Exploring Attitude And Responsible Use of AI Among University Students

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Abstract— This study investigated the attitudes and responsible use of artificial intelligence (AI) tools among university students at West Visayas State University – Himamaylan City Campus, with a focus on sex at birth and age. Using a quantitative descriptive-correlational research design, data were collected through a validated, researcher-made questionnaire covering demographics, attitudes toward AI, and levels of responsible usage. A total of 130 students participated, selected through convenience sampling. Descriptive statistics and non-parametric inferential analyses (Mann-Whitney U Test, Kruskal-Wallis H Test, and Spearman's Rank Correlation) were applied. Results revealed that students, regardless of demographic grouping, generally held positive attitudes toward AI tools. Females (M = 3.07) and students aged 21 (M = 3.20) showed the most favorable perceptions. Significant differences in attitudes were observed between sex (p = 0.027) and age groups (p = 0.036), suggesting that demographic factors influence AI perception. Regarding responsible use, all groups scored within the "Very Responsible" range, with females (M = 3.40) and students aged 22 and above (M = 3.49) slightly outperforming their peers. However, no statistically significant differences were found for responsible use by sex (p = 0.485) or age (p = 0.099). A moderate, statistically significant positive correlation (r = 0.389, p = 0.000) was found between students' attitudes and their responsible use of AI tools. These findings indicate that a favorable outlook on AI is associated with more ethical and conscientious use. The study highlights the need for targeted educational strategies that consider demographic differences to promote responsible AI integration in higher education settings.

Keywords— artificial intelligence, university students, AI tools, attitude, responsible.

INTRODUCTION

AI in higher education is key: It transforms the learning environment, academic research and student engagement. Chatbots, grading systems, and intelligent tutoring were essential for making education more accessible and efficient. Zawacki-Richter et al. (2019) found university students increasingly use AI-driven applications for academic purposes (e.g., content generation, translation, and plagiarism detection) as AI technologies develop. Yet, the increasing prevalence of AI tools raises essential questions of ethics, data privacy, and academic honesty. Therefore, regular exposure to AI will help students cultivate responsible habits of using AI, which would contribute to creating a fair culture around study (Selwyn, 2019) and mitigate potential abuses.

At the same time, while AI is becoming increasingly pervasive in doing education, the research has mainly concerned the adoption of AI for learning analytics and pedagogy or enhancing individual academic performance, and not so much about how students engage responsibly with these technologies (Holmes et al., 2021). While numerous studies praise the advantages of AI to the individual in personalized learning, little is said regarding student awareness of ethical AI use, algorithmic bias and decision-making in usage of these AI applications (Aoun, 2017). The lack of clear guidelines, as well as of AI literacy programs inside of universities, further complicates at the issue, leaving students to navigate through these ethical challenges all independently. To address almost this gap it is important for ensuring AI is used in a manner which exactly aligns with academic integrity as well as responsible digital citizenship.

This analysis sought to probe many college learners' grasp of ethical AI usage. It focuses namely on their ethical considerations, awareness of AI limitations, as well as decision-making when using AI tools for academic purposes. By taking into account students' perceptions as well as behaviors, the research sought to make contributions to the broader discussion of AI ethics occurring within higher education. The findings will mostly help inform university policies. These same findings will definitely inform the educational frameworks that promote ethical AI literacy and responsible engagement with AI-driven technologies. Finally, this study thus sought to offer key

comprehension to grow an AI culture among college students.

Review of Related Literature

University students are among some of the primary adopters of some AI tools within academic contexts, using them in research assistance, in writing support, and in problem-solving in all their coursework. That level of familiarity with such digital technology, coupled with the increasing access to such AI-driven platforms, positions them directly at the forefront for AI integration in higher education. As digital natives, most students are familiar with AI technologies like chatbots (e.g., ChatGPT). They know recommendation systems, in addition to AI-driven research tools. These aids are now vital school research mates, often merged smoothly in each pupil's daily work habits.

As per the research of Goyal, Sharma, and Kumar (2024), they investigated the contribution of AI to the learning process of university students; their research revealed that students perceive AI as a supportive tool for improving learning, particularly in activities like writing support, solving math problems, and collecting research material. This increasing dependency on AI not only aids scholarly productivity but also indicates a change in the way learners are going about information processing and problem-solving in the computer era.

Drawing on this vision, the use of Artificial Intelligence (AI) in tertiary education has accelerated, with students using AI-powered tools for writing, research, and customized learning. This trend has been driven by the advancing sophistication and accessibility of AI technologies, enabling students across disciplines to leverage intelligent feedback and adaptive guidance. Artificial intelligence tools like ChatGPT, Grammarly, and Turnitin assist learners with idea generation, improving work, and maintaining academic integrity (Dwivedi et al., 2023). The platforms are used extensively not only for task completion quickly but also to improve the quality of writing, maintain grammatical correctness, and prevent plagiarism. Additionally, the tools increase learning efficiency through immediate feedback and adaptive learning experiences specific to personal requirements (Kasneci et al., 2023). This individualized assistance is especially useful in large classes, where one-to-one instruction is not possible. Furthermore, qualitative research by Brown and Carter (2023) showed that students who learn AI ethics principles will scrutinize AI-provided suggestions, instead of taking them without question. These

reflective practices emphasize the significance of ethical consciousness in successful and accountable implementation of AI technologies.

In reaction to the growing utilization of AI, universities across the globe are putting into place policies that will control the use of AI among students. These policies seek to offer students well-defined limits and ethical standards when using AI as an academic resource. A Trinity College Dublin (2024) study analyzed the effect of AI policies on student behavior and discovered that students were more inclined to use AI responsibly when presented with clear policies on ethical AI use. This indicates that institutional policies are able to inform positively students' behavior regarding technology use. In addition, university students' attitudes regarding AI in education differ depending on their level of awareness of responsible use. Based on Santos et al. (2023), they found that students prefer AI for brainstorming and editing but not content creation, emphasizing the need for ethical use. This pattern of selective use indicates that students are conscious of the thin line between collaboration and academic fraud.

Meanwhile, artificial intelligence has advanced significantly in recent years, which has sparked the creation of groundbreaking technologies like OpenAI's ChatGPT. These innovations have not only transformed academic work but also raised new ethical questions. Modern technology like the ChatGPT language model has the potential to revolutionize the educational landscape. Nonetheless, responsible AI usage entails moral decision-making, which encompasses the thoughtful consideration of biases, privacy concerns, and harm as a result of AI. These issues underscore the need for AI literacy and the development of critical thinking habits in higher education.

Therefore, the responsible use of AI in higher education is a growing concern as universities endeavour to ensure that students interact with AI ethically and uphold academic integrity (Brown & Carter, 2023). With AI becoming more pervasive in teaching practice, students need to be equipped with a sophisticated understanding of its implications. Evidence indicates that students' perceptions of how to use AI responsibly draw heavily from institutional policy and AI literacy programs. Students in a survey by Lai and Zheng (2024) were confused about what ethical AI use would look like, reflecting the need for more explicit guidelines for AI-enabled learning. Similarly, Gonzalez and Rivera (2023) found that students often encounter ethical dilemmas

when using AI for academic tasks, as they struggle to balance AI's efficiency with academic honesty. These challenges underscore the need for clear communication, education, and support from academic institutions.

Evidence in line with this is a case study conducted by Wang and Huang (2023), which revealed that students who learned about the limitations of AI were more careful regarding plagiarism, disinformation, and excessive usage of AI-generated content. Being aware of the limitations of AI can empower students to make better choices and reduce academic dishonesty. Additionally, Sharma and Patel (2024) indicated that students with good AI literacy ability showed improved judgment in deciding when AI support was needed, cutting down on the number of academic dishonesty incidents. Their study emphasizes the benefits of incorporating AI education into the curriculum to instill discernment and ethical thought.

Consequently, as AI continues to evolve, academic institutions must take proactive measures to prepare students with the appropriate ethical frameworks and critical thinking abilities to confront AI responsibly in the context of higher education. As argued by Zhou et al. (2023), students who reflect on their AI usage are likely to practice responsible behavior, including not plagiarizing or not utilizing AI applications for harmful purposes. The findings of this study show that reflective thinking and education regarding responsible AI usage play a critical role in how students use AI within academic and everyday settings. It also indicates that those students with greater technical expertise with AI tools had a greater understanding of the ethical dilemmas of the technology, which allowed them to more responsibly utilize AI. According to this, Martin and Chen (2021) indicated that students who were exposed to AI tools through hands-on activities, like internships or research that was AI-powered, were more likely to appreciate the capability of AI for making a difference in society and hence think more about ethics when they used AI tools. Likewise, Nguyen and Lee (2022) explained how students' awareness of AI rules, including data protection regulations and AI fairness regulations, influenced their behavior when working with AI tools. These results further support the need for curriculum development in terms of both technical and ethical aspects of AI.

Additionally, artificial intelligence (AI) has advanced a great deal in higher education, especially how students acquire knowledge, finish assignments, and work together on projects. AI has created new modes of learning, communication, and collaboration. AI tools, such as natural language processing algorithms and machine learning systems, are being used to personalize learning experiences, providing students with adaptive learning environments that suit their individual needs (Akgun & Greenhow, 2022). These systems promote individualized progress tracking and offer support tailored to each learner's strengths and weaknesses. But as AI becomes increasingly embedded in academic life, ethical usage concerns and the likelihood of misuse are escalating. University students, being the future professionals, need to strike a balance between availing themselves of the tools of AI while ensuring academic integrity. The discussion of AI use among university students is therefore vital for comprehending how technology is revolutionizing the way education is done and its associated challenges.

Among the most significant ethical issues with AI in education is the possibility that students will become too dependent on AI-created work, which leads to intellectual dishonesty and intellectual laziness. In Dwivedi et al.'s (2023) study, students recognized the ability of AI technologies such as ChatGPT to help them accomplish assignments but also lacked awareness of ethical standards. This highlights the need for AI literacy programs that emphasize not only the practical use of AI but also the ethical implications of its use. Without proper training in AI ethics, students may inadvertently or intentionally use AI to circumvent academic integrity standards, such as using AI to write essays or solve complex problems without proper attribution. Consequently, this has implications for authenticity, originality, and fairness in academic results (Zhai, 2022). Such risks necessitate greater institutional intervention to define expectations and limits of AI application in learning environments.

The function of educators and universities in instilling responsible AI use is thus paramount. Kasneci et al.'s (2023) research points to the value of AI literacy in tertiary education, noting the way students who have a strong grasp of the ethical considerations involved in AI usage are more likely to use the technology responsibly. Universities that include AI ethics and critical thinking abilities in their academic curricula assist students in comprehending better when to utilize AI tools and when not to. In addition, institutional regulations on the use of AI, i.e., guidelines for work facilitated by AI, can assist in creating borders that prompt students to work with AI

within the terms of academic virtue. On the other hand, the absence of such policies could lead to students misusing AI, thus compromising their learning experience and the validity of academic work.

While responsible AI use can be promoted through education, research indicates that students' understanding of AI ethics remains underdeveloped. According to a study by Ivanova and Skolkina (2023), students' perceptions of AI's ethical issues—such as bias in algorithmic decision-making and transparency—are often superficial, with many students not recognizing the broader societal implications of AI. This is a concern since AI technology is not neutral and can reinforce or worsen current biases and inequalities. If these matters are not fully understood, students can misuse AI without exploring its social and ethical implications. Hence, ethical education and awareness about AI will help students not only utilize AI responsibly in academic situations but also critically evaluate its wider societal implications.

Lastly, with AI evolving further and being embedded in educational settings, the promotion of critical AI literacy and ethical decision-making competencies is now more essential than ever. According to a study by Rahman and Dey (2022), universities are also urged to become actively involved with students in order to endow them with skills to confront the challenges posed by AI while preserving ethical scholarly conduct. Curricula that integrate AI technical proficiency with ethical thought can equip students more effectively to use AI responsibly in the university and beyond. To this end, universities have a singular opportunity to direct students toward becoming ethically conscious users of AI so that AI contributes to the education experience instead of undermining it. Finally, ethical principles need to be integrated into AI education so that students are not just well-equipped to excel in their own academic lives but also in their subsequent professional careers in an increasingly changing technological world.

Research Questions

1. What is the attitude of university students towards the use of AI tools when grouped according to sex at birth and age?
2. What is the level of responsible use of university students on AI tools when grouped according to sex at birth and age?
3. Are there significant differences in the attitude of university students towards various AI tools when grouped according to sex at birth and age?

4. Are there significant differences in the level of responsible use of university students on AI tools when grouped according to sex at birth and age?
5. Is there a significant relationship between the attitude of university students and their level of responsible use when taken as a whole?

RESEARCH METHODOLOGY

Research Design

This study utilized a quantitative descriptive-correlational research design to determine the attitude and extent of responsible use of AI tools among university students, categorized by their profile variables such as age, sex at birth, and course. It also aimed to identify the correlation between students' attitudes toward AI and their level of responsible use. The main instrument for data collection was a researcher-developed survey questionnaire, composed of three primary sections: Demographic Profile, Attitude Toward the Use of AI, and Level of Responsible Usage. To ensure clarity, reliability, and alignment with the study's objectives, the instrument underwent validation by experts in research methodology and AI ethics.

Respondents

The individuals who responded in this study are learners from West Visayas State University – Himamaylan City Campus. By employing a convenience sampling technique, the researchers chose students who were accessible and eager to take part in the research. This selection may encompass students from different academic departments and years, based on their availability and readiness to engage. Although this technique might not ensure fair representation from all departments or years, it enables the researchers to effectively collect information regarding the students' perspectives and responsible application of AI. This strategy offers a preliminary viewpoint on how the student body views and employs AI in the university.

Research Instrument

A validated researcher-made survey questionnaire served as the main instrument for gathering data for this investigation. There are three primary sections to the survey:

- Demographic Profile: In this part, the respondents' sex at birth and age are among the fundamental details gathered.
- Attitude Toward the Use of AI: Students' opinions, convictions, and sentiments about the application of AI tools in educational contexts are evaluated in this section.

- Level of Responsible usage: Students' ethical and responsible usage of AI tools for academic objectives is gauged in this section.

Data Analysis

The data collected in this study were analyzed using both descriptive and inferential statistical methods, with the aim of exploring university students' attitudes toward and responsible use of artificial intelligence (AI) tools, as well as examining whether these variables differ significantly by sex and age. Additionally, the relationship between attitude and responsible use was also assessed.

Descriptive statistics, including means and standard deviations, were used to summarize participants' responses on attitudes toward AI and their level of responsible use, when they are grouped according to sex at birth and age. Inferential tests like Mann-Whitney U Test were conducted to determine whether significant differences existed in students' attitudes and responsible AI usage based on sex, and Kruskal-Wallis H Test, when they are grouped according to age. Lastly, the Spearman's Rank Correlation analysis was used to determine if significant relationship between students' attitude and level of responsible use of AI.

RESULTS

Table 1. University Students' Attitudes towards the Use of AI Tools when grouped According to Sex at Birth and Age

GROUP ACCORDING TO SEX				
SEX	N	Mean	Interpretation	Standard Deviation
Male	28	2.88	Positive	0.52
FEMALE	102	3.07	Positive	0.47
TOTAL	130	3.03	Positive	0.49
GROUP ACCORDING TO AGE				
AGE	N	Mean	Interpretation	Standard Deviation
Ages 18-19	32	2.86	Positive	0.40
Age 20	31	2.97	Positive	0.49
Ages 21	37	3.20	Positive	0.54
Ages 22 and above	30	3.07	Positive	0.45
TOTAL	130	3.02	Positive	0.47
Note: 3.26-4.00 "Highly Positive", 2.51-3.25 "Positive", 1.76-2.50 "Negative", 1.00-1.75 "Highly Negative"				

The data reveal that both males and females exhibited a positive perception, with females (Mean = 3.07) scoring slightly higher than males (Mean = 2.88), and showing more consistency in their responses as indicated by a lower standard deviation (0.47 vs. 0.52). When grouped by age, all categories reflected a positive perception, with the 21-year-old group having the highest mean score (3.20), indicating the most favorable outlook.

Conversely, the 18–19 age group had the lowest mean (2.86), though still within the "Positive" range. The highest variability in responses was observed among 21-year-olds, as shown by the standard deviation of 0.54. Overall, the findings suggest a generally positive perception across all sex and age groups, with females and 21-year-olds demonstrating the most favorable responses.

Table 2. University's Students' Level of Responsible Use of AI Tools when grouped According to Sex at Birth and Age

GROUP ACCORDING TO SEX				
SEX	N	Mean	Interpretation	Standard Deviation
MALE	28	3.37	Very Responsible	0.32
FEMALE	102	3.40	Very Responsible	0.39
TOTAL	130	3.40	Very Responsible	0.38
GROUP ACCORDING TO AGE				
AGE	N	Mean	Interpretation	Standard Deviation
Ages 18-19	32	3.26	Very Responsible	0.37
Age 20	31	3.47	Very Responsible	0.37
Ages 21	37	3.38	Very Responsible	0.38
Ages 22 and above	30	3.49	Very Responsible	0.37
Note: 3.26-4.00 "Very Responsible", 2.51-3.25 "Responsible", 1.76-2.50 "Irresponsible", 1.00-1.75 "Very irresponsible"				

The data indicate that both males (Mean = 3.37) and females (Mean = 3.40) fall under the "Very Responsible" category, with females showing a slightly higher mean and a slightly greater variability in responses (SD = 0.39 vs. 0.32). When grouped by age, all participants across age brackets were also rated as "Very Responsible." The highest mean was observed among those aged 22 and above (Mean = 3.49), followed closely by age 20 (Mean = 3.47), suggesting that responsibility tends to increase slightly with age. The lowest mean was recorded among the 18–19 age group (Mean = 3.26), though it still falls within the "Very Responsible" range. Overall, all groups demonstrated a strong sense of responsibility, with older participants showing marginally higher levels.

Table 3. Significant Differences in the Attitude of University Students towards Various AI tools when grouped According to Sex at Birth and Age

GROUP ACCORDING TO SEX						
		N	Mean Rank	Sum of Ranks	Mann-Whitney U	Significance p-value
SEX	MALE	28	51.55	1443.50	1037.50	0.027
FEMALE	FEMALE	102	69.33	7071.50		
TOTAL	Total	130				
GROUP ACCORDING TO AGE						
	Category	Mean Rank	Kruskal Wallis	Df	Sig (2-tailed)	
Age	Ages 18-19	52.19	8.523	3	0.036	
FEMALE	Ages 20	61.37				
TOTAL	Ages 21	77.69				
	Ages 22 and above	68.93				

*p<0.05, "significant"

Based on the Mann-Whitney U test, a significant difference was found between male and female students (p = 0.027), with female students showing a higher mean rank (M=69.33) compared to male students (M=51.55). This indicates that female students tend to have a more favorable attitude toward AI tools, suggesting that sex at birth influences how students perceive and engage with AI technologies.

On the other hand, the Kruskal-Wallis H test results show a significant statistical difference in students' attitudes towards the use of AI tools across different age groups (p = 0.036). This, therefore, suggests that age is a significant factor in how students perceive and accept the use of AI. Among the different age groups, students in the 21-year-old group had the most positive attitudes, with the highest mean rank of 77.69. The students in the 18- 19-year-old group, on the other hand, had the least positive attitudes, with a mean rank of 52.19. The 20-year-olds and those in the 22 and Above group were in between, with mean ranks of 61.37 and 68.93, respectively. The results show a positive trend in the attitude towards AI with a rise in age. One possible reason for this is that older students may have more exposure to technology and a better understanding of its advantages, particularly in academic and professional environments. They may also have more experience with coursework or activities that are facilitated by the use of AI and therefore have a more positive attitude towards such tools.

Table 4. Significant Differences in the Level of Responsible Use of University Students on AI Tools when grouped According to Sex at Birth and Age

GROUP ACCORDING TO SEX						
		n	Mean Rank	Sum of Ranks	Mann-Whitney U	Significance p-value
SEX	MALE	28	61.11	1711.00	1305.00	0.485
FEMALE	FEMALE	102	66.71	6804.00		

TOTAL	Total	130				
GROUP ACCORDING TO AGE						
	Category	Mean Rank	Kruskal Wallis	Df	Sig (2-tailed)	
Age	Ages 18-19	52.53	6.268	3	0.099	
	Ages 20	71.45				
	Ages 21	64.55				
	Ages 22 and above	74.35				

*p>0.05, "not significant"

The results of the Mann-Whitney U test indicated no differences in the appropriate and responsible use of AI technologies among university students based on their sex at birth. The comparison between male and female students yielded a p-value of 0.485 , over the significance level of 0.05, suggesting random variations. Even though female students outperformed male students in average rank with female students scoring (M=66.71) and male students (M=61.11), this discrepancy did not reach statistically significant differences. From the previously stated findings, both male and female students within this specific sample demonstrated an equal level of responsibility regarding the use of AI tools. This clearly shows that the sex assigned at birth has no distinguishing impact on the university students' responsibility with AI technologies.

The Kruskal-Wallis H test was used to investigate if there were any notable differences in the extent of responsible AI tool utilization across age groups, also did not yield a statistically significant finding. The test reported a p-value of 0.099, higher than the significance level of 0.05, meaning that differences in mean ranks between the age groups are not statistically significant. That is, the observed differences in the use of AI responsibly by students aged 18–19, 20, 21, and 22 and older might be due to random variation rather than true age-related differences in behavior. Still, even in the absence of statistical significance, the mean rank scores showed a slight but apparent upward trend with age. Students aged 22 and Above had the highest mean rank at (M=74.35) , followed by students aged 20 (M=71.45), 21 (M=64.55), and lastly, students aged 18–19 with the lowest mean rank of (M=52.53). Although this trend was not strong enough to achieve statistical significance, it could still indicate a possible trend in which older students show more responsible use of AI tools.

Table 5. *Significant Relationship Between the Attitude of University Students and their Level of Responsible Use of AI when taken as a Whole*

			Attitude of University Students	Responsible Use
Spearman's rho	Attitude	Correlation Coefficient	1.000	0.389
		Significance (2-tailed)		0.000
	Responsible Use	Correlation Coefficient	0.389	1.000
		Significance (2-tailed)	0.000	

*p<0.05, "significant"

The table shows the results of a Spearman's rank correlation analysis, which was applied to explore the relationship between the students' attitude and the level of responsible use of AI. The correlation coefficient is 0.389, which demonstrates a moderate positive correlation and therefore indicates that students with a more positive attitude are more likely to exhibit responsible use. The p-value of 0.000 is smaller than the traditionally used significance level of 0.05 and, therefore, the result is statistically significant. Hence, this study verifies that the attitude of university students is significantly related to how responsibly they utilize AI, and such an observation can be employed to inform additional educational policies and interventions.

DISCUSSIONS

The study's findings regarding university students' attitudes toward AI tools revealed consistent trends of positive perception across different sex and age categories. Specifically, both male (M = 2.88) and

female (M = 3.07) students reported a "Positive" attitude toward the use of AI, with females showing a slightly more favorable view. This aligns with prior studies suggesting that female students often express more enthusiasm toward emerging technologies, particularly when these tools support academic efficiency and personalized learning experiences (Liu et al., 2022; Khan et al., 2020). Regarding age, students aged 21 had the highest mean attitude score (M = 3.20), suggesting they are the most open to AI adoption. This could be attributed to their increased exposure to academic demands, which fosters a greater appreciation of AI tools' practical utility (Zawacki-Richter et al., 2019).

When assessing responsible use of AI tools, both male and female students demonstrated a "Very Responsible" level, with females again scoring marginally higher (M = 3.40 vs. 3.37). Age-based data revealed that older students, particularly those aged 22 and above (M = 3.49), also demonstrated the highest level of responsibility. These results suggest that responsibility in AI use grows with maturity, possibly due to increased academic accountability and more comprehensive ethical understanding. According to studies by Holmes et al. (2021) and Zhang & Dafoe (2023), ethical awareness and responsible digital behavior tend to deepen with age and educational exposure, indicating that older students are more likely to be conscientious users of AI technologies in academic contexts.

Statistical analyses further confirmed significant differences in attitudes toward AI based on both sex and age. The Mann-Whitney U test revealed that female students have significantly more favorable attitudes (p = 0.027), while the Kruskal-Wallis H test indicated a significant difference across age groups (p = 0.036). The trend suggests that attitudes improve with age, with 21-year-olds showing the most favorable perceptions. Such age-related differences might stem from differing levels of familiarity and comfort with AI technologies, as highlighted in recent research by Dwivedi et al. (2021), which noted that digital fluency and confidence in using AI often increase with time and exposure to complex academic environments.

In contrast, no statistically significant differences were found in responsible AI usage based on sex (p = 0.485) or age (p = 0.099). While older students and females showed slightly higher mean ranks, the results did not reach significance, suggesting that responsible use of AI is broadly consistent across demographics in this sample. However, the Spearman's rho correlation showed a statistically significant moderate positive relationship (r = 0.389, p = 0.000) between students' attitudes and their level of responsible AI use. This supports the notion that favorable attitudes towards AI positively influence ethical and appropriate usage, a finding consistent with the work of Eynon et al. (2022), who argue that positive digital attitudes can lead to more thoughtful and responsible engagement with emerging technologies.

CONCLUSIONS

Based on the analysis of the data, it can be concluded that university students, regardless of their sex at birth or age, generally exhibit positive attitudes toward the use of AI tools. Females and students aged 21 emerged as the most favorable toward AI use, indicating that these groups may be more open to integrating such technologies in their academic activities. The statistically significant differences in attitudes based on both sex and age suggest that demographic factors play a meaningful role in shaping perceptions of AI. This points to the need for tailored approaches in introducing AI technologies that consider these demographic influences to foster acceptance and effective use.

In terms of responsible AI use, all groups scored within the "Very Responsible" range, demonstrating a commendable level of ethical and appropriate usage among the participants. While females and older students recorded slightly higher mean scores, the differences were not statistically significant. This suggests a broad-based sense of accountability in how AI tools are utilized across the student population, which may reflect increased awareness of academic integrity and institutional guidelines. These findings imply that current educational strategies and digital literacy initiatives may already be fostering responsible technology use among students.

The study also found a significant positive correlation between students' attitudes toward AI and their level of responsible use. This means that students who view AI more positively are also more likely to use it in an ethical and conscientious manner. Such a relationship underscores the importance of promoting positive perceptions of AI in educational contexts, as these attitudes can directly influence behavior. Educational institutions can leverage this insight by embedding positive, ethics-based narratives around AI in their curricula, thereby not only enhancing engagement but also reinforcing responsible digital practices.

Overall, the results emphasize the importance of demographic awareness and attitude formation in the successful and ethical integration of AI tools in higher education. The consistent positivity and responsibility shown by students across groups suggest readiness for wider AI adoption, but the significant variances by sex and age highlight the need for nuanced policy-making and educational interventions. Institutions should aim to bridge gaps in attitude and ensure that all students, regardless of demographic background, receive equal support and exposure to the benefits and proper use of AI technologies. These insights can help shape future curriculum design, digital training programs, and institutional guidelines surrounding AI in education.

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