



AI's Impact on Social Integrity, Well-being and Academic Performance of International Students

Pankaj Dhiman,

Chandigarh University, Mohali, India

Babhuti Kashyap,

CMR University, Bengaluru, India

ABSTRACT

The present investigation explores the role of artificial intelligence (AI) in international students' lives. It fosters a sense of belongingness and community engagement among international students of Chandigarh University using AI. It looks at the reality of AI in improving social integration, academic advancement, and general well-being through advanced education mechanisms and support system applications. AI-enabled tools such as smart tutoring systems, chatbots, and language translation software help in academic conversions and cross-cultural communication. Additionally, services like mental health support via accessible counseling services, boosting emotional well-being, self-esteem, and happiness are on offer with AI's help. The research also addresses algorithmic biases and data privacy challenges, stressing the need for ethical considerations in AI use. Overall, it highlights AI's potential to enhance international students' experiences during their stint at host country.

Keywords: Academic support, AI, International students, Mental health, Social integration, and Well-being

INTRODUCTION

In a fast-paced globalized world, international students experience challenges to adapt to new academic environments. They also balance cultural as well as language differences in a foreign country. With these added challenges, the students require access to resources to help them succeed academically. Present study focuses on various variables and first variable is AI's control on the social integration of university pupils. Particularly, it is a multifaceted topic with implications for various aspects of student life. AI-powered platforms and social networks can facilitate the creation of virtual communities among university students (Owens & Looms, 2010). These platforms use algorithms to connect students with shared interests, courses, or backgrounds, fostering a sense of belonging.

AI language translation tools help break down language barriers. It enables international students to communicate to their peers effectively. This promotes cross-cultural interactions and the formation of diverse social connections (Zhou et al., 2022). Educational technologies, that too powered by AI, provide personalized academic support. These systems contribute to academic success, positively influencing students' confidence and social integration by adapting to individual learning styles and needs.

AI-powered virtual assistants or chatbots offer immediate support for students who are culturally or geographically diverse. Whether answering academic queries or providing information about campus life, these tools contribute to students' overall well-being by enhancing their access to resources. AI can play a role in providing mental health and counseling support. Chatbots are designed to offer emotional assistance and resources that can contribute to students' psychological well-being, especially when faced with the challenges of university ((Nguyen Thuy Van et al., 2024).

AI technologies, including automated messaging and communication tools, can streamline administrative processes. It fosters clear and transparent communication, as international students can get clear and transparent information on various events at university campus, schedules, and resources as well (D'Mello & Graesser, 2012). Also, the beauty of AI algorithms is that it can analyze students' preferences, behaviors, and academic performance. This approach is helpful to provide personalized recommendations. This includes suggesting relevant courses, extracurricular activities, or social events. It caters in contributing to a more tailored university experience. To address concerns like data privacy, algorithmic biases, and the responsible use of technology, it's essential to address ethical considerations related to AI. Additionally, AI implementation is crucial to maintaining trust among students in ensuring transparency and ethical practices (Asri, 2024).

AI's effect on social integration entails with both the positive contributions and potential challenges. In recent years, AI's influence on the academic routine of university students is popularized as a dynamic and evolving area of research. AI technologies, however, can provide personalized learning experiences when students' learning styles, preferences, and performance are to be analyzed. Adaptive learning platforms offer tailored content and assessments, potentially improving students' understanding of academic material (Käser & Alexandron, 2024). AI-driven tutoring systems can assist students in various subjects. These systems adapt to individual needs, providing additional support, practice exercises, and feedback ((Mao, 2025). Research suggests that students using AI-based tutoring systems may show improved academic performance compared to traditional methods. AI also enables assignments' and assessments' automated grading. This not only saves instructors' time but also gives immediate feedback to the students. Timely feedback can enhance the learning process and contribute to improved academic outcomes (Xu, 2025).

AI can analyze large datasets to identify patterns related to student performance. Early intervention systems can alert educators to students who may be at risk of falling behind academically, allowing for timely support and intervention (Shoab et al., 2024). Universities can use AI to optimize resource allocation. However, it needs to ensure that educational resources are directed in a way where they are much required. This can contribute to a more efficient learning environment and potentially enhance academic outcomes (Yingsoon & Rahman, 2025). It has been noticed that AI-enabled language conversion tools can overcome language barriers for international students. They helps in making academic content more accessible. Technology's such type of amalgamation may positively impact students' academic integration, especially who belongs to diverse linguistic backgrounds (Ma, Akram, & Chen, 2024). AI supported virtual laboratories and simulations helps in providing students with realistic experiences in various disciplines. This immersive learning approach can enhance understanding and application of theoretical concepts, potentially improving academic performance (Asare et al., 2023).

AI's application is crucial if ethical considerations are to be addressed. This involves ensuring fairness, transparency, and mitigating algorithmic biases to prevent unintended negative impacts on students' academic experiences. Understanding the impact of AI on academic performance requires a nuanced examination of various applications and their implications ((Fazil et al., 2024). As AI continue to transform the education, ongoing research and evaluation are essential to assess its effectiveness and

address potential challenges (Coniam, 1998). AI's impact on international students' well-being in a university setting is a multifaceted topic with several dimensions (Velastegui-Hernandez et al., 2023).

Moreover, AI-driven mental health and counseling services offer timely and reachable help to international students. Interestingly, Chatbots and virtual assistants operational with natural language processing capabilities can offer immediate assistance, resources, and coping strategies. These are further contributing to improved emotional well-being as well as social interactions among international students ((Shahzad, Xu, Lim, Yang, & Khan, 2024)). Subsequently, AI may help alleviate feelings of remoteness and improve social connectedness. It can come by providing platforms for communication, language translation, and collaboration.

Thereby, AI will be positively influencing the overall well-being of students studying away from their homes (Lee & Zhang, 2024). With this approach, AI applications that promote cross-cultural communication and understanding can have a say to a more comprehensive and supportive environment for international students. AI empowered virtual experiences, language translation tools, and cultural awareness programs promotes empathy and reduce cultural barriers, thus, positively impacting the well-being of students (Du, 2024).

Recent research suggests that AI-powered communication tools, including chatbots and virtual assistants can make things easier for information-sharing and also act as a support system for international students (El Fahmi & Astutik, 2023). A reduction in stress levels and enhancement in overall well-being can be witnessed with the help of quick access to relevant information about academic processes, campus resources, and cultural adaptation. As linguistic challenges are much common among international students, AI can offer personalized support by understanding individual needs and preferences. This further applies to academic assistance, mental health resources, and general guidance (Bhutoria, 2022).

Moreover, tailored support systems can contribute to a more positive and personalized university experience for international students (Dekker et al., 2020). It's crucial to address ethical considerations related to data privacy when it comes to implement AI in support services. It is also significant to make sure that AI applications prioritize the confidentiality and security of student information that too is essential for maintaining trust and well-being (Prinsloo et al., 2024). It is important to mention that AI-driven response mechanisms can supplement student satisfaction, concerns, and overall capabilities. Collecting feedback through automated assessments or virtual assistants allows universities to spot areas for improvement and modify their

support services to meet up the well-being needs of international students better (Tapalova & Zhiyenbayeva, 2022). AI's holistic impact on international students' well-being requires ongoing assessment, feedback loops, and a commitment to addressing emerging challenges. Balancing technological advancements with ethical considerations is key to maximizing the positive effects of AI on student well-being (Daniel, 2019).

AI is transforming a variety of aspects of international education, from teaching and learning to administrative processes. Here's a comprehensive look at the role of AI in international education. AI finds more utility in the human society paving a way to examine AI's relationship with humans. Even, technology has progressed from the sheer encoding of human awareness into designing machines (Chen et al., 2023). Humans "know how" to attain the knowledge they need separately, and then obtain from it and act autonomously in the situation. Hence, this type of need is not a new thing. However, it has a scientific base that could be traced back to the inception of computers. This paper employs a multidisciplinary approach to discover how a human's natural cognitive aptitude could interface with a machine's artificial cognitive intelligence (Popenici & Kerr, 2017).

Over the past 50 years, the AI's scientific advancement has shaped the way we know the Human-AI link. This journey helps us discover the character of this relationship, focusing on the role of belief and the various risks and opportunities at the human-AI interface (Raees et al., 2024). By exploring these elements, we can recognize key technical challenges in generating a reliable interaction between humans and AI. A critical evaluation of available literature reveals that integrating AI into human society needs a form of enduring human participation in decision-making processes (Hamilton Mann et al., 2024). This participation remains decisive, regardless of how advanced AI becomes. With a special reference to education, understanding AI's fundamental nature is a key phenomenon. At its core, AI is a program designed which has been designed in such a way as it could rethink the functions of the human brain. It also helps in offering a means of simulating human cognitive processes (Horvitz et al., 2024).

Generative AI, an exact type of artificial intelligence, can make new data based on the information it has already been skilled on. This makes it more alike to the human brain compared to other AI technologies. By recognizing patterns in on hand datasets, generative AI can create unique outputs such as stories, poems, novels, essays, and even paragraphs. It influences technologies like machine learning, natural language processing, and neural networks (Bringsjord & Ferrucci, 1999). The benefits of AI in education are clear, particularly when it comes to automating repetitive tasks.

One area where generative AI proves more than ever useful is in quiz creation. Teachers can currently rely on AI tools to rapidly and competently generate quiz questions, saving precious time and effort. This not only streamlines the process but also ensures more accurate assessments of student progress.

AI's another advantage is its ability to analyze data and present it in a statistical format. For instance, by analyzing quiz results with AI, educators can receive detailed insights into student performance, highlighting strengths and weaknesses. This enables teachers to create personalized educational plans that cater to each student's unique learning needs, fostering more effective learning. Generative AI has the capability to transform education by automating manual tasks. Tasks such as research and grammar checks, which would usually take hours to fulfill manually, can now be done in a while with AI tools. This can significantly trim down the time required to finish assignments. Educators and students alike can streamline workflows and enhance the learning experience by integrating AI into the teaching and learning process. With AI support, students can access the resources they need to shine in their academic endeavors, improving both the competence and excellence of their education (Yong & Liu, 2024).

Effectively adapting to a novel social and academic setting is a key challenge for educators (Cohen, 2018). Academic difficulties may take time to surface, and individual students' psychological or social issues may not be immediately apparent to staff, especially when managing large numbers of students with whom they may have limited regular interaction (Leander, Phillips, & Taylor, 2010). Administering a range of complex and separate assessments to measure social, psychological, and academic adaptation can be inefficient in a busy academic setting (Leander et al., 2010). Social integration is regularly more challenging for international students than for their familial counterparts, as they not have access to their home social networks, friends, and families (Pho & Schartner, 2021; Bochner, McLeod, & Lin, 1977). A key challenge for international students, particularly those from non-Western countries in Western education settings, is unfamiliarity with the host country's culture and customs. This cultural gap can significantly affect their academic performance (Akanwa, 2015). Developing intercultural knowledge can improve social interactions and strengthen student connections (Stone, 2006).

The arrival of the COVID-19 pandemic added an additional layer of trouble, as international students were enforced to limit social gatherings and physical meetings due to quarantine policies. In this context, mediated communication through social media became a crucial tool for meeting their social needs. This raises important questions about how international

students, with their unique psychosocial vulnerabilities, engage with social media (Dhiman & Paliktzoglou, 2024).

We conceptualize psychosocial well-being as a precursor to social media use, drawing from the social compensation perspective (Valkenburg & Peter, 2009). Research within this outline suggests that psychosocial vulnerabilities, such as depression or loneliness, can add to the probability of social media use, as persons with these challenges frequently find mediated environments more at ease than in-person interactions (High & Caplan, 2009; Valkenburg & Peter, 2009). However, most of these empirical findings have been paying attention on only one feature of psychosocial well-being or between-group effects, for example, persons with severe depression engage in more social media use than those with low depression (Wickrama, Conger, Lorenz, & Jung, 2008). In contrast, communication scholars are calling for a person-centered approach to illustrate distinctive personal experiences in relation to social media use (Fulmer & Zhai, 2025).

LITERATURE REVIEW

AI brings a number of positive impacts to education, including virtual assistants, intelligent assessments and feedback, personalized learning, and improved administrative efficiency. However, it is necessary to think the ethical implications of AI execution, ensuring that these technologies are used responsibly with respect to student privacy, algorithmic transparency, and the human interaction's security. Education can be enhanced, and the learning experience can be transformed to better meet the evolving needs of the digital era. It can be achieved by harnessing the potential of AI while addressing these ethical concerns (Popenici & Kerr, 2017).

The number of students who decide to attend a university abroad is rising. Teachers frequently think that foreign students are not academically adjusted enough. There is conflicting evidence from recent studies regarding whether or not overseas students do worse academically and in terms of academic integration. Accordingly, research should broaden its attention to comprehend the fundamental causes of these performance disparities between local and international students (Morrison et al., 2005).

Compared to local students, international students place a higher emphasis on their faculty and educational system. Local and international students, however, utilize their free time differently and have little social interaction with one another. In conclusion, non-Western students are less integrated than their Western counterparts, score significantly lower on academic and social integration tests, and have marginally worse grade point averages (GPAs) and European Credit Transfer System (ECTS) ratings.

International students appear to learn better in institutions with small class sizes and collaborative learning environments.

According to Alison Owens and Susan Loomes (2010), integration benefits international students in a number of ways. First, it facilitates their social and academic transition by assisting them in establishing connections with the host institution and the local community, which is important for their academic performance and general well-being. Second, it gives international students a sense of belonging to the country of destination, which fosters a deeper understanding and appreciation of its culture. Third, it offers opportunities for personal growth, including the development of empathy and intercultural communication skills. Finally, integration offers useful advantages like language learning and networking opportunities.

Computational intelligence applications and technological developments in higher education have made it easier for teachers to spot underachievers early on. The HEI now has a competitive edge thanks to artificial intelligence (AI), which makes it possible to conveniently and effectively monitor and evaluate pupils. In the past, predictive analytics on the performance of the "students" and more insightful pedagogical analysis for stakeholders have also been made possible by data mining and machine learning techniques. However, the study of student performance as a time-series problem has gained more attention recently.

AI's capacity to customize learning experiences is one of its major educational accomplishments. In order to produce personalized content and recommendations, AI systems can evaluate huge amount of data, together with student performance, preferences, and learning styles (Gligorea et al., 2023). Personalized learning routes, adaptive feedback, and the ability to pinpoint areas in which students require more assistance are all capabilities of intelligent tutoring systems.

In comparison to typical classroom settings, Gobert, Li, Dickler, and Lott (2024) discovered that students who got individualized training through AI-based systems demonstrated higher levels of engagement. They have improved academic performance, and increased information retention as well. By automating grading, giving instant feedback, and relieving teachers of some of their workload, artificial intelligence (AI) technologies are transforming the assessment process. Student responses, papers, and assignments can be analyzed and evaluated using machine learning algorithms, providing reliable and impartial evaluations (Qasmi & Fatima, 2024).

Giri (2025) discusses that students can receive quicker and more accurate feedback from AI-powered assessment systems, enabling them to

make necessary adjustments and enhance their conceptual understanding. Chatbots and other AI-powered virtual assistants have emerged as useful tools in the field of education. These assistants can help students right away by responding to their inquiries, helping them understand difficult subjects, and being available around-the-clock (Labadze et al., 2023).

Social recognition with fellow international students was found to envisage better psychological adaptation, which in turn predicted improved socio-cultural adaptation. However, no lagged effects were observed regarding social media use within this group. The findings emphasize the importance of the international student community as a key resource for successful cross-cultural adaptation. It is argued that the close proximity and shared experiences within this group facilitate the benefits of social identification during the acculturation process (Bierwiazzonek, 2017).

These results are consistent with other research that highlights the value of friendships and bonding experiences among the group of international students during the study (Hendrickson, 2011; Beech, 2018; Quinton, 2020). Since international students have a common experience that crosses many aspects of their lives—they are in a new country, move through similar situations both inside and outside of universities, and deal with similar academic and acculturating challenges—students may be encouraged to actively seek out the group of international students because they provide a more immediate source of support (Beech, 2018; Kundariati, Ibrahim, Rohman, & Nida, 2025)) and strengthen the sense of belonging (Kashima & Loh, 2006; Gomes et al., 2014).

Taušová, Bender, Dimitrova, and van de Vijver (2019) discovered that a thorough model of acculturation must take into account the impact of fellow sojourners on individual outcomes. Because they seem to be a crucial group to share the adaptation experience with. This is particularly crucial for international students, who typically travel for brief periods of time and move around in areas that facilitate social interaction and their decisions for the future (Hendrickson, 2018).

It may be unexpected in this regard that social media use directed at other international students has no lag effects. This deficiency, in our opinion, may indicate that social media by itself is insufficient to greatly aid the process of acculturation or the development of identification with other international students, and that face-to-face interactions may actually be the deciding factor (Damian & Van Ingen, 2014). In order to determine the circumstances in which social media may benefit international students' acculturation and cross-cultural adaptation, future research might compare in-person and virtual interactions.

Neji, Boughattas, and Ziadi (2023) explored how AI-based chatbots can improve student satisfaction and engagement by providing individualized help and lowering reliance on human support. AI technology makes administrative work more efficient, giving teachers more time to engage with pupils in deeper ways. Scheduling, attendance monitoring, data analysis, and other automated procedures can improve operational effectiveness and free up teachers to concentrate on teaching.

According to Anderson (2019), AI-based administrative solutions greatly cut down on the amount of time spent on repetitive tasks, improving resource allocation and efficiency in educational institutions. Even though AI has enormous potential to improve education, ethical issues still need to be taken into account.

Selwyn (2014) emphasizes the need for significant indication on AI's ethical implications in implementing it in education. Though it is evident that AI helps to maintain transparency, and equity in the education setting. His research examines the AI's use and its impact on students' academic performance at the University of Guayaquil. Selwyn (2014) highlights concerns such as algorithmic bias, data privacy, and the over-reliance on technology, all of which must be carefully considered and evaluated.

Designing and implementing a predictive model to forecast academic success in order to expect student performance was the goal in this study. This study takes a quantitative, projective, non-experimental, and predictive method. Academic performance criteria were incorporated into a questionnaire, which was then validated using the expert judgment criterion. Data was gathered using the Google Forms platform and the questionnaire. A 92% response rate was achieved with the distribution of 1100 copies of the questionnaire and the receipt of 1012 responses. Gretl software was used to create the prediction model, and a coefficient of determination of 0.9075, mean square error (0.26), and mean absolute error (0.16) were taken into consideration when fitting the model.

The findings demonstrate a significant and direct impact on pupils' academic achievement, with p-values < 0.001 and positive coefficients around zero indicating the statistical relevance of age, hours, days, and AI-based tools or applications. In order to create an artificial intelligence-based mode, it was determined that a predictive model with theoretical backing might be put into practice to modify the variables.

OBJECTIVES

1. To assess AI's positive influence on social integration of international students at Chandigarh University.

2. To examine AI's relationship of positive influence with academic performance of international students at Chandigarh University.
3. To investigate AI's relationship of positive influence with the general well-being of international students at Chandigarh University.
4. To compare AI's positive influence on social integration, academic performance, and general well-being with respect to male and female international students at Chandigarh University.

HYPOTHESIS

1. AI's positive influence is positively correlated with the social integration of international students at Chandigarh University.
2. AI's positive influence is positively correlated with the academic performance of international students at Chandigarh University.
3. AI's positive influence is positively correlated with the general well-being of international students at Chandigarh University.
4. There is a significant difference in the AI's positive influence on social integration, academic performance, and general well-being between male and female international students at Chandigarh University.

RESEARCH METHOD

Research Design

The present study employs a cross-sectional exploratory correlational research design. It is to explore relationships between the positive influence of AI and three specific variables: social integration, academic performance, and general well-being among international students at Chandigarh University. This design is perfect for identifying patterns and relationships at a specific point in time, laying the groundwork for future in-depth studies.

Sample and Sampling Technique

The sample for this study consists of 60 international students (30 males and 30 female) aged between 18-26 years, having exposure to AI and currently enrolled at Chandigarh University. A simple random sampling technique ensures the representation of diverse academic disciplines and backgrounds within the international student cohort. This approach minimizes bias, enhancing the generalizability of the findings.

Data Collection Tools

To ensure the validity and reliability of the measurements, four standardized instruments were employed. The below mentioned tools (from S.No. 1 to 4) were selected to comprehensively measure the constructs of interest, aligning with the study's objectives.

1. **Affinity for Technology Interaction:** Franke, Attig, and Wessel (2019), used this tool to assess students' wellbeing, candidness, and engagement with AI and technology.
2. **Brief Social Integration Scale:** Holland and Gruhn (2012), developed this scale that evaluates the extent of students' social integration and their campus immersion capabilities.
3. **Health and Well-Being Scale:** Deliberated by Cosby (2017), this instrument assesses the physical, emotional, and psychological well-being of international students.
4. **Academic Performance Scale:** McGregor (2015) developed this scale assesses academic outcomes such as GPA, participation, and confidence in learning.

RESULTS AND ANALYSIS

AI plays a trans-formative role in international students' experiences with significant implications in academic performance and well-being. This study's results highlight critical pathways for leveraging AI to foster inclusivity, academic success, and overall student satisfaction. By contextualizing these findings within broader debates on AI's role in education and social structures, this research underscores its potential to address pressing challenges faced by international students.

Hypothesis 1 (AI and Social Integration)

Despite a positive correlation ($r=0.217$, $p=0.096$), the evidence does not support a statistically significant relationship. This suggests that AI's current applications may not sufficiently target social integration needs. Prior research indicates that cultural barriers and a lack of human-centric AI design could limit its efficacy in fostering community and belonging. Institutions should investigate tailored AI tools, such as virtual communities or cultural exchange platforms, to address these gaps.

Table 1 shows AI's positive influence, which is significantly positively correlated with the social integration of international students at Chandigarh University. The correlation analysis between the positive influence of AI and the social integration of international students at Chandigarh University yielded a Pearson correlation coefficient of 0.217 with a p-value of 0.096 based on a sample size of 60. While the positive correlation suggests a potential link between AI enhancement and social integration, the non-significant p-value indicates that, at the conventional 0.05 significance level, there is insufficient evidence to reject the null hypothesis.

Table 1
Correlation Analysis (Hypothesis 1)

		Social Integration Test (DV)	AI (Enhancement) (I.V)
Social integration test (DV)	Pearson correlation	1	.217
	P-Value		.096
	N	60	60
AI (enhancement) (I.V.)	Pearson correlation	.217	1
	P-Value	.096	
	N	60	60

**. Correlation is significant at the 0.05 level

Therefore, the findings do not support the assertion that the positive influence of AI is significantly positively correlated with the social integration of international students at Chandigarh University. Further investigation, consideration of effect size, and exploration of potential influencing factors may be warranted for a comprehensive understanding of this relationship.

Hypothesis 2 (AI and Academic Performance)

The significant positive correlation ($r=0.555$, $p<0.00$) aligns with studies emphasizing AI's potential in personalized education and adaptive learning systems. This robust relationship suggests that AI tools like virtual tutors and intelligent feedback mechanisms can significantly enhance academic performance, particularly for students navigating a new educational system. Universities should prioritize integrating AI-driven learning support into their academic frameworks.

Table 2 displays that AI's positive influence is significantly positively correlated with the Chandigarh University's international students' academic performance. The correlation analysis for Hypothesis 2 reveals a strong and statistically significant positive correlation between the AI's positive influence and Chandigarh University's international students' academic performance. The Pearson correlation coefficient of 0.555^{**} with a p-value of 0.000, based on a sample size of 60, indicates a robust relationship.

Table 2
Correlation Analysis (Hypothesis 2)

		AI (enhancement) (i.v)	Academic performance (d.v.)
AI (Enhancement) (I.V)	Pearson Correlation	1	.555**
	P-Value		.000
	N	60	60
Academic Performance (D.V.)	Pearson Correlation	.555**	1
	P-Value	.000	
	N	60	60

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

The correlation is considered significant at the 0.01 level (2-tailed). Therefore, the findings provide strong evidence to reject the null hypothesis, supporting the assertion that the positive influence of AI is significantly positively correlated with the academic performance of international students at Chandigarh University. These results suggest a potentially beneficial role of AI in enhancing academic outcomes, highlighting the importance of further exploration and consideration of the implications for educational practices at the university.

Hypothesis 3 (AI and General Well-Being)

The positive correlation ($r=0.30$, $p=0.017$) underscores AI's role in supporting mental health and emotional well-being. Tools like AI-based counseling and mental health apps likely contribute to this outcome. These findings reinforce the need for ethical and culturally sensitive deployment of AI technologies to bolster student support services.

Table 3 shows the positive influence of Artificial Intelligence is significantly positively correlated with the general well-being of international students at Chandigarh University. The correlation analysis for Hypothesis 3 indicates a statistically significant positive correlation between the positive influence of Artificial Intelligence (AI) and the general well-being of international students at Chandigarh University. The Pearson correlation coefficient is 0.307* with a p-value of 0.017, based on a sample size of 60. The correlation is considered significant at the 0.05 level (2-tailed). Consequently, the results provide sufficient evidence to reject the null hypothesis.

Table 3
Correlation Analysis (Hypothesis 3)

		AI (enhancement) (I.V)	General well being (DV)
AI (enhancement) (I.V)	Pearson Correlation	1	.307*
	P-Value		.017
	N	60	60
General well being (DV)	Pearson Correlation	.307*	1
	P-Value	.017	
	N	60	60

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

Hypothesis 4 (Gender Differences)

The lack of significant gender differences highlights the inclusivity of AI applications across male and female students ($p > 0.05$; $p > 0.05$; $p > 0.05$ for all outcomes). This finding is crucial for ensuring equity in technology design and deployment, suggesting that current AI tools are perceived as accessible and beneficial regardless of gender.

Table 4 shows that there is no significant difference in the positive influence of Artificial Intelligence on social integration, academic performance, and general well-being between male and female international students at Chandigarh University. The independent samples t-test results for Hypothesis 4, examining the difference in the positive influence of Artificial Intelligence (AI) on social integration, academic performance, and general well-being between male and female international students at Chandigarh University, indicate that there is no significant difference.

Levene's test for equality of variances did not reveal significant differences in variances between the groups for each outcome measure. The t-tests, assuming equal variances, showed no statistically significant differences in the means of general well-being ($t = -0.364$, $p = 0.717$), academic performance ($t = -0.348$, $p = 0.729$), and social integration ($t = -0.374$, $p = 0.709$) between male and female students. The confidence intervals also include zero for each outcome measure, further supporting the conclusion that there is no significant difference.

Table 4*Independent Samples Test (Hypothesis 4)*

Dependent Variable	F	p	T	df	p
General Well Being (DV) vs. Gender (Male and Female)	.525	.472	-0.364	58	.717
Equal variances not assumed			-0.364	57.68	.717
Academic Performance (DV) vs. Gender (Male and Female)	.666	.418	-0.348	58	.729
Equal variances not assumed			-0.348	57.69	.729
Social Integration Test (DV) vs. Gender (Male and Female)	.439	.510	-0.374	58	.709
Equal variances not assumed			-0.374	57.51	.709

Note: DV = dependent variable; SE diff > 0.50; mean diff = -.20

Therefore, the results suggest that the positive influence of AI on these factors does not differ significantly between male and female international students at Chandigarh University. These findings suggest that AI-enhanced experiences may contribute positively to the overall well-being of students, emphasizing the potential importance of integrating AI technologies to enhance student life and well-being in a university setting. Further research may explore specific mechanisms through which AI influences well-being and inform strategies for its effective implementation.

DISCUSSION AND CONCLUSIONS

This study investigated how AI affected social integration, academic achievement, and overall well-being, among other facets of international students' experiences at Chandigarh University. It also looks at possible gender inequalities in these kinds of partnerships. The results are organized in accordance with the hypothesis of the study. AI has a profound impact on overseas students' experiences, changing both their academic achievement and general well-being. The study's findings point

to essential directions for using AI to promote academic achievement, diversity, and general student pleasure. This study highlights AI's ability to address urgent issues encountered by international students by placing these findings within larger discussions on the technology's role in education and social systems. Considerably, the international student communities living in host nations are minorities. Thus, AI facilitates them in providing information on various aspects they experience during their stint in diverse settings.

The findings of this research provide valuable insights into these relationships:

- i. **Social Integration:** Although a favorable relationship between AI use and social integration was hypothesized, there was insufficient evidence to support this claim in the statistical study. This suggests that more research is necessary to fully understand how AI promotes social integration.
- ii. **Academic Performance:** AI's influence and Academic performance were found to be positively correlated in a robust and statistically significant way. This demonstrates how AI tools can improve learning results and help international students succeed academically.
- iii. **General Well-Being:** The use of AI and students' overall wellbeing were found to be significantly positively correlated. This implies that AI-powered resources, such support networks and apps for mental health, can have a beneficial effect on students' emotional and mental well-being.
- iv. **Gender Differences:** The influence of AI on social integration, academic achievement, and overall well-being was not found to differ significantly between male and female international students. This result suggests that, given the scenario under study, the advantages of AI are the same for both genders.

Considering all aspects, the findings highlight AI's key role in different facets of international students' academic experiences. The complexity of these connections, however, highlights the necessity for additional study to fully understand the personal and contextual fundamentals influencing AI's efficacy. To guarantee AI's fair and safe use in education, future research must also report ethical issues including algorithmic biases and data privacy.

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PANKAJ DHIMAN, PhD, is a senior journalist-turned-academician, works with Media Studies department of Centre for Distance and Online Education, Chandigarh University, Mohali, India. His major research interests lie in the area of digital communities, media studies, higher education research and multiculturalism. Email: pankaj.e14157@cumail.in

BABHUTI KASHYAP, PhD, is an Assistant Professor of Psychology at CMR University, Bengaluru, India. Her teaching and research interests include mental health, social behavior, and the impact of digital media on human psychology.

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