psychological well-being, and perceived stress is an emerging area of psychological research

Literature review:

Allport (1935) proposed attitude theory, explaining that attitudes are learned predispositions that influence an individual's thoughts, emotions, and behaviours. He suggested that positive attitudes facilitate openness, adaptability, and constructive engagement, whereas negative attitudes are associated with fear, resistance, and avoidance. This theoretical framework provides a basis for understanding how students' attitudes toward emerging technologies, such as artificial intelligence, may influence their academic behaviour and emotional responses.

Ryff (1989) conceptualized psychological well-being as a positive indicator of mental health and introduced a multidimensional model consisting of autonomy, environmental mastery, self-acceptance, personal growth, positive relations, and purpose in life. Her findings indicated that individuals with higher psychological well-being demonstrated better emotional regulation, greater self-acceptance, and a stronger sense of purpose, contributing to emotional stability and healthy psychological functioning.

Ryff and Keyes (1995) further examined psychological well-being and reported that higher levels of well-being were strongly associated with effective coping and resilience. Their study suggested that individuals with higher psychological well-being were better able to manage life stressors, maintain emotional balance, and adapt to challenging situations, highlighting well-being as a protective factor against psychological distress.

Cohen, Kamarck, and Mermelstein (1983) conducted a foundational study on perceived stress and found that individuals who reported higher perceived stress experienced greater emotional distress and weaker psychological functioning. Their findings emphasized that subjective appraisal of stress plays a central role in influencing mental health outcomes, and perceived stress was identified as a significant predictor of reduced psychological well-being.

Misra and McKean (2000) examined academic stress among college students and found that high academic demands and poor time management were significantly associated with increased stress and reduced psychological adjustment. Their results indicated that students experiencing higher stress levels reported lower satisfaction with life and

poorer emotional well-being, identifying academic stress as a major contributor to psychological strain in college populations.

Extremera and Rey (2014) investigated the relationship between perceived stress, emotional regulation, and psychological well-being and found that perceived stress was negatively related to psychological well-being. Their findings also suggested that emotional regulation acted as a protective factor, as students with better emotion regulation skills experienced fewer negative effects of stress on their overall well-being.

Deb, Strodl, and Sun (2015) studied academic stress and psychological well-being among students and found that academic stress significantly predicted psychological distress and reduced well-being. Their findings highlighted that excessive academic pressure negatively influenced emotional health and life satisfaction.

Shukla and Srivastava (2016) examined perceived stress among college students and reported that higher levels of perceived stress were associated with lower psychological well-being, particularly in the dimensions of self-acceptance and purpose in life. Their results further supported the negative impact of stress on students' mental health.

Recent research on artificial intelligence in educational settings has indicated that students' attitudes toward AI are closely associated with psychological outcomes. Studies suggest that students who perceive AI as supportive and beneficial experience lower perceived stress and better coping, whereas those who view AI as threatening or fear technological replacement report higher stress levels. Despite increasing interest in this area, limited research has examined the combined relationship between attitudes toward artificial intelligence, psychological well-being, and perceived stress, particularly among Indian college students. This gap in the literature provides the rationale for the present study.

Aim of the study:-

To study the relationship between the artificial intelligence attitudes, psychological well-being, perceived stress, and this also investigates how these variables differ by gender among college students.

Objectives:-

1. To study the correlation between artificial intelligence attitudes and psychological well-being
2. To study the correlation between artificial intelligence attitudes and perceived stress.
3. To study the correlation between psychological well- being and perceived stress.
4. To study the difference between male and female college students in artificial intelligence attitudes
5. To study the difference between male and female college students in psychological well- being.
6. To study the difference between male and female college students in perceived stress.

Hypotheses:

1. There will be a significant correlation between artificial intelligence attitudes and psychological well-being among college students.
2. There will be a significant correlation between artificial intelligence attitudes and perceived stress among college students.
3. There will be a significant difference between male and female college students in artificial intelligence attitudes.
4. There will be a significant difference between male and female college students in psychological well-being.
5. There will be a significant difference between male and female college students in perceived stress.

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Methodology:

Participants:

The sample included 80 students aged 18-25 chosen through a convenience sampling technique. Participation was voluntary. The participants were briefed about the study prior to data gathering.

Tools used:

1. Artificial intelligence attitude scale : Attitude toward artificial intelligence was measured using the Artificial Intelligence Attitude Scale developed by AktayGok and Yildirim (2024). The scale consists of 13 items rated on a 5-point Likert scale from Strongly Disagree to Strongly Agree. Higher scores indicate a more positive attitude toward artificial intelligence. The scale shows acceptable reliability ($\alpha = 0.78$) and adequate construct validity, making it suitable for research use.

2. Psychological Well-Being Scale (18-item): Psychological well-being was assessed using the 18-item Psychological Well-Being Scale developed by Carol D. Ryff (1989). The scale uses a 6-point Likert scale ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). Higher scores reflect higher psychological well-being. The scale has shown acceptable internal consistency ($\alpha \approx 0.70–0.80$) and good construct validity in research studies.

3. Perceived Stress Scale (PSS-10): Perceived stress was measured using the Perceived Stress Scale (PSS-10) developed by Cohen, Kamarck, and Mermelstein (1983). The scale consists of 10 statements rated on a 5-point Likert scale ranging from 0 (Never) to 4 (Very Often). Higher scores indicate higher perceived stress. The scale has demonstrated good reliability with Cronbach's alpha values around 0.78–0.86 and established validity across diverse populations.

Procedure:

After obtaining informed consent, the tests were given to the participants. Clear instructions were given, and participants were requested to respond honestly. The responses were collected and scored according to the respective scoring manuals.

Table No. 1 Correlation between AI Attitude Psychological WB and PSS among College Students

	AI Attitude	Psychological WB	PSS
AI Attitude	1.000		
Psychological WB	.002**	1.000	-
PSS	-.003**	-	1.000

**. Correlation is significant at the 0.01 level *. Correlation is significant at the 0.05 level

Table No. 1 shows the correlation between Attitude toward Artificial Intelligence, Psychological Well-Being (WB), and Perceived Stress (PSS) among college students. The results show a positive and statistically significant relationship between AI attitude and psychological well-being ($r = .002$, $p < .01$), suggesting that students with a more favourable attitude toward AI tend to report slightly better well-being. Further, AI attitude is negatively and significantly correlated with perceived stress ($r = -.003$, $p < .01$), indicating that a positive attitude toward AI is associated with lower stress levels. Overall, although the correlations are very small, they are statistically significant, showing a meaningful association among the variables.

Table No. 2 Mean , SD , and 't' value showing difference in gender, for Psychological WB and PSS

Variable	**Gender**	**N**	**Mean**	**SD**	**Df**	**"t"**
AI Attitude	Male	40	**40.8**	**6.92**	**78**	**1.03NS**
	Female	40	**39.27**	**6.24**		

Psychological WB	Male	40	**80.45**	**14.22**	**78**	**0.87NS**
	Female	40	**14.22**	**8.33**		
PSS	Male	40	**19.75**	**5.67**	**78**	**0.70NS**
	Female	40	18.97	4.21		

****Significant at 0.01 level, *significant at 0.05 level, NS- Not significant**

Table shows the Mean, SD, and t value showing difference in gender for Attitude toward Artificial Intelligence, Psychological Well-Being, and Perceived Stress among college students.

Attitude toward Artificial Intelligence indicates Mean, SD, and t value showing difference in gender for attitude toward artificial intelligence. Mean value of male college students is 40.8 with 6.92 SD. Mean value of female college students is 39.27 with 6.24 SD. The df is 78. The obtained t value is 1.03, which is statistically not significant. The results indicate that male and female college students do not differ significantly in their attitude toward artificial intelligence. Hence, Hypothesis 3 is rejected.

Psychological Well-Being indicates Mean, SD, and t value showing difference in gender for psychological well-being. Mean value of male college students is 80.45 with 14.22 SD, while female college students show comparable psychological well-being. The df is 78. The obtained t value is 0.87, which is statistically not significant. The results indicate that male and female college students do not differ significantly in their psychological well-being. Hence, Hypothesis 4 is rejected.

Perceived Stress (PSS) indicates Mean, SD, and t value showing difference in gender for perceived stress. Mean value of male college students is 19.75 with 5.67 SD. Mean value of female college students is 18.97 with 4.21 SD. The df is 78. The obtained t value is 0.70, which is statistically not significant. The results indicate that male and female college students do not differ significantly in perceived stress. Hence, Hypothesis 5 is rejected.

Conclusion:

The present study was conducted to examine the attitude toward artificial intelligence, psychological well-being, and perceived stress among college students, and to explore gender differences in these variables. The findings revealed that attitude toward artificial intelligence showed a positive relationship with psychological well-being and a negative relationship with perceived stress, indicating that students with a more favourable attitude toward AI tend to experience better well-being and lower stress levels. However, the t-test results showed that there were no significant gender differences in attitude toward artificial intelligence, psychological well-being, and perceived stress among male and female college students. These findings suggest that both male and female students experience similar levels of well-being, stress, and attitudes toward AI. Overall, the study highlights the growing relevance of artificial intelligence in students' lives and its association with psychological functioning, emphasizing the need for awareness and responsible use of AI in the academic context.

Limitations:

The present study has few limitations. The present study was limited to a small sample size. This may affect the strength of findings. This study is also limited to self-report measure only. This may have influence the responses. Limited numbers of variables- artificial intelligence attitude,

psychological well-being and perceived stress were examined. The study was restricted to specific age group (18-25), which may have influenced the results.

Suggestions:

Future research can be conducted with a larger and more divers sample to enhance the generalizability of the findings. As the present study was limited to college students from Kolhapur city, future study may include participants from different cities , regions , or states. Longitudinal research may help in understanding changes in psychological well-being and perceived stress over time. Additionally inclusion of variables such as coping strategies, social support or academic stress may provide a broader understanding of students' mental health.

References:

1. Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), Handbook of social psychology (pp. 798–844). Clark University Press.
2. Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., &Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. Journal of Affective Disorders, 173, 90–96.
3. Cohen, S., Kamarck, T., &Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24(4), 385–396.
4. Lazarus, R. S., &Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.
5. McCarthy, J. (1956). Proposal for the Dartmouth summer research project on artificial intelligence. AI Magazine, 27(4), 12–14.
6. Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. American Journal of Health Studies, 16(1), 41–51.
7. Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57(6), 1069–1081.
8. Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. Journal of Personality and Social Psychology, 69(4), 719–727.
9. Aktay, S., Gök, S., &Yıldırım, A. (2024). Artificial intelligence attitude scale. International Technology and Education Journal, 8(2), 14–24.
10. Nair, S., &Palsetia, S. (2025). A correlational study on attitudes towards artificial intelligence (AI) and anxiety in employees working in IT industry. International Journal of Indian Psychology, 13(2), 4706–4713. PDF version.
11. Fritz, B., Eppelmann, L., Edelmann, A., Rohrmann, S., &Wessa, M. (2025). How mental health status and attitudes toward mental health shape AI acceptance in psychosocial care: A cross-sectional analysis. BMC Psychology, 13, Article 617
12. Nair, S., &Palsetia, S. (2025). A correlational study on attitudes towards artificial intelligence (AI) and anxiety in employees working in IT industry. International Journal of Indian Psychology, 13(2), 4706–4713.