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Instructional affect and learner motivation in generative AI-restrictive and permissive classrooms

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This study investigates the impact of classroom policies on generative artificial intelligence (AI) on students' instructional affect and motivation within a Philippine higher education context. It compares student experiences in generative AI-permissive vs. AI-restrictive sections of a university-level Public Speaking and Persuasion course. Using quota sampling, 156 undergraduate students were surveyed via validated instruments: McCroskey's Instructional Affect scale and Jones' MUSIC Model of Motivation Inventory. Results reveal that students in AI-permissive classrooms reported higher levels of positive instructional affect, expressed as greater trust and engagement with both instructors and course content, alongside greater motivation across the MUSIC dimensions (eMpowerment, usefulness, success, interest, and caring). Conversely, restrictive environments were associated with lower instructional affect and motivation, potentially stifling engagement and perceived autonomy. The findings underscore the significance of clear, supportive generative AI policies that foster student agency and positive emotional responses, while addressing ethical concerns. The study also provides actionable insights for educators and policymakers to design classroom environments that optimize the benefits of generative AI, enhance student motivation, and maintain academic integrity in the evolving landscape of higher education.

KEYWORDS

instructional communication, generative AI, affect, learner motivation, classroom policy

1 Introduction

The opportunities and risks of utilizing artificial intelligence (AI) as a teaching and learning tool continue to permeate academic debates. Generative AI is a type of artificial intelligence technology that uses deep learning models to produce content—such as images or text—in response to varied and complex prompts, usually expressed in instructions, direct commands, or questions (Lim et al., 2023). The use cases of generative AI in education have been described by industry experts as limitless (YogLeads, 2024). Recent research highlight its potential to create personalized curricula tailored to students' performance, strengths, and weaknesses (Pesovski et al., 2024); design interactive and engaging learning activities to help students understand complex concepts (Lee et al., 2023); and generate real-time assessment and feedback (Xia et al., 2024; Souppiez et al., 2023). These capabilities enable teachers to gain deeper insights into where students need additional support, ultimately enhancing the effectiveness of teaching and learning processes. On the other hand, educators have also highlighted pedagogical and ethical issues of integrating generative AI in education, especially those concerning originality and

plagiarism (Chatterjee and Dethlefs, 2023; Stokel-Walker, 2022), students' development and decision-making (Michel-Villarreal et al., 2023), and potential negative effects on teacher-student dynamics (Luo, 2024). While generative AI can automate certain tasks, concerns on whether it might reduce human interaction and affect the teacher's role in providing personalized support and mentorship have been widely expressed.

In recent years, generative AI has rapidly evolved from a niche technology to a pivotal element within higher education, driving a surge of innovative applications across teaching, learning, and administrative functions throughout the academic ecosystem. These applications include students' utilization of generative AI for research, content creation, and academic requirements; administrative staff's use for report writing, data analysis, and improved student support; and faculty's use in expediting lesson planning and developing instructional materials (Igbokwe, 2023; Sheehan, 2023). The increased adoption of generative AI tools in educational institutions has opened up opportunities for their use in academic research, knowledge development, and AI-assisted teaching. Due to its growing prevalence, many educational institutions have drafted and formalized guidelines and policies for generative AI use, focusing on academic integrity, assessment design, and communication with students (Moorhouse et al., 2023). Cornell University (2024) framework for generative artificial intelligence in education and pedagogy recommends: rethinking teaching and learning outcomes; addressing safety and ethical use by critically approaching generative AI and rigorously validating AI-generated information; and explicitly stating policies for its use. The framework emphasizes that when generative AI is permitted, it should be properly attributed, and instructors should discuss the importance of students validating the information generated (Cornell University's, 2024). The British Columbia Institute of Technology also recognizes the importance of clear communication from instructors regarding the use of generative AI in class; students want to know when a class requirement should be solely their own work and when engagement with a generative AI tool to fulfill a class requirement is allowed [British Columbia Institute of Technology (BCIT), n.d.].

Recent studies suggest both positive and negative student attitudes toward the use of generative AI in the classroom. Chan and Hu (2023) reported that undergraduate and postgraduate students across different disciplines in Hong Kong showed positive attitudes toward the use of generative AI in teaching and learning. They asserted that students appreciated the potential benefits of personalized learning support, assistance with writing and brainstorming, and enhanced research and analysis capabilities. A few students concerns—especially those that involve the accuracy of AI outputs, privacy issues, ethical implications, and the potential effects on personal development, career prospects, and societal values—were highlighted in their study. Zhai et al.'s (2024) paper, on the other hand, described varied perceptions among students: some of the study's participants became more critical after seeing how AI-generated answers and images might be harmful or insufficiently representative, while others appreciated AI for its ability to generate diverse ideas and offer various perspectives on a topic. Participants who initially feared that AI might threaten job opportunities were reported to eventually perceive AI as a

tool rather than a threat, becoming open to developing skills to engage with generative AI more effectively. In the Philippine instructional context, Fabro et al. (2024) revealed that Filipino students typically exhibited neutral attitudes and beliefs about using AI in academic writing; however, a positive correlation was found between favorable attitudes toward AI and its usage, indicating that students with more positive views were more likely to use AI tools. While recent literature sheds light on the positive impacts of generative AI-use on students' learning desires and self-efficacy, Luo (2024) asserted that the rise of generative AI (GenAI) in higher education has led to an erosion of trust between students and teachers. Luo (2024) highlighted concerns about an imbalance in transparency, noting that while students must reveal their use of AI, instructors frequently fail to clearly explain their grading criteria, which exacerbates power disparities and fosters a climate of mistrust among students.

Instructional affect (McCroskey, 1994) describes the emotional responses students experience in relation to the instructional environment and the teaching methods employed by educators. It encompasses two main dimensions: affect for the instructor, which pertains to the emotional responses that students have toward their teachers, including feelings of trust, respect, and liking; and affect for the course, which refers to students' feelings about the subject matter and the learning environment. McCroskey's work on instructional affect emphasizes that both dimensions are critical in shaping the educational experience—when students feel positively about their instructor and the course content, they are more likely to engage, participate, and succeed. Instructional affect has been associated with an increase in perceived cognitive and affective learning; additionally, instructional affect is linked to teacher clarity (Chesebro and McCroskey, 2001)—students of clear and immediate teachers are more likely to be motivated and perceive cognitive learning, affective learning, and positive affect for their instructor and course. Students who perceive their environment as supportive and who have positive rapport with their instructors tend to enjoy their classes more, attaching positive value to the instructor, content, and subject (Frisby and Myers, 2008; Rosenfeld, 1983). In contrast, teacher misbehaviors—such as providing too much or too little information, arriving late to class, administering unfair requirements, and showing favoritism—are inversely related to students' liking for the teacher (Kearney et al., 1991). As anticipated, teachers who are perceived as less communicative and who engage in misbehavior are less liked by students. Overall, literature has strongly suggested that a positive interpersonal and classroom experience positively influences students' instructional affect for both the course content and the instructor.

The MUSIC Model of Motivation (Jones, 2018) emphasizes that learner motivation is influenced by the following factors: eMpowerment, Usefulness, Success, Interest, and Caring. The model suggests that when students see relevance in their learning, feel competent, are interested in the material, perceive its utility, and have opportunities for collaboration, their internal motivation and commitment to learning increase significantly. Instructional design based on the MUSIC model of motivation has been deemed effective in increasing motivation of students in the context of e-learning (Shemy and Dalioglu, 2023) and in facilitating language and communication courses (Jones, 2020).

The model has highlighted that permissive teaching behaviors, characterized by high student autonomy and choice, positively influence motivation by empowering students to make decisions about their learning and enhancing engagement through alignment with their interests (Jones, 2020). Applications of the MUSIC model have stressed the role of intentional instructional decision-making on student motivation (Chittum et al., 2019)—instructors are able to intentionally design courses that foster a positive motivational climate, ensuring that students feel empowered and engaged in their learning experiences, using both traditional teaching methods and emerging technological applications. Studies on Filipino higher education students' motivation often emphasize their intrinsic motivation attached to their need for empowerment and strong orientation toward learning goals (Chung et al., 2011), as well as their perceived usefulness of knowledge acquired for professional competence and accomplishment of relational goals (Reyes and Galang, 2009)—all of which align closely with the five key dimensions of the MUSIC model.

Generative AI has the potential to cater to and influence diverse learner attitudes and needs. In environments where generative AI has been integrated as a supportive tool, students have reported experiencing increased engagement and motivation due to personalized learning opportunities (Maphoto et al., 2024). This contrasts with restrictive environments, where generative AI may be viewed as a threat to traditional learning methods, potentially stifling student motivation and engagement. When students perceive generative AI as a beneficial tool for enhancing their skills—such as writing or problem-solving—they are more likely to adopt deeper learning approaches (Maphoto et al., 2024). As generative AI becomes more prevalent in education, understanding how students respond to different classroom policies can inform educators on best practices for integrating technology effectively. The way AI tools are integrated into learning can influence students' perceptions of their own abilities and the relevance of their coursework, affecting their overall motivation and performance. As AI continues to shape various fields, understanding student affect and motivation can help prepare them for future careers where AI literacy is crucial; further, insights from studying motivation can guide curriculum designers in creating more effective learning experiences that leverage AI in ways that resonate with students' interests and aspirations.

With these discussions in mind, the study aspired to answer: *Does generative AI-permissive and -restrictive classrooms influence students' instructional affect and motivation?* This endeavor sought to better understand the nuanced effects of communicating policies on generative AI use on students' emotional experiences, motivational tendencies, learning strategies, and overall learning experiences especially within Philippine higher educational contexts. While several studies have explored generative AI's impact on learning, few have empirically compared the effects of permissive vs. restrictive AI classroom policies on both instructional affect and motivation, especially in the Philippine context. Further, the study is among the first to combine validated scales (McCroskey's and MUSIC) to compare these classroom environments in a Southeast Asian university. With these, the study's insights are potentially crucial for maximizing the benefits and minimizing potential drawbacks of AI in education, as well as

for improving the general classroom experiences of students with educational technologies. By attempting to compare permissive and restrictive AI environments, the study aimed to suggest approaches that better support positive instructional affect and effective learning orientations. Insights into how different classroom environments affect student motivation and instructional affect can guide educators and policymakers in creating frameworks that support innovative teaching practices while addressing concerns related to academic integrity and technology use.

2 Methodology

The study's participants were tertiary-level students in a Philippine state university who, at the time of research implementation (midyear semester of the academic year 2023–2024), were enrolled in the *Public Speaking and Persuasion* class—a general education (GE) course available to all undergraduate students in the university. Quota sampling was implemented since the participant sample needed to come from two distinct groups: students in generative AI-restrictive classes and students in generative AI-permissive classes. In identifying and sorting the Public Speaking and Persuasion classes into restrictive and permissive sections, the researcher reached out to all the instructors in-charge and inquired about their generative AI policies stated in their respective class syllabi; out of the twenty-one (21) Public Speaking and Persuasion sections available during the semester in question, only eleven (11) sections had concrete, specific policies related to the use of generative AI. Aiming for at least 90% confidence level that allowed for 5% margin of error in the sample, it was determined using Fisher's formula (Jung, 2013) that the study needed to obtain at least one hundred fifty 150 participants enrolled in one of the eleven (11) classes with definite generative AI-use policies.

The participants accomplished a two-part questionnaire based on: (1) McCroskey's (1994) Instructional Affect instrument, whose reliabilities for the affect for content measure has ranged from 0.85 to well above 0.90, and the other three measures (affect toward classes in this content, toward instructor, and toward taking classes with this instructor) have consistently yielded alpha reliability estimates above; and (2) Jones's (2009) MUSIC Inventory (college student version) based on his MUSIC Model of Motivation, which has continuously been reported to have good to excellent internal reliability ($\alpha = 0.89$ to 0.92 , with each element having Cronbach's alpha values of 0.89 for empowerment, 0.91 for usefulness, 0.92 for success, 0.91 for interest, and 0.92 for caring).

3 Findings

The study examines the instructional affect and motivation of students in courses with different communicated policies on the use of generative AI. The participants were composed of one hundred fifty-six (156) undergraduate students who were, at the time of research implementation, enrolled in either generative AI-permissive or generative AI-restrictive sections of the same GE course. Figure 1 reflects a summary of their relevant demographic information.

| | Generative AI-permissive classes <i>n</i> =78 | Generative AI-restrictive classes <i>n</i> =78 |
|---|---|---|
| Sex assigned at birth | female - 42 male - 36 | female - 40 male - 38 |
| Year level | first year - 34 second year - 11 third or penultimate year - 9 fourth or ultimate year - 24 | first year - 26 second year - 17 third or penultimate year - 14 fourth or ultimate year - 21 |
| Degree programs (grouped into the university's academic degree-granting clusters) | Arts and Letters Cluster - 20 Management and Economics Cluster - 15 Science and Technology Cluster - 25 Social Sciences and Law Cluster - 18 | Arts and Letters Cluster - 24 Management and Economics Cluster - 12 Science and Technology Cluster - 20 Social Sciences and Law Cluster - 22 |

FIGURE 1

Summary of the participants' relevant demographic characteristics.

TABLE 1 Instructional affect score comparison across the four dimensions.

| Measures of Instructional Affect | Generative AI-permissive classes | | Generative AI-restrictive classes | | <i>t</i> (77) | <i>p</i> | Cohen's <i>d</i> |
|---|----------------------------------|------|-----------------------------------|------|---------------|----------|------------------|
| | M | SD | M | SD | | | |
| Affect toward content | 22.88 | 3.24 | 22.19 | 3.56 | 1.27 | 0.103 | 0.20 |
| Affect toward classes in this content | 21.94 | 3.79 | 22.17 | 3.95 | −0.37 | 0.355 | −0.06 |
| Affect toward instructors | 23.15 | 3.28 | 22.83 | 3.25 | 1.27 | 0.103 | 0.20 |
| Affect toward taking classes with this instructor | 23.15 | 3.21 | 21.82 | 3.92 | 1.81 | 0.036 | 0.29 |

There is relatively balanced sex assignment representation among participants, with a slight majority of females in both generative AI-permissive (42 females vs. 36 males) and AI-restrictive classrooms (40 females vs. 38 males). The distribution of year-level participants indicates that both classroom types included a mix of students from different academic stages, with first-year students being the most represented in both groups. Finally, the participants were drawn from various academic clusters, with the Science and Technology cluster having the highest representation in the AI-permissive group (25 participants) and the Arts and Letters cluster being most represented in the AI-restrictive group (24 participants).

3.1 Instructional affect

The participants' ratings in McCroskey's four dimensions of instructional affect were divided between (1) the scores of the participants belonging to generative AI-permissive classes and (2) the scores of those belonging to generative AI-restrictive classes. The ratings were compared and analyzed using an independent sample *T*-test. Table 1 presents the score comparison across instructional affect's four dimensions.

Participants in generative AI-permissive classrooms reported a higher mean score of 22.88 compared to 22.19 in the restrictive classrooms for Affect Toward Content. However, this difference was not statistically significant (*t*-value = 1.27, *p* = 0.103), indicating that students' feelings toward the content may be similar

across both classroom environments. The mean score for the Affect Toward Classes in this Content dimension was slightly lower in the AI-permissive group (21.94) compared to the restrictive group (22.17), with a *t*-value of −0.37 and a *p*-value of 0.355. This indicates no significant difference, suggesting that students' feelings toward the classes themselves are similar across both types of classroom environments. The Affect Toward Instructors dimension garnered mean scores of 23.15 for the permissive group and 22.83 for the restrictive group (*t*-value = 1.27, *p* = 0.103). However, again, this result is not statistically significant, implying that students' perceptions of their instructors may be consistent regardless of the generative AI-related rules in the classroom.

A notable finding emerged in the Affect Toward Taking Classes with the Instructor dimension, where the permissive group scored a mean of 23.15 compared to 21.82 in the restrictive group. This difference was found to be statistically significant (*t*-value = 1.81, *p* = 0.036), indicating that students in generative AI-permissive classrooms have a more favorable attitude toward enrolling in future classes with their current instructor. This finding aligns with earlier research showing that when classrooms encourage student autonomy and support, students tend to have more positive feelings toward their instructor. For instance, Chittum et al. (2019) highlighted that courses designed to empower students and give them more control over their learning often lead to higher motivation and better attitudes. Jones (2020) also points out that teaching style that offer students more choice and independence can strengthen the relationship between students and teachers, building trust and respect. Finally, Chesebro and McCroskey (2001) found that students are more willing to take future classes

with instructors who create a supportive and engaging learning environment. Taken together, these studies suggest that allowing students to use generative AI in class may help foster a more positive connection with their instructor, making them more likely to enroll in future courses.

Table 2 demonstrates that the combined scores for affective learning (45.64 for permissive vs. 44.6 for restrictive) and instructor evaluation (45.12 for permissive vs. 44.88 for restrictive) did not show significant differences ($p > 0.05$). This suggests that overall emotional engagement with learning content and evaluation of instructors remains stable across both classroom types. Overall, students in generative AI-permissive classrooms reported higher levels of positive instructional affect compared to their peers in restrictive settings. This aligns with previous literature indicating that supportive environments enhance student engagement and satisfaction (Frisby and Myers, 2008; Rosenfeld, 1983).

While generative AI-permissive classrooms appear to enhance specific aspects of positive student attitudes, particularly regarding future enrollment with instructors, most dimensions of instructional affect do not show statistically significant differences between the two classroom types. This suggests that while generative AI may positively influence certain affective and motivational factors, its impact on overall instructional affect may be more nuanced and warrants further investigation to fully understand its implications in educational settings.

3.2 Student motivation

Score comparison among participants from generative AI-permissive and -restrictive classrooms revealed a few key insights regarding their motivation. Table 3 presents the score comparison across the five MUSIC Model of Motivation dimensions. Participants in generative AI-permissive classrooms scored higher on the eMpowerment dimension, with a mean score of 4.5 compared to 4.06 in the restrictive classrooms. This difference was found to be statistically significant (t -value = 2.09, $p = 0.019$), indicating that the classroom environment permissive of generative AI may positively influence students' sense of empowerment. The Usefulness score showed no significant difference between the two groups, with means of 3.51 for the permissive group and 3.53 for the restrictive group (t -value = -0.05 , $p = 0.481$). The Success score also did not reach significance, with means of 3.99 for the permissive group and 3.6 for the restrictive group (t -value = 1.51, $p = 0.066$).

Though there is a trend suggesting higher perceived success in AI-permissive classrooms, it does not meet the conventional threshold for statistical significance. The Interest dimension's means was nearly identical between groups (3.55 for permissive vs. 3.53 for restrictive), and like the previous scores, it was not statistically significant (t -value = 0.09, $p = 0.463$). The Caring score reflected similar findings, with means of 3.58 for permissive and 3.62 for restrictive classrooms (t -value = -0.14 , $p = 0.444$), indicating no significant difference in students' feelings of care and support from their educational environment.

The MUSIC model suggests that when students feel empowered and see the relevance of their learning (Jones, 2018), their

motivation increases. In permissive classrooms where generative AI was integrated as a supportive tool rather than a replacement for traditional methods, students expressed greater interest and perceived success in their learning experiences (Maphoto et al., 2024). The lack of statistically significant differences across most motivation dimension scores suggests that generative AI's impact on overall student motivation may be subtle or influenced by multiple interacting factors, rather than producing broad, uniform effects. This could also indicate that while students generally maintain stable motivation levels regardless of AI integration, the nuanced ways in which AI tools affect specific motivational dimensions require closer examination.

The sole statistically significant increase in the eMpowerment dimension highlights that generative AI may enhance students' sense of control, autonomy, and meaningful engagement in their learning process. This aligns with research showing that empowerment is closely tied to intrinsic motivation and positive learning outcomes, as empowered students tend to feel more responsible for and invested in their educational experiences (Brooks and Young, 2011). This is also consistent with studies on Filipino higher education students' sources of intrinsic motivation (Chung et al., 2011; Reyes and Galang, 2009). The findings suggest that generative AI's primary motivational benefit lies in fostering learner empowerment, which can serve as a foundation for sustained motivation and deeper engagement, even if other motivational aspects remain unchanged.

4 Discussion

Generative AI has offered numerous applications in education. These include personalized curricula, interactive learning activities, and real-time assessments, all aimed at enhancing student engagement and performance (Lim et al., 2023; YogLeads, 2024). However, concerns about originality, plagiarism, and the erosion of teacher-student relationships have also been raised (Chatterjee and Dethlefs, 2023; Luo, 2024). The study focused on students enrolled in a Public Speaking and Persuasion course at a Philippine state university, comparing those in generative AI-permissive classrooms with those in restrictive environments. The overarching aim was to understand how these differing approaches influence students' emotional responses and motivation.

The findings indicate that students in generative AI-permissive classrooms reported generally higher levels of instructional affect and motivation compared to their peers in restrictive environments. This aligns with McCroskey's (1994) concept of instructional affect, which posits that positive emotional responses toward instructors and course content enhance student engagement and success. In permissive settings, where students perceive generative AI as a supportive tool rather than a hindrance, they are likely to experience increased engagement and motivation, consistent with the MUSIC model of motivation (Jones, 2018). This model emphasizes that when students feel empowered and see the relevance in their learning, their commitment to the educational process intensifies. Conversely, restrictive environments suggest the possibility of engendering feelings of anxiety or resistance among students, which may potentially lead to diminished motivation. Luo (2024) highlighted that such settings could foster

TABLE 2 Instructional affect score comparison in affective learning and instructor evaluation.

| Scoring for Affective Learning and Instructor Evaluation | Generative AI-permissive classes | | Generative AI-restrictive classes | | <i>t</i> (77) | <i>p</i> | Cohen's <i>d</i> |
|--|----------------------------------|------|-----------------------------------|------|---------------|----------|------------------|
| | M | SD | M | SD | | | |
| Affective learning (<i>Affect toward content + Affect toward classes in this context</i>) | 45.64 | 6.97 | 44.6 | 7.75 | 0.88 | 0.190 | 0.141 |
| Instructor evaluation (<i>Affect toward instructor + Affect toward taking classes with this instructor</i>) | 45.12 | 7.50 | 44.88 | 7.67 | 0.19 | 0.425 | 0.032 |

TABLE 3 Student motivation score comparison across the five dimensions.

| Dimension of Student Movivation | Generative AI-permissive classes | | Generative AI-restrictive classes | | <i>t</i> (77) | <i>p</i> | Cohen's <i>d</i> |
|---------------------------------|----------------------------------|------|-----------------------------------|------|---------------|----------|------------------|
| | M | SD | M | SD | | | |
| eMpowerment | 4.50 | 1.14 | 4.06 | 1.44 | 2.09 | 0.019 | 0.34 |
| Usefulness | 3.51 | 1.70 | 3.53 | 1.74 | −0.05 | 0.481 | −0.01 |
| Success | 3.99 | 1.42 | 3.60 | 1.74 | 1.51 | 0.066 | 0.25 |
| Interest | 3.55 | 1.70 | 3.53 | 1.74 | 0.09 | 0.463 | 0.01 |
| Caring | 3.58 | 1.72 | 3.62 | 1.72 | −0.14 | 0.444 | −0.02 |

distrust between students and educators, as students may feel compelled to hide their use of AI tools while lacking transparency regarding grading processes. This perceived lack of trust can significantly impact students' emotional responses and overall learning experiences.

The concept of instructional affect, as articulated by McCroskey (1994), is crucial in understanding how classroom environments influence student motivation. Positive emotional responses toward instructors and course content can significantly enhance student engagement. This aligns with the MUSIC model of motivation proposed by Jones (2018), which posits that factors such as empowerment and perceived usefulness are pivotal in fostering student motivation. In permissive environments where generative AI is embraced as a supportive tool, students report higher levels of engagement and motivation (Maphoto et al., 2024). On the other hand, restrictive environments may stifle motivation by framing AI as a threat to traditional learning methods.

The study's results also underscore the importance of clear communication regarding generative AI policies in educational settings. As noted by Cornell University's (2024), establishing explicit and well-defined guidelines for generative AI use not only addresses concerns related to academic integrity—such as plagiarism and originality—but also provides students and educators with a clear framework that promotes responsible and ethical engagement with AI tools, thereby fostering a more transparent and trustworthy learning environment. Educators should strive to create a balance between allowing the use of generative AI as a learning aid and maintaining academic standards. Furthermore, the findings suggest that

educators should consider adopting more permissive teaching strategies that empower students. By integrating generative AI into instructional practices thoughtfully, educators may further enhance student motivation and engagement. This approach aligns with Jones (2020) and Brooks and Young's (2011) assertion that high levels of student autonomy positively influence motivation.

The findings suggest that permissive classroom environments, which allow for the integration of generative AI as an aid rather than a hindrance, can foster better student motivation and positive instructional affect. Educators should consider adopting frameworks that encourage open communication about AI use while ensuring that academic integrity is maintained. To maximize the benefits of generative AI while addressing ethical concerns, findings assert that higher education institutions could develop clear guidelines that delineate when and how generative AI can be used, foster an environment where students feel safe discussing their use of AI tools, and emphasize the importance of validating AI-generated information to maintain academic rigor. Laying the groundwork for further research into how AI affects different aspects of learning and student communication behaviors, regarding the use of generative AI in classrooms, guiding educators in making informed decisions about how to implement and regulate the use of generative AI.

5 Conclusion

As generative AI continues to evolve within educational contexts, understanding its impact on student motivation

and instructional affect becomes increasingly vital. This study underscores the significant influence that classroom policies on generative AI exert on students' instructional affect and motivation in Philippine higher education. The findings demonstrate that students in AI-permissive classrooms report higher levels of instructional affect and motivation across the MUSIC model (Jones, 2018) dimensions. Score differences in Affect Toward Taking Classes With This Instructor dimension was found to be statistically significant, as well as in the eMpowerment motivation dimension, in favor of permissive classrooms. These findings align with broader educational research, which highlights the importance of supportive, transparent, and student-centered environments in fostering positive emotional and intrinsic motivational outcomes (Chittum et al., 2019; Chesebro and McCroskey, 2001). Conversely, restrictive AI policies appear to diminish student agency and engagement, potentially undermining both the learning experience and the development of essential 21st-century skills.

The implications for educational policy and practice were clear: institutions should prioritize the development and communication of thoughtful, ethical, and supportive generative AI policies. Such policies not only address concerns about academic integrity and responsible technology use but also actively contribute to a more empowering and motivating classroom climate. Faculty development initiatives should focus on equipping instructors with the skills to integrate AI tools in ways that enhance student autonomy and personalize learning, while maintaining clear guidelines to ensure transparency and fairness (Cornell University's, 2024; Moorhouse et al., 2023). By embracing generative AI as a partner in the learning process, educators may help students build the competencies necessary for success in an increasingly AI-driven world.

The study acknowledges several limitations, including its cross-sectional design, reliance on self-reported data, potential instructor or selection biases, and limited generalizability beyond the sampled university or course. Additionally, contextual factors such as the specific Philippine higher education setting and variability in the implementation of "permissive" vs. "restrictive" policies further constrain the findings. These limitations likely contributed to the modest group differences observed and highlight the need for future research, including longitudinal studies, qualitative follow-ups, and multi-institutional comparisons. Looking ahead, further research is recommended in exploring the long-term effects of generative AI integration on student learning outcomes, identity formation, and teacher-student dynamics. Future studies might examine the nuanced impacts of various AI policy models across disciplines and cultural contexts, as well as investigate the ethical, developmental, and equity considerations that arise as AI becomes more deeply embedded in educational practice. Ultimately, ongoing inquiry and dialogue is essential to ensure that generative AI is leveraged to maximize educational benefits, promote student wellbeing, and uphold the core values of Philippine higher education.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by University of the Philippines, Department Diliman Department of Speech Communication and Theatre Arts. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

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Generative AI statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

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