

ORIGINAL

## Perceptions of Generative AI among Development Communication Students: Insights by Gender and Age from the Philippines

### Percepciones sobre la Inteligencia Artificial Generativa entre Estudiantes de Comunicación para el Desarrollo: Perspectivas según el Género y la Edad en Filipinas

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#### ABSTRACT

Generative artificial intelligence (GenAI) tools such as ChatGPT are increasingly used in higher education, yet students' perceptions remain varied and may be shaped by demographic factors. This study examined the overall perceptions of Development Communication students toward generative AI and investigated whether these perceptions differ by gender and age. Using a descriptive-quantitative design, survey data were collected from 208 students and analyzed using descriptive statistics and independent samples t-tests. The results showed a neutral overall perception of generative AI ( $M = 3,31$ ;  $SD = 0,65$ ), indicating a balanced view of its advantages and limitations. Students positively rated AI's 24/7 availability ( $M = 3,46$ ;  $SD = 0,97$ ), its ability to offer unique perspectives ( $M = 3,42$ ;  $SD = 1,00$ ), and teachers' growing awareness of AI-assisted work ( $M = 3,63$ ;  $SD = 0,82$ ). Skepticism was evident regarding AI's potential to replace teachers ( $M = 2,86$ ;  $SD = 1,20$ ). A significant gender difference emerged, with male students ( $M = 3,81$ ;  $SD = 0,28$ ) reporting higher perceptions than female students ( $M = 3,07$ ;  $SD = 0,65$ ),  $t(206) = 8,94$ ;  $p < 0,001$ ;  $d = 0,55$ . No significant differences were found across age groups,  $t(206) = -0,52$ ;  $p = 0,61$ . Overall, the findings suggest that students recognize the usefulness of generative AI but remain cautious about its limitations and ethical implications. The observed gender disparity underscores the need for inclusive AI literacy initiatives to support equitable and responsible integration of GenAI in higher education.

**Keywords:** Generative AI; Student Perceptions; Gender Differences; Age Differences; Development Communication; Higher Education.

#### RESUMEN

Las herramientas de inteligencia artificial generativa (IAG), como ChatGPT, se utilizan cada vez más en la educación superior; sin embargo, las percepciones de los estudiantes siguen siendo diversas y pueden estar influenciadas por factores demográficos. Este estudio examinó las percepciones generales de los estudiantes de Comunicación para el Desarrollo sobre la inteligencia artificial generativa e investigó si estas percepciones difieren según el género y la edad. Mediante un diseño descriptivo-cuantitativo, se recopilaron datos de encuesta de 208 estudiantes y se analizaron utilizando estadísticas descriptivas y pruebas t para muestras independientes. Los resultados mostraron una percepción general neutra de la inteligencia artificial generativa ( $M = 3,31$ ;  $SD = 0,65$ ), lo que indica una visión equilibrada de sus ventajas y limitaciones. Los estudiantes valoraron positivamente la disponibilidad 24/7 de la IA ( $M = 3,46$ ;  $SD = 0,97$ ), su capacidad para ofrecer perspectivas únicas ( $M = 3,42$ ;  $SD = 1,00$ ) y la creciente capacidad de los docentes para identificar trabajos asistidos por IA ( $M = 3,63$ ;  $SD = 0,82$ ). Se observó escepticismo respecto al potencial de la IA para

reemplazar a los profesores ( $M = 2,86$ ;  $SD = 1,20$ ). Surgió una diferencia significativa por género, donde los estudiantes varones ( $M = 3,81$ ;  $SD = 0,28$ ) reportaron percepciones más altas que las estudiantes mujeres ( $M = 3,07$ ;  $SD = 0,65$ ),  $t (206) = 8,94$ ;  $p < 0,001$ ;  $d = 0,55$ . No se encontraron diferencias significativas entre grupos de edad,  $t (206) = -0,52$ ;  $p = 0,61$ . En general, los hallazgos sugieren que los estudiantes reconocen la utilidad de la IA generativa, pero mantienen cautela respecto a sus limitaciones e implicaciones éticas. La disparidad observada por género resalta la necesidad de iniciativas inclusivas de alfabetización en IA que promuevan una integración equitativa y responsable de la IAG en la educación superior.

**Palabras clave:** IA generativa; Percepciones Estudiantiles; Diferencias de Género; Diferencias de Edad; Comunicación para el Desarrollo; Educación Superior.

## INTRODUCTION

Generative artificial intelligence (GenAI) has rapidly reshaped educational landscapes worldwide, transforming how learners access, produce, and evaluate information. In the Philippines, these developments strongly influence development communication education, where students routinely engage with digital platforms for storytelling, advocacy, and public information work.<sup>(1,2)</sup> As tools like ChatGPT increasingly mediate writing, research, and content creation, development communication students face both opportunities, which include enhancing creativity, refining messages, and streamlining production, and challenges related to originality, authorship, and ethical use. Recent studies among Filipino students show a mixture of enthusiasm and caution. Learners value GenAI's ability to improve outputs and facilitate multilingual communication, yet they express concern about its impact on creativity, critical thinking, and academic integrity.<sup>(1,2,3)</sup>

This tension reflects broader global trends. Research consistently highlights students' generally positive perceptions of GenAI's usefulness, particularly for writing and learning support, but also documents persistent apprehensions regarding misinformation, plagiarism, surveillance, and ethical misuse.<sup>(4,5,6)</sup> In the Philippines, where technological resources and AI literacy vary across higher education institutions, students and teachers call for structured AI education, ethical training, and institutional policies that promote responsible integration.<sup>(7,8,9)</sup> For development communication students, who are future practitioners shaping public discourse, such concerns are especially relevant because AI-driven media production raises additional questions regarding message credibility, transparency, and social accountability.

A growing body of research emphasizes the role of demographic factors in shaping perceptions of GenAI. International studies indicate that gender and age influence attitudes toward AI, with male students generally reporting higher perceived usefulness and confidence, and female students demonstrating greater ethical awareness and anxiety.<sup>(10,11,12)</sup> Philippine evidence mirrors these patterns. Several studies show men reporting higher literacy or knowledge, while women express higher levels of AI-related anxiety.<sup>(13,14,15)</sup> Age often reflects readiness and trust. Younger individuals display greater openness to AI tools, whereas older learners and teachers exhibit more cautious perspectives.<sup>(16)</sup> Not all studies align. Other investigations report no significant gender or age effects, highlighting inconsistencies that merit deeper examination.<sup>(17,18,19,20)</sup>

Taken together, these findings underscore the importance of examining how demographic characteristics influence perceptions of GenAI, especially within communication programs where the implications of AI use extend beyond academics into public-facing work. This study addresses this gap by investigating development communication students' perceptions of generative AI and determining whether these perceptions differ according to gender and age. As GenAI becomes increasingly embedded in educational and communicative practice, understanding these perceptual differences is essential for designing equitable AI literacy initiatives, developing targeted instructional support, and preparing future communication professionals for ethical and responsible technological engagement.

## LITERATURE REVIEW

### Generative AI in Education and Communication Studies

Generative artificial intelligence (GenAI) has increasingly permeated educational and communication fields, fundamentally transforming how knowledge is created, disseminated, and consumed. Tools powered by large language models, such as ChatGPT, Gemini, and Claude, have introduced novel ways of supporting teaching and learning by enabling personalized, interactive, and adaptive learning environments.<sup>(21,22)</sup> These technologies allow students to engage in self-directed exploration, simulate real-world scenarios, and access immediate, context-specific guidance, thereby promoting critical thinking, creativity, and communication skills essential to the development of competent professionals. In communication-related disciplines, such as development communication, GenAI supports students in crafting compelling narratives, analyzing audience responses, and enhancing persuasive strategies, aligning with the evolving demands of digitally mediated environments.<sup>(23)</sup>

Despite its pedagogical promise, the integration of GenAI into education raises significant challenges that require careful governance and pedagogical adaptation. Studies highlight persistent concerns regarding academic dishonesty, originality, and ethical dilemmas emerging from AI-assisted content creation.<sup>(1,5)</sup> Additionally, critics warn of possible overreliance on AI, which could erode critical thinking skills and diminish students' capacity for independent problem solving.<sup>(24)</sup> These issues are particularly salient in communication studies, where credibility, authorship, and ethical storytelling remain central to professional identity formation. As generative AI tools increasingly mediate knowledge production, educators are confronted with the challenge of balancing technological affordances with safeguards against academic misconduct and cognitive complacency, underscoring the need for responsible and intentional adoption strategies.

Within the context of the Philippines, recent research has demonstrated tempered enthusiasm among development communication students. While learners value GenAI's capacity to streamline academic tasks, improve productivity, and facilitate multilingual writing, they also express apprehension regarding its ethical implications and potential influence on creativity and cognitive development.<sup>(1,2)</sup> Educators emphasize the need to integrate AI literacy into curricula to prepare students for ethical decision-making in an AI-driven society while also advocating for institutional frameworks that promote trust, accountability, and equitable access.<sup>(7,8)</sup> Collectively, these findings position GenAI as both a transformative learning catalyst and a source of ethical and cognitive tension. The dual necessity of maximizing pedagogical benefits while addressing emerging challenges provides the foundation upon which the present study situates its exploration of development communication students' perceptions of generative AI.

### **Students' Perceptions and Attitudes toward Generative AI**

Students' perceptions of and attitudes toward GenAI reflect a complex interplay of optimism and caution shaped by technological affordances, ethical considerations, and contextual experiences. Empirical investigations across diverse contexts including China, the United States, Saudi Arabia, Indonesia, and the Philippines have consistently shown that students appreciate the convenience, efficiency, and academic value offered by GenAI tools.<sup>(25,26,27)</sup> These technologies are widely perceived to enhance writing quality, assist with brainstorming, facilitate vocabulary acquisition, and streamline research processes, ultimately reducing cognitive load and academic stress.<sup>(1,6)</sup> For development communication students in particular, GenAI supports creativity in content design, audience targeting, and narrative development, skills essential in producing media outputs for advocacy, information dissemination, and social change.

However, this positive orientation is often tempered by significant apprehensions surrounding academic integrity, reliability, and originality. Concerns persist about misinformation, plagiarism, and dependency risks arising from uncritical reliance on GenAI.<sup>(4,5)</sup> Trust in AI-generated content emerges as a decisive factor shaping students' acceptance and responsible usage, depending heavily on perceptions of transparency, accuracy, and the presence of institutional safeguards.<sup>(7,24)</sup> Studies indicate that students tend to prefer GenAI outputs when validated by educational authorities or peer-reviewed mechanisms, which signals the importance of structured institutional policies in guiding responsible integration. Thus, perceptions are neither uniformly positive nor negative but instead reflect a spectrum of attitudes influenced by literacy levels, prior experience, and trust in governance frameworks.

Within Philippine higher education, development communication students display readiness to use GenAI tools but express a strong preference for structured, pedagogically aligned guidance that integrates ethical considerations into practice.<sup>(1,2)</sup> Studies in teacher education settings support similar observations, where learners show moderate to positive acceptance of AI for academic writing, language learning, and classroom instruction.<sup>(14,19,20,28,29,30)</sup> Professional educators are increasingly exploring AI tools as well, although knowledge gaps and ethical uncertainties remain.<sup>(31)</sup> These findings underscore the need to reconcile technological adoption with ethical practice and professional identity, particularly in communication-related fields.

### **Differences in the Effects of Gender and Age on Perceptions of Generative AI**

Gender and age constitute significant demographic dimensions that influence perceptions, attitudes, and engagement with GenAI. International research consistently reports gender-based differences in technology adoption. Male students tend to demonstrate higher technology self-efficacy, greater perceived usefulness, and more frequent usage of AI-powered tools.<sup>(10,11)</sup> Female students often exhibit stronger ethical awareness and heightened concern over plagiarism, misinformation, and academic integrity.<sup>(12)</sup>

Philippine studies both reinforce and complicate these trends. Research has shown that male preservice teachers report higher AI literacy, knowledge levels, and readiness.<sup>(14,28,30)</sup> On the other hand, female participants frequently report higher AI-related anxiety, particularly concerning job replacement and sociotechnical blindness.<sup>(13,15)</sup> Other studies, however, found no significant gender differences in attitudes, acceptance, or usage, which suggests that gender effects may vary across academic programs or contexts.<sup>(17,18,19,20)</sup> Age similarly influences perceptions. Younger learners, often described as digital natives, exhibit greater openness, adaptability, and

willingness to explore AI tools.<sup>(8,31)</sup> Older students and in-service teachers tend to adopt more cautious stances, emphasizing skill preservation, human interaction, and responsible use.<sup>(16,32)</sup> Age-related variations also appear in the willingness to adopt AI for instructional or professional purposes.

Trust intersects with gender and age. Zhang et al.<sup>(27)</sup> noted that cultural orientations toward collectivism shape trust in AI systems, with younger and male groups demonstrating higher willingness to accept AI outputs when endorsed by credible authorities. Studies on media perception further show that demographic variables influence how users assess AI-mediated or media-framed information.<sup>(33)</sup>

By disaggregating perceptions according to gender and age, the present study fills a critical empirical gap in Philippine higher education and provides insights that support inclusive AI literacy programs, equitable policy design, and pedagogical innovations that reflect the diverse needs of development communication students.

## METHOD

This study adopted a quantitative cross-sectional approach to investigate how Development Communication students perceive generative artificial intelligence and to determine whether these perceptions differ according to gender and age. A cross-sectional design is suited for research that gathers information from a defined population at a single point in time, allowing the researcher to identify existing patterns, measure levels of perception, and compare subgroups without manipulating any variables.<sup>(34)</sup> Data were gathered through an online survey administered using Google Forms, which enabled convenient distribution and ensured accessibility for all intended participants. This design aligns with methodological recommendations for examining attitudes toward emerging educational technologies, particularly when the goal is to capture current tendencies within a specific student cohort.<sup>(35)</sup>

### Respondents of the Study

A total of 208 Development Communication students enrolled in a state university in the Philippines during the second semester of 2024-2025 participated in the study. The sampling procedure followed systematic random sampling. A complete list of enrolled students was obtained, a sampling interval was calculated based on the population size and the required sample, and selection began from a randomly identified starting point. Students were then chosen throughout the list using this interval-based procedure, ensuring fair and unbiased representation.

Among the respondents, 68 were male (32,69 %) and 140 were female (67,31 %). By age group, 116 students (55,77 %) were 17-19 years old, while 92 students (44,23 %) were 20-22 years old. Participation required official program enrollment and informed consent. These demographic characteristics allowed for meaningful comparisons across gender and age groups.

### Research Tool

Data were gathered using a modified survey instrument adapted from Chan et al.<sup>(36)</sup>, originally designed to measure perceptions of generative AI in academic and professional contexts. The questionnaire included two parts: (1) demographic information such as gender and age, and (2) items assessing perceptions of GenAI using a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The use of a previously validated tool reinforces the reliability and content validity of the measures employed.<sup>(34)</sup>

### Data collection procedure

The survey was administered online through Google Forms to facilitate accessibility and efficient distribution to sampled students. The link was disseminated through official student communication channels, and responses were collected over a three-week period. Participation was voluntary, and informed consent was obtained prior to completing the questionnaire. The online format allowed respondents to complete the instrument at their convenience, ensuring adequate response rates while maintaining the integrity of the cross-sectional design.

### Data Analysis Procedure and Statistical Treatment

The collected data were exported from Google Forms into Microsoft Excel and subsequently analyzed using IBM SPSS Statistics. Descriptive statistics, such as frequency counts, percentages, means, and standard deviations, were used to summarize the demographic characteristics of the respondents and determine their overall perception of generative artificial intelligence (GenAI).

To address the research questions on group differences, independent samples t-tests were conducted to examine whether perceptions of GenAI varied according to gender and age group. Assumptions of normality and homogeneity of variances were assessed before running the tests. The level of significance was set at  $p < 0,05$ . Effect sizes were computed using Cohen's  $d$  to provide additional insight into the magnitude of observed differences. All statistical procedures followed recommended guidelines for quantitative educational research to ensure accuracy and interpretability of the results.

## RESULTS AND DISCUSSION

### Perception among Development Communication students towards GenAI

**Table 1.** The level of perception among Development Communication students towards GenAI

	Strong Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5	Mean	SD	Interpretation
								Positive
1. I envision integrating generative AI technologies like ChatGPT into my teaching and learning practices in the future.	6	18	88	72	24	3,43	0,91	Positive
2. Generative AI technologies such as ChatGPT can provide guidance for coursework as effectively as human teachers.	5	28	78	75	22	3,39	0,93	Neutral
3. I believe Generative AI technologies such as ChatGPT can improve my students' overall academic performance.	7	31	90	62	18	3,25	0,93	Neutral
4. I think generative AI technologies such as ChatGPT can help me/students become a better writer.	9	38	77	66	18	3,22	0,99	Neutral
5. I believe AI technologies such as ChatGPT can provide me/ students with unique insights and perspectives that I they may not have thought of themselves.	8	27	71	74	28	3,42	1,00	Positive
6. I think AI technologies such as ChatGPT is a great tool (for students) as it is available 24/7.	9	19	73	81	26	3,46	0,97	Positive
7. I/Students can ask questions to generative AI technologies such as ChatGPT that I/ they would otherwise not voice out to their teacher	8	27	74	71	28	3,40	1,00	Neutral
8. Generative AI technologies such as ChatGPT will hinder my students' development of generic or transferable skills such as teamwork, problem-solving, and leadership skills.	7	24	97	63	17	3,28	0,90	Neutral
9. Teachers can already accurately identify a student's usage of generative AI technologies to partially complete an assignment.	5	9	65	108	21	3,63	0,82	Positive
10. AI technologies like ChatGPT will replace teachers in the future.	33	50	55	53	17	2,86	1,20	Neutral
11. If a fully online programme with the assistance of a personalized AI tutor was available, I/ students should be open to pursuing their degree through this option.	11	42	88	50	17	3,10	0,99	Neutral
						3,31	0,65	Neutral

Table 1 presents the level of perception of generative AI among development communication students based on their responses to eleven indicator statements. Overall, the composite mean score of 3,31 (SD = 0,65) indicates a neutral perception of generative AI technologies such as ChatGPT. This suggests that, on average, students neither strongly endorse nor reject the integration of AI into their academic practices, reflecting a balanced and cautious stance.

Among the indicators, several statements were rated positively, reflecting openness toward AI integration. The highest-rated item was “Teachers can already accurately identify a student's usage of generative AI technologies to partially complete an assignment” ( $M = 3,63$ ,  $SD = 0,82$ ), interpreted as positive, suggesting that students acknowledge teachers' growing awareness of AI-assisted work. Similarly, the students expressed positive perceptions of AI's 24/7 availability as a learning tool ( $M = 3,46$ ,  $SD = 0,97$ ) and its potential to provide unique insights and perspectives ( $M = 3,42$ ,  $SD = 1,00$ ).

However, several items were interpreted as neutral, indicating hesitancy and uncertainty regarding AI's broader educational implications. For example, students showed ambivalence toward statements about AI's ability to improve academic performance ( $M = 3,25$ ,  $SD = 0,93$ ), enhance writing skills ( $M = 3,22$ ,  $SD = 0,99$ ), and offer coursework guidance comparable to that of human teachers ( $M = 3,39$ ,  $SD = 0,93$ ). Interestingly, the lowest-rated item was “AI technologies such as ChatGPT will replace teachers in the future” ( $M = 2,86$ ,  $SD = 1,20$ ), which suggests that most students are skeptical about AI fully replacing educators and still value human-

led teaching.

The observed neutral perception toward generative AI (GenAI) technology among Development Communication students, with a composite mean score of 3,31 indicating neither strong endorsement nor rejection, is consistent with recent literature revealing ambivalence in student attitudes toward AI in academic settings. Fabro et al.<sup>(1)</sup> reported that Filipino students similarly hold a balanced stance, recognizing GenAI's utility while simultaneously expressing caution about its limitations and ethical concerns. Students tend to acknowledge AI's practical benefits, such as 24/7 availability and enhanced insights, as reflected in the current study's positively rated indicators around teacher awareness of AI use, AI accessibility, and potential contributions to unique perspectives.

Moreover, the neutrality regarding GenAI's impact on academic performance, writing skill improvement, and parity with respect to human teachers found in this study echoes the global caution documented among students. Golding et al.<sup>(26)</sup> and Zhang et al.<sup>(37)</sup> highlighted how students appreciate AI as an adjunct tool but remain skeptical about its ability to replicate the depth of human teaching or fully enhance learning outcomes. The lowest-rated item—that AI will replace teachers—reflects widespread consensus endorsing the irreplaceable value of human guidance, as also observed by Vergara<sup>(2)</sup> in Philippine educational reform discussions. This skepticism toward wholesale automation aligns with broader pedagogical caution emphasizing AI as a support rather than a substitute, underscoring emerging narratives on responsible AI adoption that preserve the centrality of educators and human-centered learning processes.<sup>(7,8)</sup> Such tempered attitudes may be crucial to preventing overreliance and promoting critical engagement, particularly within communication studies where human judgment and ethical considerations are paramount.

The implications of a neutral and cautiously optimistic outlook on GenAI for development communication education are significant. Students appear ready to integrate AI tools into their academic workflow, recognizing benefits without overestimating capabilities, which presents a strategic opportunity for curriculum designers to capitalize on enthusiasm while addressing reservations.<sup>(1,2)</sup> Embedding formal AI literacy and ethics training can transform ambivalence into informed, responsible use. Institutional policies should proactively codify appropriate AI usage, emphasize critical evaluation of AI outputs, and support faculty development to guide students effectively.<sup>(7,10)</sup> Such integrative approaches can ensure that AI technologies enhance rather than diminish the analytical, creative, and ethical competencies central to development communication disciplines.<sup>(24,38)</sup> Ultimately, recognizing and responding to this nuanced student perception landscape will foster AI-enabled education that is equitable, trustworthy, and aligned with academic integrity.

#### Test of difference in the level of perception among development communication students across gender

**Table 2.** Independent Samples t test on the difference in the level of perception among development communication students when grouped according to gender

Variable	Gender	N	Mean	SD	t	df	p value	d	Interpretation
Perception	Male	68	3,81	0,28	8,94	206	0,000	0,55	Significant
	Female	140	3,07	0,65	11,39	204,050			Moderate effect

An independent samples t-test was conducted to examine the difference in the level of perception of generative AI among development communication students when grouped according to gender. The results revealed a statistically significant difference in the level of perception of generative AI between male and female development communication students,  $t (206) = 8,94$ ,  $p < ,001$ , indicating that gender plays a meaningful role in shaping perceptions (see table 2). Compared with their female counterparts, male students ( $M = 3,81$ ,  $SD = 0,28$ ) reported higher levels of perception ( $M = 3,07$ ,  $SD = 0,65$ ). The calculated Cohen's  $d$  of 0,55 suggests a moderate effect size, meaning that gender accounts for a practically meaningful proportion of the variance in perception scores. These findings imply that male students demonstrate greater engagement, confidence, and receptiveness toward generative AI technologies than females do, who appear to express more caution or uncertainty regarding their academic applications.

These results are corroborated by a growing body of literature documenting gender disparities in the perception and adoption of generative AI technologies, particularly in educational settings. For example, Fusco et al.<sup>(39)</sup> reported that women consistently report higher AI-related anxiety and lower perceived efficacy than men do, which correlates with lower usage rates and less favorable attitudes toward AI tools. This aligns with findings by Kim et al.<sup>(10)</sup> and Tortella et al.<sup>(12)</sup>, who similarly noted that male students exhibit greater technological self-efficacy and more positive acceptance of AI-driven educational tools, whereas female students tend to emphasize ethical concerns, academic integrity, and potential risks associated with AI use. These trends have been observed across various cultural contexts, including Western, Asian, and Philippine educational environments.<sup>(1,2)</sup> For example, Zhang et al.<sup>(27)</sup> research in China highlights how gendered

socialization and cultural expectations shape differentiated trust and adoption patterns, a factor resonant with the Filipino context where gender is expressed in digital literacy and AI adoption.

In the specific context of development communication education, where students are expected to critically engage with media production, digital platforms, and ethical communication, these findings reinforce the urgency of designing inclusive and gender-sensitive AI literacy interventions. Integrating gender-aware instructional strategies could bridge the engagement gap by fostering balanced perceptions and improving AI self-efficacy among female students, thus eliminating barriers to effective GenAI adoption.<sup>(1,7)</sup> Institutional support, such as targeted workshops, mentorship programs, and curricular adaptations that explicitly address gendered experiences with AI, can empower underrepresented groups and create a more just technological learning environment.<sup>(8)</sup> Importantly, this approach not only facilitates equitable academic access but also prepares all students to responsibly leverage GenAI in professional communication contexts, where ethical dilemmas and societal impacts converge.<sup>(2,24)</sup>

### Test of difference in the level of perception among development communication students across age group

**Table 3.** Independent samples t test on the difference in the level of perception among development communication students when grouped according to age

Variable	Age	N	Mean	SD	t	df	p value	d	Interpretation
Perception	17-19 years old	116	3,28	0,63	-0,52	206	0,61	0,65	Not Significant
	20-22 years old	92	3,33	0,66	-0,53	123,372			Moderate effect

An independent samples t test was conducted to examine differences in perceptions of generative AI among development communication students based on age. Results showed no significant difference between students aged 17-19 years ( $M = 3,28$ ,  $SD = 0,63$ ) and those aged 20-22 years ( $M = 3,33$ ,  $SD = 0,66$ ),  $t(206) = -0,52$ ,  $p = 0,61$ . Although Cohen's  $d = 0,65$  indicates a moderate effect size, the difference was not statistically significant.

The finding that age does not significantly influence GenAI perceptions aligns with mixed literature on age-related differences in AI acceptance. Some studies suggest that younger students, often considered digital natives, tend to report greater ease and adaptability in using AI tools due to early exposure to technology, whereas older students may express more caution and ethical concern.<sup>(5)</sup> However, the lack of significant difference in this study may reflect similar learning environments and comparable exposure to GenAI tools among students in the same program.<sup>(1)</sup>

This interpretation resonates with technology acceptance frameworks that emphasize how perceived usefulness, trust, and institutional support can narrow demographic gaps in AI adoption. As noted by Venkatesh et al.<sup>(41)</sup>, structured exposure and social influence often mitigate age-related disparities in technology use. The present findings therefore suggest that AI literacy initiatives may be implemented uniformly across age groups, although the moderate effect size indicates the possibility of subtle differences that may emerge in larger or more varied samples.

## CONCLUSION

This study examined the perceptions of Development Communication students toward generative AI technologies, highlighting their overall attitudes and possible demographic variations. The findings revealed that students generally hold a neutral perception of generative AI, recognizing its value in enhancing writing, research, and access to information while remaining cautious about ethical concerns, content reliability, and the potential impact on traditional teaching roles. Gender emerged as a significant factor, with male students expressing more favorable perceptions than female students, suggesting variations in technological confidence and familiarity. Conversely, age did not influence perceptions, as younger and older students demonstrated comparable views on the integration of AI in academic tasks. These results indicate that openness to AI may be shaped more by digital self-efficacy than by generational differences, underscoring the need for supportive learning environments that cultivate critical and responsible engagement with AI tools.

## RECOMMENDATIONS

Based on the findings, the study recommends the integration of AI literacy into higher education curricula to equip students with essential knowledge and critical skills for responsible and ethical AI use. Gender-inclusive training programs should also be developed to address differences in technological confidence, ensuring equitable access to AI learning opportunities for all students. Additionally, institutions should establish clear policies and guidelines that promote the ethical, transparent, and effective use of generative AI in academic work, helping learners maximize its benefits while upholding academic integrity. Strengthening faculty and student capacity through workshops, seminars, and hands-on activities is likewise encouraged to foster meaningful and informed

adoption of AI in teaching and learning. Finally, future research should consider larger samples, additional demographic and psychological variables, or qualitative approaches to deepen understanding of students' perceptions and experiences with AI in higher education.

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