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Academic use of ChatGPT among postgraduate healthcare students: Findings from a cross-sectional study

Luu Thi Thuy¹, Tran Thi Hoang Oanh², Nguyen Thi Thu Thao¹, Dang Van Thoi³, Le Thi Anh Tuyet⁴, Nguyen Hoa Van Chi¹, Nguyen Huong Giang¹, Nguyen Thi Ai Ny⁵ & Tran Thi Thu Trang¹

¹Faculty of Nursing, Da Nang University of Medical Technology and Pharmacy, Vietnam; ²Institute of International Education, Hue University of Medicine and Pharmacy, Hue University, Vietnam; ³Faculty of Medicine, Da Nang University of Medical Technology and Pharmacy, Vietnam; ⁴Da Nang Hospital, Vietnam; ⁵Danang Oncology Hospital, Vietnam

Abstract

Introduction: ChatGPT, a large language model, has considerable potential in higher education. However, its academic use and associated factors among Vietnamese postgraduate healthcare students remain underexplored. This study aimed to examine the academic use of ChatGPT and identify factors associated with its use.

Methods: A cross-sectional study was conducted among 301 postgraduate students at a public healthcare university in Central Vietnam between August 2024 and August 2025. Data were collected using a self-administered questionnaire assessing demographic characteristics, ChatGPT-related knowledge, attitudes, and academic use. Descriptive statistics and non-parametric analyses, including point-biserial and Spearman's rank-order correlations, were performed.

Results: The mean academic use score was 4.32 out of 10 (SD = 4.00). More than half of participants reported using ChatGPT to clarify unclear content (57.5%) and to develop writing outlines (53.2%). Academic use was positively correlated with ChatGPT knowledge ($r = 0.373$, $p < 0.001$) and with attitudes toward technology and social influence ($r = 0.282$, $p < 0.001$), but was not associated with gender, age, or working position.

Conclusion: Vietnamese postgraduate healthcare students demonstrated moderate academic use of ChatGPT. Greater knowledge and more favourable attitudes toward technology and social influence were associated with higher levels of use. Structured training and clear institutional guidance may therefore support more effective and responsible integration of ChatGPT in postgraduate education.

Keywords: Academic Use, Artificial Intelligence, ChatGPT, Health Education, Postgraduate Students

Practice Highlights

- Postgraduate students most frequently used ChatGPT to clarify unclear contents and develop writing outlines, underscoring its emerging role in academic learning.
- Students' knowledge of ChatGPT was a significant predictor of academic use, emphasising the importance of awareness and training initiatives.
- Positive attitudes toward technology and social influence were associated with increased use of ChatGPT, suggesting that institutional norms may shape its adoption.
- Structured training and clear institutional guidance may strengthen students' competence and promote responsible use of ChatGPT.

I. INTRODUCTION

In recent years, artificial intelligence (AI) has become increasingly prominent across various sectors, particularly in education and healthcare. Among generative AI tools, ChatGPT has attracted considerable attention due to its capacity to generate human-like text in response to user prompts. Its ability to process and produce natural language has positioned it as a potentially valuable educational support tool (Adeshola & Adepoju, 2024).

In healthcare education, ChatGPT has been reported to support teaching and learning activities in several ways. It may assist with academic writing and enhance research-related skills, including literature searching and preliminary data analysis (Sallam, 2023). Evidence suggests that ChatGPT can improve learning efficiency, foster self-directed learning, provide personalised educational support, and reduce barriers to accessing information (Baig & Yadegaridehkordi, 2024). Its use may also facilitate tailored learning experiences while encouraging critical thinking and problem-based learning (Sallam, 2023). Furthermore, ChatGPT has been explored as a tool for language development, knowledge revision, and clinical simulation, thereby contributing to competency development among healthcare students (Scherr et al., 2023).

Previous research indicates that a substantial proportion of students (66.7%) are aware of and use ChatGPT for academic purposes, often informally as a search tool, although many (over half) do not fully understand its underlying mechanisms (Maaß et al., 2025). Students tend to use ChatGPT independently but frequently report limited confidence in prompt construction and uncertainty regarding legal and ethical considerations (Maaß et al., 2025). Similarly, a study in Saudi Arabia found that 91.2% of healthcare students were familiar with ChatGPT and 75.1% felt comfortable using it for academic purposes (Alharbi et al., 2024). Although students generally demonstrate positive attitudes toward ChatGPT, gaps in confidence and understanding suggest a need for more structured and targeted training, particularly in relation to future professional roles. Students have expressed interest in learning about AI within their programmes (62.5%), general AI knowledge (58.0%), and AI applications in academic writing (57.0%). Differences in usage have also been observed according to gender and self-rated academic performance (Maaß et al., 2025). Notably, 66.7% of students reported positive attitudes toward ChatGPT, and 84.7% believed it had a positive impact on their education (Alharbi et al., 2024). Greater knowledge of ChatGPT and more favourable attitudes toward technology have been associated with variations in

usage, whereas demographic variables, including gender, have shown inconsistent or limited associations (Abdaljaleel et al., 2024; Abdelhafiz et al., 2025; Cherrez-Ojeda et al., 2024; Yakubu et al., 2024).

Despite this growing body of evidence, most existing studies have focused on undergraduate populations and have primarily reported prevalence rates and associated factors (Qazi et al., 2025; Zhang et al., 2024). Less attention has been directed towards postgraduate students, particularly within healthcare disciplines where students frequently balance academic study with ongoing professional or clinical responsibilities. This dual role may influence how generative AI tools, such as ChatGPT, are adopted and integrated into authentic academic and professional tasks, extending beyond purely classroom-based applications.

Within Vietnamese postgraduate education, ChatGPT has been reported to support academic writing, particularly in addressing grammatical issues and providing lexical resources (Duong et al., 2024; Nguyen et al., 2025). However, the Vietnamese context has not been extensively examined in relation to ChatGPT adoption in healthcare education. Higher education in Vietnam is undergoing rapid digital transformation, while institutional policies and formal guidance concerning generative AI remain in development (Miao & Holmes, 2024). Variations in infrastructure, access to AI-related training, and reliance on predominantly English-language resources may further shape patterns of use (Nhun et al., 2025; Quy et al., 2023). These contextual factors make Vietnam a relevant setting for examining how ChatGPT is adopted within postgraduate healthcare education.

A review of the literature revealed no studies specifically investigating ChatGPT use among postgraduate healthcare students in Vietnam. Examining this usage behaviour is therefore important for developing a more comprehensive understanding of AI integration in medical education, particularly within a context where learners navigate both professional and academic demands. Accordingly, this study aims to (1) describe ChatGPT utilisation for academic purposes among postgraduate healthcare students and (2) examine factors associated with its utilisation. By focusing on postgraduate healthcare students in Vietnam, this study extends existing survey-based research and offers context-sensitive insight into generative AI adoption in professional education.

II. METHODS

A. Study Design and Participants

A cross-sectional study was conducted between August 2024 and August 2025 with the actual data collection for the main study taking place in late December 2024, following official ethical clearance at a public healthcare university in Central Vietnam, in accordance with the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) statement (<https://www.strobe-statement.org/>). The institution offers both undergraduate and postgraduate programmes. At the time of the study, its three two-year specialised postgraduate programmes in nursing, medical laboratory technology, and internal medicine enrolled approximately 450 students.

Participants were postgraduate students from this university who provided voluntary informed consent. The required sample size was calculated using G*Power version 3.1.9.4 (<http://www.gpower.hhu.de/>) for a one-sided correlation test (effect size = 0.2, α = 0.05, power = 0.80), yielding a minimum sample of 153 participants. To enhance generalisability, the target sample size was increased to 306. Participants were recruited using convenience sampling based on the predefined inclusion criteria. During data collection, five respondents submitted incomplete questionnaires and were excluded from the final analysis to ensure data quality.

B. Data Collection

Data were collected using a self-report questionnaire comprising four sections. The first section gathered participants' demographic information, including age, gender, current working position, and years of work experience.

The second section employed the ChatGPT Knowledge Scale developed by Köhler and Hartig (2024). This six-item scale includes three response options: "Correct", "Incorrect", and "Unknown". Correct responses were awarded 1 point, whereas incorrect and unknown responses received 0 points. For items 1, 2, 4, and 6, reverse scoring was applied: incorrect responses were assigned 1 point, while the remaining responses received 0 points. The total score ranged from 0 to 6, with higher scores indicating greater knowledge of ChatGPT (Köhler & Hartig, 2024).

The third section assessed participants' attitudes toward ChatGPT using the Attitude Scale developed by Sallam et al. (2023). This instrument comprises 13 items across three dimensions: perceived risk (5 items), anxiety (3 items), and attitudes toward technology and social influence (5 items). Each item was rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Eight negatively worded items within the perceived risk and anxiety dimensions were reverse-scored. Dimension scores and the overall scale score were calculated as the mean of the item scores, ranging from 1 to 5, with higher scores indicating more positive attitudes (Sallam et al., 2023).

The final section assessed participants' academic use of ChatGPT using a 10-item scale developed by Köhler and Hartig (2024). Each item provided four response options: "No, I don't intend to either", "No, but I can imagine it", "Yes, but was not helpful", and "Yes, was helpful". The original scale measured two dimensions: actual usage (whether a specific interaction with ChatGPT occurred) and use value (the perceived usefulness of that interaction). In the present study, only the actual usage dimension was analysed. As the primary objective of this study was to examine patterns and predictors of ChatGPT use in academic contexts, focusing exclusively on the actual usage dimension ensured conceptual alignment with the behavioural emphasis of the research. Accordingly, the responses "Yes, but was not helpful" and "Yes, was helpful" were categorised as "yes" and coded as 1, whereas the remaining responses were categorised as "no" and coded as 0. The total score ranged from 0 to 10, with higher scores indicating more frequent academic use of ChatGPT (Köhler & Hartig, 2024).

The second, third, and final sections were translated into Vietnamese in accordance with the procedure described by Cruchinho et al. (2024). Subsequently, a panel of five experts, each holding a master's or doctoral degree in a health-related field and teaching at healthcare universities, evaluated the content validity of the Vietnamese versions. The content validity index (CVI) and internal consistency coefficients derived from both the pilot study ($n = 30$) and the main study ($n = 301$) are presented in Table 1.

Scale	CVI	KR-20 ^{kr}		Cronbach's alpha coefficient	
		Pilot study	Actual study	Pilot study	Actual study
ChatGPT Knowledge Scale	0.93	0.58	0.53	-	-
Attitude Scale	0.95	-	-	0.51	0.79
Perceived risk dimension	1.00	-	-	0.84	0.89
Anxiety dimension	0.93	-	-	0.91	0.93
Attitude to technology/social influence dimension	0.92	-	-	0.94	0.91
ChatGPT Usage Scale	0.94	0.96	0.95	-	-

^{kr}Kuder-Richardson's method

Table 1. Content validity index and reliability of the scales

An email containing a link to a Google Form was distributed to invite potential participants. The email outlined the purpose of the study and informed recipients of their right to withdraw at any time. Anonymity was assured throughout the survey process. Informed consent was obtained electronically, with participants indicating their agreement by clicking “Yes” to access the questionnaire. Completion of the survey typically required approximately 10-15 minutes.

C. Data Analysis

Data were analysed using SPSS version 26.0 (SPSS Inc., Chicago, Illinois, USA). Descriptive statistics, including frequencies, percentages, means (M), standard deviations (SD), ranges, medians, and interquartile ranges (IQR), were calculated to summarise participants' demographic characteristics, knowledge, attitudes, and ChatGPT usage.

Prior to conducting correlation analyses, the distribution of ChatGPT usage scores was examined using histogram inspection to assess normality (Appendix 1). As the data were not normally distributed, non-parametric tests were applied. Specifically, point-biserial correlation and

Spearman's rank-order correlation were performed to examine associations between the investigated factors and ChatGPT usage. Statistical significance was set at $p < 0.05$.

D. Ethical Considerations

This study received approval from the Medical Ethics Committee in Biomedical Research, Da Nang University of Medical Technology and Pharmacy on December 16, 2024 (Reference #97/CT-HDDD). Participants were fully informed about the study, confidentiality, and their right to refuse or withdraw. Informed consent was obtained from all participants prior to questionnaire administration.

III. RESULTS

A. Characteristics of Participants

A total of 301 postgraduate students participated in the study. The mean age of participants was 37.98 years (SD = 5.72), and 76.7% were female. More than half (54.8%) held non-managerial positions. The mean duration of work experience was 15.14 years (SD = 5.63). Detailed participant characteristics are presented in Table 2.

Characteristic	N	%
Age (Year): Mean $\pm$ SD = 37.98 $\pm$ 5.72 (Range = 25 – 53)		
Gender		
Female	231	76.70
Male	70	23.30
Current working position		
Managerial position	136	45.2
Non-managerial position	165	54.8
Work experience (years): Mean $\pm$ SD = 15.14 $\pm$ 5.63 (Range = 1 – 28)		

Table 2. Characteristics of the participants (N=301)

B. Knowledge and Attitude Regarding ChatGPT Among Participants

Participants had a mean knowledge score of 2.18 (SD = 1.39) out of a possible 6. The mean overall attitude score towards ChatGPT was 2.93 (SD = 0.46) on a 5-point

scale, with observed scores ranging from 1.77 to 4.85. This value was close to the neutral midpoint (3.0). Detailed statistics are presented in Table 3.

Variable	Mean (SD)	Possible range	Observed range
Knowledge score	2.18 (1.39)	0 – 6	0 – 6
Attitude score	2.93 (0.46)	1 – 5	1.77 – 4.85
Perceived risk	2.53 (0.72)	1 – 5	1 – 4.6
Anxiety	2.39 (0.91)	1 – 5	1 – 5
Attitude to technology/social influence	3.66 (0.69)	1 – 5	1 – 5

Table 3. Knowledge and attitudes toward ChatGPT among participants (N=301)

C. Academic Use of ChatGPT Among Participants

As shown in Table 4, participants reported using ChatGPT for a range of academic purposes. More than half indicated that they used ChatGPT to clarify unclear contents and to develop outlines for writing projects. The mean score for academic use of ChatGPT was 4.32 (SD

= 4.00) out of a possible 10, with a median of 4.00, indicating a moderate level of overall engagement. Floor and ceiling effects were observed in 33.9% and 20.6% of participants, respectively, suggesting notable clustering at both the lowest and highest possible scores.

Activity	“Yes” Answer n (%)	Mean (SD)	Median (IQR)
Using ChatGPT to clarify unclear contents in class.	173 (57.5)	0.57 (0.49)	1 (1.0)
Using ChatGPT to create writing project outlines.	160 (53.2)	0.53 (0.50)	1 (1.0)
Using ChatGPT to get an overview of a new topic.	144 (47.8)	0.48 (0.50)	0 (1.0)
Using ChatGPT to get content ideas for a paper.	139 (46.2)	0.46 (0.49)	0 (1.0)
Using ChatGPT to get feedback on the texts created.	136 (45.2)	0.45 (0.49)	0 (1.0)
Using ChatGPT to have texts summarised.	120 (39.9)	0.40 (0.49)	0 (1.0)
Using ChatGPT to get advice (e.g. on time management).	116 (38.5)	0.39 (0.48)	0 (1.0)
Using ChatGPT to create template-based content blocks (e.g. writing internship reports for various rotations)	115 (38.2)	0.38 (0.48)	0 (1.0)
Using ChatGPT for self-motivation (e.g. talking about stress and anxiety).	111 (36.9)	0.37 (0.48)	0 (1.0)
Using ChatGPT to have pre-written emails.	87 (28.9)	0.29 (0.45)	0 (1.0)
Academic use of ChatGPT		4.32 (4.00)	4.0 (9.0)
Floor percentage (Score = 0): 33.9%		Ceiling percentage (Score = 10): 20.6%	

Table 4. Academic use of ChatGPT among participants (N=301)

D. Factors Associated with the Academic Use of ChatGPT Among Participants

Table 5 presents the associations between demographic characteristics, knowledge, attitudes toward ChatGPT, and its academic use. A statistically significant moderate positive correlation was found between knowledge and ChatGPT usage ($r = 0.373$, $p < 0.001$). Although overall

attitude was not significantly associated with usage, a weak positive correlation was observed for the dimension of attitudes toward technology and social influence ($r = 0.282$, $p < 0.001$). No statistically significant differences in ChatGPT usage were identified across demographic variables.

Variable	Academic use of ChatGPT		
	r	95% CI	p-value
Age	-0.069 ^{sp}	-0.179 – 0.047	0.232
Gender	0.024 ^{pb}	-0.088 – 0.133	0.677
Work experience	-0.071 ^{sp}	-0.182 – 0.037	0.217
Working position	-0.059 ^{pb}	-0.170 – 0.060	0.306
Knowledge	0.373 ^{sp}	0.270 – 0.469	< 0.001
Attitude	0.090 ^{sp}	-0.028 – 0.198	0.120
Perceived risk	0.006 ^{sp}	-0.115 – 0.125	0.924
Anxiety	-0.011 ^{sp}	-0.132 – 0.099	0.855
Attitude to technology/social influence	0.282 ^{sp}	0.164 – 0.391	< 0.001

^{pb} Point-biserial correlation coefficient

^{sp} Spearman's Rho correlation coefficient

Table 5. Factors associated with the academic use of ChatGPT among participants

IV. DISCUSSION

A. Academic Use of ChatGPT Among Participants

The academic use of ChatGPT has been widely documented; however, its application among postgraduate healthcare students remains underexplored. In this study, the moderate mean and median usage scores suggest overall modest engagement. At the same time, the marked floor (33.9%) and ceiling (20.6%) effects indicate a polarised distribution, with a considerable proportion of students either not using ChatGPT or using it extensively. Such divergence may reflect differences in confidence, perceived legitimacy, or access to institutional guidance. Clustering at the extremes may also limit the scale's sensitivity to detect more nuanced variation in usage behaviour.

The moderate level of academic use observed in this cohort may reflect contextual constraints rather than limited interest. Postgraduate healthcare students in Vietnam commonly balance academic study with ongoing professional and clinical responsibilities, which may encourage selective and task-oriented engagement. In this context, ChatGPT use may be shaped by pragmatic considerations, including time pressures, professional accountability, and caution regarding ethical boundaries in academic and clinical settings. Furthermore, where institutional guidance on ChatGPT remains emergent, students may adopt a measured approach rather than pursuing widespread or experimental integration.

Participants most frequently reported using ChatGPT to clarify unclear content, consistent with prior research highlighting its role in concept clarification and complex problem-solving support (Monib et al., 2025). In postgraduate healthcare education, where learners often balance academic, clinical, and professional responsibilities, such task-oriented use may reflect pragmatic rather than exploratory engagement. ChatGPT appears to function primarily as a cognitive scaffold, supporting comprehension and structuring of ideas in self-directed learning contexts.

More than half of participants reported using ChatGPT to generate writing outlines, and many used it to gain overviews of new topics, generate content ideas, summarise academic readings, and obtain feedback on drafts. These patterns align with prior findings that postgraduate students predominantly use ChatGPT for writing, revising, editing, and summarising tasks (Acosta et al., 2024; Belaldavar & Angadi, 2024). Similarly, Chauke et al. (2024) reported its use in refining research focus, rephrasing content, and reducing time spent searching for literature. Collectively, these findings

suggest that ChatGPT is integrated into early-stage knowledge exploration and drafting processes, supporting efficiency and academic productivity.

In contrast, more personalised or practical applications were reported less frequently. Although over one-third of participants used ChatGPT for advice related to time management or emotional concerns, entertainment-related use appeared limited. This differs from findings among undergraduates, where entertainment significantly influenced usage (Lee et al., 2025). A speculative but plausible interpretation is that postgraduate students, who often manage study, work, and family responsibilities simultaneously, may prioritise efficiency over recreational experimentation. However, as such contextual factors were not directly measured, these interpretations remain tentative and warrant further investigation.

Fewer than one-third of participants reported using ChatGPT to draft pre-written emails. Although ChatGPT has been recognised as useful for improving academic communication, including writing style and clarity (Liu et al., 2024), its adoption for administrative or professional correspondence appears comparatively cautious in this cohort. This hesitation may stem from uncertainty regarding the appropriateness of AI-assisted communication in academic or clinical settings, particularly in the absence of clear institutional guidance. The relatively modest scores on perceived risk and anxiety dimensions suggest ambivalence rather than overt resistance. Notably, the positive association between ChatGPT use and the technology/social influence dimension indicates that institutional endorsement or peer normalisation may facilitate broader acceptance of AI-supported communication.

Overall, these findings indicate that postgraduate healthcare students primarily use ChatGPT to support learning and writing processes. The comparatively lower engagement in emotional support or administrative communication may reflect professional norms, ethical caution, and evolving institutional policies. These patterns highlight the need for structured AI literacy initiatives and clearer guidance on responsible and context-appropriate use within postgraduate programmes.

B. Factors Associated with the Academic Use of ChatGPT Among Participants

Knowledge of ChatGPT was moderately associated with academic use ($r = 0.373$, $p < 0.001$), consistent with prior research identifying awareness as a key factor associated with adoption among postgraduate students (Yakubu et

al., 2024). However, the relatively low internal consistency of the knowledge scale ($KR-20 = 0.53$) suggests potential measurement limitations; hence, the role of knowledge as an associated factor should be interpreted with caution. The instrument primarily assesses factual recognition and may not adequately capture procedural skills, such as prompt design or deeper conceptual understanding of how ChatGPT functions. As ChatGPT-related knowledge is likely multidimensional, this limited scope may have introduced measurement error and attenuated the observed association. Future research should therefore consider multidimensional assessments of ChatGPT literacy to enhance reliability and conceptual precision.

Attitudes toward technology and social influence were positively associated with ChatGPT use ($r = 0.282$, $p < 0.001$), consistent with prior research linking perceived ease of use and normative influences to utilisation among postgraduate students (Abdaljaleel et al., 2024; Yakubu et al., 2024). Notably, overall attitude was not significantly associated with usage. This pattern suggests that behavioural engagement may be shaped more strongly by contextual and normative factors than by general affective disposition. In institutional settings where formal guidance on ChatGPT remains emergent, peer endorsement and prevailing academic norms may exert a particularly influential role in shaping adoption. The influence of social norms may be further amplified by cultural and institutional characteristics. In hierarchical academic environments, supervisory attitudes and peer expectations may carry substantial weight in behavioural decision-making. Where formal policy frameworks are still developing, informal signals of approval from lecturers or senior peers may function as indicators of legitimacy, thereby facilitating engagement. This may help explain why the technology and social influence dimension was associated with ChatGPT use, whereas general attitude was not.

In addition, no significant differences in usage were observed across gender, age, work experience, or working position. These findings are consistent with prior research reporting no significant association between gender and ChatGPT usage (Bouzar et al., 2024), and reflect broader patterns in technology adoption where demographic differences are diminishing. Within this postgraduate cohort, engagement appears to be influenced more by knowledge and contextual factors than by personal characteristics.

These findings extend beyond descriptive prevalence by illustrating how ChatGPT engagement among postgraduate healthcare students may be selective,

instrumental, and socially mediated. Rather than reflecting universal or novelty-driven adoption, ChatGPT use appears shaped by professional academic demands, institutional norms, and levels of familiarity with the tool. In contrast to undergraduates, postgraduate students typically undertake more autonomous, research-intensive, and writing-focused tasks, which may position ChatGPT not merely as a supplementary resource but as a cognitive scaffold supporting higher-order academic functions such as conceptual clarification and structural organisation of scholarly work. In this sense, ChatGPT use among postgraduate students may reflect developmental academic needs and professional pragmatism rather than simple technological experimentation. The observed polarisation in usage further underscores uneven integration within the cohort, raising the possibility of widening disparities in digital competence and academic strategy. Accordingly, responsible integration of ChatGPT in postgraduate education may require structured and transparent literacy initiatives that enhance practical knowledge, foster critical evaluation skills, and cultivate supportive institutional environments to ensure equitable and reflective adoption across programmes.

C. Limitation of the Study

This study has some limitations that should be considered when interpreting the findings. First, the reliance on self-reported data may have introduced response biases, including social desirability and recall bias, potentially leading to over- or underestimation of actual ChatGPT use. Second, the use of an online Google Form may have resulted in digital literacy bias, as students more comfortable with technology could have been more likely to participate or complete the survey. Third, the use of convenience sampling within a single public healthcare university limits representativeness and restricts the generalisability of the findings to other institutional or academic contexts. Fourth, the predominantly female sample may not reflect gender distributions in postgraduate populations elsewhere, which may further limit external applicability. Finally, although the quantitative design enabled the identification of statistical associations, it did not capture the underlying motivations or contextual influences shaping ChatGPT use. Future research incorporating qualitative approaches may provide deeper insight into students' experiences and decision-making processes. Collapsing the ChatGPT usage scale into a binary system limited the interpretive depth. While it isolated actual behavioral occurrence, it removed meaningful distinctions regarding non-users' future intentions and users' perceived helpfulness, potentially weakening the construct validity.

V. CONCLUSION

This study highlights that postgraduate healthcare students engage with ChatGPT in diverse academic ways, particularly for clarifying complex contents, supporting academic writing, and enhancing research efficiency. Although personal and administrative uses were less frequent, their presence suggests that ChatGPT may be gradually extending into broader aspects of postgraduate learning. Knowledge and positive attitudes toward technology and social influence were significantly associated with ChatGPT use, whereas demographic characteristics were not. These findings indicate that structured training, such as incorporating prompt-writing modules into research-focused courses, and clear institutional guidance may strengthen both competence and responsible engagement. Faculty development initiatives may further support this process by enabling educators to model appropriate and effective integration of ChatGPT in teaching and supervision. Future research should evaluate the impact of such initiatives on knowledge and usage patterns, providing evidence on whether targeted training and institutional support enhance both adoption and responsible practice in postgraduate education.

Notes on Contributors

Luu Thi Thuy contributed to the conceptualisation, design of the work, and was responsible for reviewing and editing the manuscript.

Tran Thi Hoang Oanh participated in the conceptualisation and design of the work, prepared the original draft, and revised the manuscript.

Nguyen Thi Thu Thao was responsible for data analysis and original draft preparation.

Dang Van Thoi contributed to the interpretation of data and original draft preparation.

Le Thi Anh Tuyet worked on methodology, literature search, data analysis, and original draft preparation.

Nguyen Hoa Van Chi participated in analysis, literature search, interpretation of data, and original draft preparation.

Nguyen Huong Giang contributed to the literature search, data collection, and original draft preparation.

Nguyen Thi Ai Ny was involved in data collection, interpretation of data, and original draft preparation.

Tran Thi Thu Trang contributed to data collection, data analysis, and original draft preparation.

All authors reviewed and approved the final manuscript.

Ethical Approval

Participation in this study was entirely voluntary. All participants were informed about the purpose of the study, the anonymity and confidentiality of their responses, and their right to withdraw at any time without penalty. Written informed consent was obtained from all participants prior to data collection. The study received ethical approval from the Medical Ethics Committee of Da Nang University of Medical Technology and Pharmacy (97/CT-HDDD).

Data Availability

The data that support the findings of this study are openly available in Figshare repository <http://doi.org/10.6084/m9.figshare.30148834> (Thuy et al., 2025).

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Declaration of Interest

The authors declare that there are no conflicts of interest pertaining to this study.

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*Tran Thi Hoang Oanh

Institute of International Education,
Hue University of Medicine and Pharmacy,
Hue University, Hue, Vietnam
+84 914660704
Email: tthoanh@huemed-univ.edu.vn

Appendix 1: The Distribution of Usage Scores

ChatGPT use					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	102	33.9	33.9	33.9
	1	11	3.7	3.7	37.5
	2	15	5.0	5.0	42.5
	3	20	6.6	6.6	49.2
	4	20	6.6	6.6	55.8
	5	12	4.0	4.0	59.8
	6	16	5.3	5.3	65.1
	7	17	5.6	5.6	70.8
	8	9	3.0	3.0	73.8
	9	17	5.6	5.6	79.4
	10	62	20.6	20.6	100.0
Total		301	100.0	100.0	