The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 14, Issue 1, January- March, 2026
DIP: 18.01.253.20261401, DOI: 10.25215/1401.253
https://www.ijip.in

Research Paper

AI Dependence and Its Relationship with Physical, Social, Mental, Emotional and Spiritual Well-Being

Archita Verma[1]*, Dr. Deepa Pandey[2]

ABSTRACT

Artificial Intelligence has become a regular part of the daily life, especially for young adults. Many students and young people now use AI tools for studying, problem solving to express themselves emotionally, and for daily guidance. while AI makes life easier, but growing dependence on AI may influence different areas of well-being. the present study examined the relationship between AI dependence and overall well-being among young adults aged 18 to 26 years. a total of 107 participants were included in the study. The AI Dependence Scale was used to measure dependence on AI, and a standardized Well-Being Scale was used to assess the well-being and its domain like physical, emotional, social, spiritual, and mental well-being. Pearson correlation analysis showed a statistically significant weak negative relationship between AI dependence and overall well-being ($r = -0.251$, $p = 0.009$). the findings suggest that higher levels of AI dependence are associated with lower levels of well-being. the study highlights the importance of understanding how increasing reliance on AI may influence the overall health of young adults.

Keywords: *Artificial Intelligence, AI Dependence, Well-Being, Young Adults, Correlation*

Nowadays artificial intelligence or AI permeates every aspect of daily life AI tools are used nearly daily by many young adults. They use them to write assignment and get fast answers. The occasionally even use them to express their opinions. AI systems are getting more intelligent and user friendly. People are gradually growing accustomed to relaying on them as a result. AI is helpful in many ways it can save time it can explain things clearly it can even give suggestion when someone feels confused but at the same time some researchers have said that using AI too much may not always be good. Klimova & Pikhart (2025) explained that why AI supports student too much use can reduce real life interaction and may increase feelings of loneliness. Several researchers have discussed both the benefits and possible concern related to AI use.

Klimova and Pikhart 2025 reported that AI tools can improve learning efficiency and help students perform better academically. Students often find AI helpful for organizing content and clarifying complex information. however, the authors also pointed out that excessive reliance on AI may reduce face to face interaction in social engagement. 10 students depend

[1]Student, Amity University, Uttar Pradesh, India
[2]Associate Professor, Amity University, Uttar Pradesh, India
*Corresponding Author

Received: March 10, 2026; Revision Received: March 27, 2026; Accepted: March 31, 2026

more on AI system than on teachers or peers, it may gradually affect their social experiences.

Similarly, Ahmad et al. (2023) Examined The effect of AI reliance on decision making. their findings suggested that heavy dependence on automated system may reduce independent thinking. When individuals frequently rely on AI generated answer, they may put less effort into analyzing problems on their own., over time This may influence critical thinking and judgment abilities.

Ali, Gracia and Vadsaria (2024) Examined the wider impact of AI dependency and suggested that extended use of AI based system may gradually influence both mental and physical functioning. their finding indicated that long hours of screen engagement and reliance on automated system could be linked with mental strain and lower levels of physical activity finding. This highlights that AI dependence may go beyond academic or cognitive outcome and may also relate to broader aspect of Well-being.

Similarly, Zhai, Wibowo and Li (2024) Reviewed the use of AI dialogue system in the educational setting., while they reported that such system can improve learning efficiency and provide academic support, they also cautioned against excessive reliance. according to their review when students depend to heavily on AI generated responses, they may engage less in independent thinking and deeper reflection. This suggests that over dependence on AI tools could affect not only learning patterns but also cognitive engagement.

In a related context, Dr. A. Udaya Shankar et al. (2023) Conducted an empirical study to explorer how artificial intelligence is affecting mental health, behaviors, End over all well-being. Their work further supports the idea that AI use carries both potential benefits and possible psychological concerns, depending on how it is integrated into daily life. their study showed AI based tools such as chatbots, therapy applications, and personalized support systems Are making mental health services more accessible and affordable. they discussed how AI can provide continuous support and assist in every identification of mental health concern through data-based insights. at the same time, they also raised search concerns. issues like privacy risk, possible bias in algorithms, over reliance on digital systems, reduced human interaction and ethical challenges we are highlighted. The authors clearly suggested that AI does not have purely positive or negative impact., instead, it's effect depends on how frequently and in what way it is used.

In similar direction, lopes (2024) examined How AI powered chat bots Can support mood improvement and emotional well-being. The study focused on conversational AI tools that interact with users and provide psychological assistance. The findings suggested that AI-based chatbots can support people in managing their emotions, especially when immediate help is needed. They may guide users with simple coping steps and provide a space to express feelings. At the same time, the researchers noted that these systems cannot truly replace human connection. Real empathy, emotional warmth, and understanding from another person are difficulty to replicate through technology. Because of this relying too much on AI tools for emotional support may raise concern over time. When these studies are looked at together, it became clear that AI is gradually becoming part of peoples everyday psychological lives. it can be helpful and convenient, but it also brings certain risks. many existing studies focus on areas such as academic performance, productivity, or short terms emotional assistance.

However fewer researcher has treated AI dependence itself as a psychological issue. Even fewer have explored how it connects with different dimensions of well-being at the same time. Well- being itself is a wide and complex concept. It is not only about physical health. it also includes emotional balance, the quality of social relationships, mental stability, and personal sense of meaning or purpose. All these areas work together to influence how satisfied a person feels with life.

there are still limited research test studies how dependence on artificial intelligence systems related to all these dimensions together, especially among young adults. The age group off 18 to 26 years is an important developmental phase. During This Period, individuals are forming identity, building relationships, managing academic and career goals, and developing emotional independence. because of this, understanding how artificial intelligence dependence connects with different aspects of wellbeing in this group becomes meaningful. Keeping these gaps in mind, the present study seeks to understand how artificial intelligence dependence is related to different areas of wellbeing among young adults. a correlational design was used to examine whether individuals who report higher level of dependence on artificial intelligence tools also showed difference in their overall wellbeing, as well as in specific areas such as physical, emotional, social, mental, and spiritual well-being.

Objectives of the Study

The present study was conducted with the following objectives:

1. To examine the relationship between AI dependence and overall well-being among young adults.
2. To explore the relationship between AI dependence and different dimensions of well- being, including physical, social, emotional, mental, and spiritual well-being.
3. To understand whether higher levels of AI dependence are associated with changes in specific areas of well-being.

METHODOLOGY

- **H1 (Research Hypothesis):** There will be a significant relationship between AI dependence and overall well-being among young adults. This means that the level to which young adults depend on AI tools is expected to be connected to their overall well-being. In other words, changes in AI dependence may be associated with changes in how individuals feel about their physical, emotional, social, mental, and spiritual health taken together as a whole.
- **H0 (Null Hypothesis):** There will be no significant relationship between AI dependence and overall well-being among young adults. This means that the level of dependence on AI tools will not have any measurable connection with their overall well-being. Any difference observed between AI dependence and well-being would be due to chance and not because the two variables are actually related.

METHOD

Participants

The study was conducted on a sample of 107 young adults. The age range of the participants was between 18 and 26 years. Participants were selected using a convenience sampling method. Both male and female participants were included in the study. All participants voluntarily agreed to take part in the research. Before data collection, they were informed

about the purpose of the study and were assured that their responses would remain confidential and used only for academic purposes.

Measures

To assess AI dependence, the AI Dependence Scale was used. This scale measures the extent to which individuals rely on AI tools in their daily academic and personal activities. Higher scores on the scale indicate greater dependence on AI systems.

Well-being was measured using the Well-Being Scale, which assesses five domains of well-being: physical, emotional, social, spiritual, and mental well-being. The scale provides scores for each domain as well as a total well-being score. Higher scores indicate better well-being.

Both tools used in the study have been reported to have acceptable reliability and validity in previous research.

Procedure

Data were collected through online and offline modes. Participants were provided with the questionnaire, which included demographic details, the AI Dependence Scale, and the Well-Being Scale. They were instructed to read each statement carefully and respond honestly. It took approximately 15–20 minutes to complete the questionnaire. Participation was voluntary, and no personal identifying information was collected.

Statistical Analysis

The collected data were analyzed using Pearson's product–moment correlation. This statistical method was used to examine the relationship between AI dependence and overall well-being, as well as its individual domains. The level of significance was set at 0.05.

RESULT ANALYSIS

The descriptive results provide a general overview of the participants' scores. The average level of AI dependence in the sample was 23.62 (SD = 8.96), suggesting noticeable differences in how much individuals relied on AI tools. In terms of well-being, participants reported average scores of 35.71 (SD = 5.20) for physical well-being, 18.58 (SD = 4.12) for social well-being, 36.85 (SD= 4.88) for emotional well-being, 32.28 (SD = 3.61) for mental well-being, and 36.89 (SD = 6.34) for spiritual well-being. The combined well-being score had a mean of 160.31 (SD = 15.87).

To understand whether AI dependence was associated with these outcomes, a Pearson correlation analysis was carried out.

The trend observed for overall well-being did not extend in the same way to all areas. Examining each dimension separately revealed that the relationships were mixed rather than consistent. The strongest pattern appeared in emotional well-being ($r = -.354$, $p < .001$), followed by physical well-being ($r = -.267$, $p = .005$). In both instances, participants who reported higher levels of AI dependence tended to have lower scores in these areas. This pattern may reflect a possible link between greater reliance on AI tools and lower emotional stability as well as reduced physical well-being within the sample.

A different trend emerged for the other domains. The relationship with social well-being was comparatively weak (r = −.184, p = .058) and did not reach statistical significance, suggesting that AI dependence was not clearly related to social functioning in this group. A similar pattern was observed for mental well-being (r = −.081, p = .405) and spiritual well-being (r = .030, p = .762), where the correlations were minimal and not statistically meaningful. In these areas, higher or lower AI dependence did not appear to make a measurable difference within this group.

Taken together, the findings suggest that AI dependence may be connected more strongly with emotional and physical aspects of well-being than with other domains. The connection with overall well-being was evident, but it did not seem to carry over in a meaningful way to the social, mental, or spiritual aspects of well-being among the participants.

	AGE
Valid	
N	107
Missing	0
Mean	21.56
Median	22.00
Std. Deviation	2.075

SEX

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	44	41.1	41.1	41.1
	Female	63	58.9	58.9	100.0
	Total	107	100.0	100.0	

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GenAI	107	11	55	23.62	8.969
Physical WB	107	22	45	35.71	5.202
Social WB	107	9	29	18.58	4.121
Emotional WB	107	21	50	36.85	4.887
Mental WB	107	17	43	32.28	3.615
Spiritual WB	107	19	48	36.89	6.347
Wellbeing	107	105	196	160.31	15.876
Valid N (listwise)	107				

Correlations

		GenAI	Physical WB	Social WB	Emotional WB	Mental WB	Spiritual WB	Wellbeing
GenAI	Pearson Correlation	1	-.267**	-.184	-.354**	-.081	.030	-.251**
	Sig. (2-tailed)		.005	.058	.000	.405	.762	.009
	N	107	107	107	107	107	107	107
Physical WB	Pearson Correlation	-.267**	1	.421**	.424**	.260**	.146	.685**
	Sig. (2-tailed)	.005		.000	.000	.007	.132	.000
	N	107	107	107	107	107	107	107
Social WB	Pearson Correlation	-.184	.421**	1	.372**	.204*	.127	.609**
	Sig. (2-tailed)	.058	.000		.000	.035	.193	.000
	N	107	107	107	107	107	107	107
Emotional WB	Pearson Correlation	-.354**	.424**	.372**	1	.362**	.320**	.754**
	Sig. (2-tailed)	.000	.000	.000		.000	.001	.000
	N	107	107	107	107	107	107	107
Mental WB	Pearson Correlation	-.081	.260**	.204*	.362**	1	.248**	.576**
	Sig. (2-tailed)	.405	.007	.035	.000		.010	.000
	N	107	107	107	107	107	107	107
Spiritual WB	Pearson Correlation	.030	.146	.127	.320**	.248**	1	.636**
	Sig. (2-tailed)	.762	.132	.193	.001	.010		.000
	N	107	107	107	107	107	107	107
Wellbeing	Pearson Correlation	-.251**	.685**	.609**	.754**	.576**	.636**	1
	Sig. (2-tailed)	.009	.000	.000	.000	.000	.000	
	N	107	107	107	107	107	107	107

Correlation is significant at the 0.01 level (2-tailed).
Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

The present study explored how dependence on AI is related to different areas of wellbeing in young adults. The findings indicated that over all well-being and AI dependence had a week but statistically significant negative relationship (r = -.251, p= .009). In other words, participants who reported higher level of reliance on AI tools 10 dead to have slightly lower overall wellbeing. subsequent analysis of the various dimensions of wellbeing showed that AI dependents was negatively correlated with both physical and emotional wellbeing. this suggest that a higher dependence on AI was linked to lowest scores in these two dimensions.

However, no significant relationship was observed between AI dependence and social, mental, or spiritual well-being. in these domains, AI used not appear to show a meaningful statistical association. The negative association between AI dependence and overall well-being suggests net excessive reliance on AI tools may have certain Edward's effect on young adults.

The findings alliance with their study by Shankar et al. (2023), Who reported that although AI provides accessibility and mental health support, Overuse may create concerns related to behavioral dependency, reduced autonomy, and digital over engagement. their study Emphasized that the impact of AI is complex and may include both positive and negative outcomes depending on the extent of use. The present findings support the possibility that higher dependence may shift this balance toward negative well-being outcomes. The significant negative relationship between AI dependence and emotional well-being is particularly important.

Lopes (2024) Highlighted that ail chat bot can support mood regulation and provide emotional assistance. However, the study also noted limitations such as lack of genuine human empathy and possible long term dependency concern. It is possible that while AI tools may provide temporary emotional support, excessive reliance on them may reduce real life emotional processing or interpersonal emotional connection, which could influence emotional well-being. The negative association with physical well-being may be explained by increased screen exposure and reduced physical activity.

Shankar et al. (2023) Also mentioned dad when technology used become excessive, it can slowly start affecting everyday routines and physical habits. spending long hours online may reduce movement and encourage a more sedentary lifestyle. in the case of young adults' frequent reliance on AI tools for assignments, studying, or personal task might mean more time in front of screen.

Overtimes, this Patton could have subtle effect on physical health especially if replaces active habits or regular breaks. at the same time, the present study did not find the significant relationship between AI dependence and social wellbeing. Although earlier research has suggested that high level of digital use may reduce face to face interaction (Klimova & Pikhart, 2025), The current findings did not show a direct link between AI dependence and social functioning. This may indicate that using AI tools does not automatically reduce social interaction. many young adults appear to integrate technology into their daily lives while still maintaining regular contact with friends, classmates, and family members.

In this context, a usual won't may not be strong enough to significantly alter social wellbeing. This suggest that using AI may not automatically interfere with social relationship or social functioning among young adults. This may meet that using AI tools does not automatically reduce social interaction. young adults today often use technology alongside regular social contact. They may use AI for academic or personal help, but still spend time with friends, classmates or family. because of this, simply using AI may not be enough on its own to change how young adult function socially. Many of them may be using AI tools while still staying connected with friends, classmates, in family members in their regular lives.

Similarly, AI dependence did not show significant link with mental or spiritual wellbeing. I think that using AI more frequently does not automatically to stop a person's deeper psychological balance. Mental well-being is shaped by many daily experiences, academic workload family responsibilities, personal challenges, Ways coping with stress, an individual personality differences all influence how someone feels mentally. AI use may just be small Part within this provided set of influences. because of this, AI may be only one small part of a much bigger picture. In the same way spiritual bell being usually grows from

persons beliefs, values, cultural background, and sense of purpose in life. these are deeply personal areas, and they may not change simply because someone uses AI tools more often.

Looking at the overall result, the relationship between AI dependence and total well-being was negative but weak. even though the correlation was statistically significant, the strength was small. This suggests that while AI dependence may be related to wellbeing, it does not strongly determine it. the wellbeing of young adults does not depend on just one factor. it is influenced by many things happening in their lives at the same time. Their daily habits, sleep patterns, physical health, relationships, emotional support from friends or family, and even their academic or living environment all contribute to how they feel overall.

these results are also similar to the perspective discussed by Orben and Przybylski (2019). They pointed out that digital technology cannot be simply described as either good or bad. Its influence is different for different people. For some, it may make life easier, offer support, or help them stay organized. For others, it may bring stress, comparison, or mental pressure. much depends on how often it is used, or for what purpose, and how it fits into a person's daily routine. the findings of the present study also show this kind of complexity. Although AI dependence was related to overall wellbeing, the relationship was not strong, suggesting that it is only one small part of a much larger picture.

CONCLUSION

The present study aimed to explore whether dependence on artificial intelligence is associated with the well-being of young adults. The findings indicated a weak but statistically significant negative relationship between AI dependence and overall well-being. In simple terms, this suggests that individuals who rely more heavily on AI tools tend to report slightly lower levels of well-being.

When the different dimensions of well-being were analyzed individually, the results were not consistent across all areas. A more noticeable negative relationship was observed between AI dependence and **emotional** as well as **physical well-being**. In contrast, **social, mental, and spiritual well-being** did not show any significant relationship with AI dependence. This suggests that the impact of AI reliance may be more specific to certain aspects of well-being rather than influencing all domains equally.

It is also important to note that the strength of this relationship was relatively small. This indicates that AI use by itself does not determine the overall well-being of young adults. Well-being is influenced by a wide range of factors, including lifestyle habits, interpersonal relationships, academic demands, coping strategies, and the availability of emotional support. Therefore, dependence on AI can be considered only one of many elements that may contribute to an individual's overall sense of well-being.

In general, the results highlight that although AI tools can offer convenience and support in daily life, excessive reliance on them may have subtle implications for certain areas of well-being. As artificial intelligence becomes increasingly integrated into everyday activities, it becomes important to examine how people engage with these technologies and how such interactions may influence their psychological health. Future studies could expand on these findings by including larger and more diverse samples, examining different age groups, and investigating long-term patterns of AI use in order to better understand its potential impact on well-being.

REFERENCES

Ahmad, S., Rahman, M., & Lee, J. (2023). The psychological implications of artificial intelligence reliance on human decision-making and behaviour. *Humanities and Social Sciences Communications, 10*(1), Article 1787. https://doi.org/10.1057/s41599-023-01787-8

Ali, K., Garcia, A., & Vadsariya, A. (2024). *Impact of the AI dependency revolution on both physical and mental health.* Journal of Strategic Innovation and Sustainability, 19(2). https://doi.org/10.33423/jsis.v19i2.7006

Ali, R., Garcia, M., & Vadsariya, P. (2024). Artificial intelligence dependency and its effects on physical and mental health: A student perspective. *Journal of System and Information Science, 19*(2), 45–59. https://doi.org/10.33423/jsis.v19i2.7006

Klimova, B., & Pikhart, M. (2025). The impact of artificial intelligence on psychological well- being and cognitive functioning among students. *Frontiers in Psychology, 16*, Article 1498132. https://doi.org/10.3389/fpsyg.2025.1498132

Lopes, R. (2024). *Chatbots for well-being: Exploring the impact of artificial intelligence on mood enhancement and mental health*. https://doi.org/10.1192/j.eurpsy.2024.1143

Rahman, A., Khan, S., & Mehta, R. (2024). Artificial intelligence adoption and behavioral dependency patterns in emerging adults. *Review of Applied Management and Social Sciences, 8*(1), 112–128. https://doi.org/10.47067/ramss.v8i1.458

Shankar, A. U., Mishra, S., Malik, R., Subashini, N., & Sharma, M. (2023). Artificial intelligence's effects on mental health, human behavior and well-being – An empirical study. *Tuijin Jishu/Journal of Propulsion Technology, 44*(4), 1302–1309. https://doi.org/10.52783/tjjpt.v44.i4.1013

Zhai, X., Wibowo, S., & Li, M. (2024). A systematic review of artificial intelligence dialogue systems and their influence on learning and cognition. *International Journal of Educational Technology in Higher Education, 21*, Article 67. https://doi.org/10.1186/s41239-024-00467-0

Acknowledgment

I would like to express my sincere gratitude to my guide, **Dr. Deepa Pandey**, Associate Professor at the Amity Institute of Behavioural Sciences, Amity University, Lucknow Campus, for her constant guidance, encouragement, and valuable suggestions throughout the course of this research. Her support and expertise greatly contributed to the successful completion of this study and helped deepen my understanding of the research process. I would also like to extend my heartfelt thanks to all the participants who willingly took part in this research. Their cooperation and responses were essential for conducting this study and completing the research successfully. Finally, I am grateful to everyone who directly or indirectly supported me during the completion of this research.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Verma, A. & Pandey, D. (2026). AI Dependence and Its Relationship with Physical, Social, Mental, Emotional and Spiritual Well-Being. *International Journal of Indian Psychology*, *14*(1)*,* 2532-2540. DIP:18.01.253.20261401, DOI:10.25215/1401.253