CHATGPT IN ACADEMIC LEARNING: EFL SENIOR COLLEGE STUDENTS' ATTITUDES AND GENDER DIFFERENCES TOWARD CHATGPT

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Abstract
The adoption of ChatGPT into academic setting could be more prevalent due to its potential in leveraging EFL learners' language skills. Despite its popularity, the integration of this AI tool in Indonesia within academic setting is still relatively underdeveloped, and taking into account how learners perceive ChatGPT could potentially provide informed decisions before its integration. Thus, this study aimed at investigating learners' attitudes towards ChatGPT with particular attention to gender and related variables suggested by the literature. Adopting a qualitative approach through cross-sectional survey, 70 EFL college students of non-English major participated in this study in filling out five-Likert scale of 32 items. The findings demonstrated that learners had moderate attitude towards ChatGPT in behavioral, affective, and emotional aspect, and exhibited low frequency and usage duration on ChatGPT. The students had mixed attitudes on ethical issues in using ChatGPT, and generally supported the notion of using ChatGPT adhering to institution regulation, and there was no indication of addition to the tool in academic setting. While there was no significant difference in affective and cognitive aspects, it was found that male differed significantly than female students in terms of behavioral aspect, indicating the tendency of using ChatGPT for future academic activities.
Keywords: ChatGPT, EFL, Attitudes, Gender

Introduction

Artificial intelligence (AI) has rapidly transformed the landscape of education, unlocking new opportunities for a more autonomous, efficient, and personalized learning (Ayeni et al., 2024; Bahroun et al., 2023; Dash & Bhoi, 2024; Wei, 2023). Among AI models, generative AI such as ChatGPT has garnered a significant attention due to its capacity to engage in conversation, collect information, generate contents, support writing, and provide immediate feedback (Al-Kfairy, 2024; Celik et al., 2025; Fitria, 2023; Kalla et al., 2023). Previous studies indicate a growing interest on ChatGPT among college students for various academic purposes such as summarizing and paraphrasing (Ho, 2023), assisting writing (Song & Song, 2023), improving grammar understanding (Kucuk, 2024), and conversing in English (Young & Shishido, 2023). Those findings denotes the popularity of this AI tool and signal learners' tendency to rely on generative AI for various academic activities in higher education.

Despite the inclination of adopting ChatGPT in education, its integration in EFL (English as a Foreign Language) contexts in Indonesia is still relatively underdeveloped. Emerging studies mostly focus on higher education context, with fewer investigations at the lower educational contexts. Recent studies suggest that EFL learners often stumble upon technological gaps, digital literacy, institutional support in effectively utilizing AI tools in formal settings (Azwar & Jayanti, 2025; Dimas et al., 2025; Setiyanti & Pipa, 2025; Supriyono et al., 2024) which indicate the needs for further interventions. However, before taking the necessary measure, it is crucial to delve into learners' attitudes towards this advanced tool, as learners attitude could depict their acceptance and subjective experiences providing essential information to design the intervention (Aljabr, 2023; Ho, 2023)

An emerging wave of international studies have examined effective integration of ChatGPT into EFL settings. For instance, ChatGPT effectively assisted learners to enhance vocabulary mastery in Saudi Arabia context (Aldowsari & Aljebreen, 2024; Mugableh, 2024); other scholars

succeeded in improving learners' grammar understanding by positioning ChatGPT as feedback tool (Behforouz & Ghaithi, 2024), and instructional aid (Kucuk, 2024). In the same vein, ChatGPT also yielded positive outcome in improving writing ability (Tseng & Lin, 2024) and writing engagement (Teng & Huang, 2025), and elevating speaking efficacy (Celik et al., 2025). Despite these positive impacts, the studies have not comprehensively taking into account learners' characteristics such as gender, age, and other demographic variables.

Concerning EFL learners' attitude on ChatGPT, predominant findings tend to align towards a positive side. In the international scope, learners have generally demonstrated positive attitude towards ChatGPT, often perceiving it as a useful learning tool (Ajlouni et al., 2023; Aljabr, 2023; Ngo, 2023). In local context, majority of college students held positive view on ChatGPT as they utilized it for academic activities in assisting language learning (Rosmayanti, 2024; Slamet, 2024) such as writing research article (Hidayat & Sujarwati, 2024) and completing course assignments (Abdulmumin & Abdulrahman, 2024); in secondary level, despite viewing ChatGPT as desirable learning tools, human feedback is equally crucial (Adiyono et al., 2025). Even though there seems to be a rapid grow in uncovering EFL learners' attitudes towards ChatGPT, studies that explore learners' attitude in local context is still relatively underrepresented; especially, considering the populational gap in which the current study focuses on senior EFL learners. Moreover, it is also encouraged to delve deeper into other variables, such as ethical concerns and the possible tendency of addiction to ChatGPT as they are consistently highlighted as concern in adopting AI tools (Ajlouni et al., 2023; Xiao & Zhi, 2023).

Touching upon the missing pieces in the literature, this study seeks to contribute in filling the void through the following manners. Prior studies have investigated the attitudes of EFL learners toward ChatGPT from a variety of language skills, while this study primarily concentrated on gender differences and crucial issues of ethical consideration and potential addiction to AI tools, as suggested by the literature. This research specifically highlighted the attitudes of final-year college students in Indonesian context, which has not been thoroughly investigated, despite numerous studies frequently addressing the attitudes of EFL learners across various educational levels and disciplines. Therefore, the aims of this study are twofold: to elucidate learners' attitude on ChatGPT; to investigate the variations in attitudes depending on gender variable, as well as to examine the degree of ethical concern and potential addiction to ChatGPT. Additionally, the study attempts to generalize findings to the population of EFL senior college students in this setting by administering a survey to participants, employing a quantitative methodology. The findings are expected to provide a nuanced understanding of how learners perceive this AI tool through the examination of these relevant variables. Finally, the empirical resutls are expected to be invaluable to policymakers, curriculum developers, and educators in adopting AI tools in higher education.

Method

This study employed a quantitative cross-sectional approach to investigate non-English major college students' attitudes toward ChatGPT in academic learning. The study was conducted at a private university in West Kalimantan, involving 70 participants of senior year. The researchers adopted a quantitative methodology to numerically assess learners' perceptions and enable statistical analysis. The study was designed as a cross-sectional survey, collecting data from participants at a single point in time using a convenience sampling, as they were readily available and accessible during a TOEFL training session.

A questionnaire of existing research on EFL learners' attitudes towards ChatGPT (Ajlouni et al., 2023) was modified to collect the data. The questionnaire comprises four sections of total 32 items. The first section gathers demographic information, and the second section contains the frequency and duration. The third section of a five-point Likert scale examines three aspects of the

participants' attitudes: affective, cognitive, and behavioral. The questionnaire includes two supplementary variables: addiction and ethical consideration, each consisting of two items that employ a similar Likert scale.

The researchers utilized descriptive statistics to examine students' perceptions of ChatGPT. Descriptive statistics were employed to summarize the prevalence of ethical considerations and analyze perceived addiction levels. To address the gender differences towards ChatGPT, an inferential statistics were performed. Initially, a normality test was carried out, and the data were found to deviate from a normal distribution. Thus, the Mann-Whiteney U test, a non-parametric alternative to the independent samples t-test, was performed to determine possible significant differences. Lastly, to determine the category of mean score of each subscale, the following mean score categories were used:

Table 1. Mean Score Range

Mean Range	Level
1.0 - 2.33	Low
2.34 - 3.66	Moderate
3.67 - 5.0	High

Findings and Discussion

Frequency and Duration of ChatGPT Usage

Table 2. Frequency and Duration of ChatGPT Usage

Usage Pattern	Category	Frequency (n)	Percentage (%)
Frequency	Rarely (1-2 times per month)	28	40.0
	Sometimes (3-4 times per month)	25	35.7
	Often (weekly)	16	22.9
	Very Often (Daily)	1	1.4
Duration	Less than one month	32	45.7
	1-3 month	14	20.0
	4-6 month	7	10.0
	7-12 month	5	7.1
	More than a year	12	17.1

Table 2 demonstrates different levels of ChatGPT adoption among EFL senior college students. The majority of participants (40.0%) reported using ChatGPT rarely, while 35,7% used it occasionally. A small proportion (22,9%) used ChatGPT on a weekly basis, and only 1,4% reported utilizing ChatGPT daily.

On duration of use, half of the students (45,7%) had been using ChatGPT for less than a month, while 20,0% had engaged with it for 1-3 months. A smaller percentage (10.0% and 7.1%) had been using ChatGPT for 4-6 months and 7-12 months, respectively. Moreover, 17.1% of participants had been using ChatGPT for more than a year, suggesting that while some students are still unfamiliar with ChatGPT for learning, a smaller group has been engaging with it for more than a year.

The usage patterns of ChatGPT were diverse; only a small percentage had spent the tool on daily basis, whereas the rest had engaged with it for a minimum of three months. The frequency of ChatGPT use was dominated by infrequent usage, suggesting that the participants might not be

accustomed to AI tool in academic settings. Similar results were found in other EFL contexts, for instance, Aksakallı & Daşer (2025) identified that undergraduates utilized ChatGPT infrequently for academic writing because using AI could diminish their writing proficiency. Similarly, Aljohani (2024) contended that infrequent utilization of ChatGPT may be ascribed to insufficient digital proficiency, academic workload, and restricted familiarity with AI tools for scholarly activities. Finally, the ethical issues frequently highlighted in numerous studies on AI tool adoption warrant increased focus in future research, especially through the application of diverse methodological approaches in different contexts.

Descriptive Statistics of Overall Attitudes

Table 3. Descriptive statistics of participants' attitudes

Attitude Component	Mean	SD	Level
Affective	3.06	.406	Moderate
Cognitive	3.53	.607	Moderate
Behavioral	3.52	.624	Moderate

Table 3 reveals that students' attitude generally were at moderate levels in all subscales. The cognitive attitude received the highest mean score (M = 3.53, SD = 0.607), followed by the behavioral component (M = 3.52, SD = 0.624), while the affective component had the lowest mean score (M = 3.06, SD = 0,406). Despite small differences in mean scores, all components are at the moderate level (2.34 - 3.66).

Three Aspects of Attitude

1. Affective Attitude

Table 4. Items of Affective Components

Items	Mean (M)	SD
I like learning about ChatGPT	3.66	.720
I enjoy using ChatGPT in the learning process	3.66	.740
I feel comfortable using ChatGPT in the learning process	3.61	.708
I feel annoyed to use ChatGPT because there is no human interaction	2.30	.906
I feel concerned about using ChatGPT in doing campus work because it may generate inaccurate results	2.76	.970
I feel nervous if I can't access ChatGPT services	2.37	.871
Total	**3.06**	**.406**

Table 4 details the descriptive statistics of learners' attitudes toward ChatGPT in academic learning. The overall mean score was at moderate level (M = 3.06, SD = 0.406). The highest-rated items were "I like learning about ChatGPT" and "I enjoy using ChatGPT in the learning process", indicating a moderately positive attitude toward using ChatGPT. Similarly, "I feel comfortable using ChatGPT in the learning process" was also at moderate, indicating that most students feel comfortable the tool. Conversely, "I feel annoyed to use ChatGPT because there is no human interaction" (M = 2.30, SD = 0.906) fell within low level, denoting that the lack of human interaction is not a primary concern.

Regarding concerns about accuracy, "I feel concerned about using ChatGPT in doing campus work because it may generate inaccurate results" (M = 2.76, SD = 0.970) was rated moderate. Meanwhile, the lowest-rated item was "I feel nervous if I can't access ChatGPT services" (M = 2.37, SD = 0.871), which falls at low level, suggesting that most students do not feel dependent on ChatGPT for academic tasks.

2. Cognitive Attitude

Table 5. Items of Cognitive Components

Items	Mean (M)	SD
The skills of Employing ChatGPT in learning are necessary for students	3.61	.937
ChatGPT makes the learning process easier	3.91	.717
ChatGPT makes the learning experiences better	3.74	.774
ChatGPT enhances academic self-confidence	3.41	.732
ChatGPT develops writing skills	3.40	.769
ChatGPT satisfies my individual learning needs	3.59	.752
ChatGPT supports lifelong learning	3.11	.910
ChatGPT improves higher-order skills, i.e. Evaluation and creativity	3.44	.828
Total	**3.53**	**.607**

Table 5 outlines the overall mean score of cognitive attitude (M = 3.53, SD = 0.607), which falls into a moderate level of cognitive recognition of ChatGPT's role in learning. Among the items, the highest-rated statement was "ChatGPT makes the learning process easier" (M = 3.91, SD = 0.717). Similarly, "ChatGPT makes the learning experiences better" was also rated high, indicating that students perceive ChatGPT as beneficial and enhancing their learning.

The necessity of ChatGPT skills in learning was rated moderate, as represented in "The skills of employing ChatGPT in learning are necessary for students" and "ChatGPT satisfies my individual learning needs". This shows that while students reckon the importance of ChatGPT in education, their perception stays at moderate level. Additionally, the lowest-rated item was "ChatGPT supports lifelong learning", suggesting that students are not certain about ChatGPT's long-term educational impact beyond immediate learning tasks.

The findings above show that the students exhibited a moderate cognitive recognition of ChatGPT's role in academic learning, with the strongest perception related to its ability to simplify and improve the learning process. Although students acknowledge its contributions to academic confidence, writing skills, and higher-order thinking, these aspects are not viewed as significant.

3. Behavioral Attitude

Table 6. Items of Behavioral Component

Items	Mean (M)	SD
I would follow the improvements in ChatGPT	3.54	.774
I would inform friends and colleagues about the benefits of employing ChatGPT in the learning process	3.60	.710
I would use ChatGPT as a tutor	3.56	.735
I would use ChatGPT as an educational resource	3.67	.737
I would use ChatGPT for exercising, practicing and exam preparation	3.43	.791
I would use ChatGPT for summarizing and analyzing the educational material	3.53	.756
I would keep using ChatGPT to achieve my learning goals	3.33	.880
Total	**3.52**	**.624**

Table 6 displays the descriptive statistics of behavioral aspects toward ChatGPT in academic learning. The overall mean score for this component was 3.52 (SD = 0.624), indicating a moderate level of engagement and willingness to integrate ChatGPT into their learning practices.

Amongst the items, the highest-rated statement was "I would use ChatGPT as an educational resource" (M = 3.67, SD = 0.737), which belongs to high level. This suggests that students recognize ChatGPT as a valuable tool for academic support and are inclined to utilize it as a learning aid. Other behavioral items, such as "I would inform friends and colleagues about the benefits of employing ChatGPT in the learning process", "I would use ChatGPT as a tutor", and "I would follow the improvements in ChatGPT", were all rated moderate, indicating that students exhibit an extend of willingness to promote and keep up with advancements of ChatGPT.

Correspondingly, students showed moderate engagement in using ChatGPT for specific academic tasks, such as "I would use ChatGPT for summarizing and analyzing the educational material" (M = 3.53, SD = 0.756) and "I would use ChatGPT for exercising, practicing, and exam preparation" (M = 3.43, SD = 0.791). These results demonstrate that while students find ChatGPT useful for study-related activities, they may still rely on other learning methods. The lowest-rated item was "I would keep using ChatGPT to achieve my learning goals" (M = 3.33, SD = 0.880), suggesting that while students acknowledge the usefulness of ChatGPT, they do not exhibit strong long-term commitment to making it an essential part of their academic activity.

Concerning attitudes in the three aspects above, the learners generally showed a moderate positive attitude of ChatGPT cognitively, behaviorally, and affectively. This result could be a predictor of learners' acceptance of ChatGPT for academic setting; potentially leading to the more frequent utilization. Finding yielded by Ajlouni et al. (2023) revealed that learners who have relatively high level of attitude on ChatGPT might be supported by their technological skills. Similarly, Aljohani (2024) posited that college students whose academic tasks are demanding in number and deadlines would use AI tools more frequently. Understandably, the participants in this study were mostly at the end of their college year with less demanding academic tasks as those who are in the second year of their study.

Ethical considerations towards ChatGPT

Table 7. Ethical Consideration Items

Ethical Consideration Item	M	SD	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe using ChatGPT for assignments raises ethical concerns.	2.86	0.84	4.3	27.1	50	15.7	2.9
The use of ChatGPT in completing assignments should be monitored to ensure academic integrity.	3.47	0.78	0.0	7.1	48.6	34.3	10.0

Table 7 depicts a moderate concerns regarding the ethical implications of ChatGPT use in academic settings. The term, ethical considerations, refers to concern on potential of violation towards academic integrity comprised of ethical standards and behavior indicating commitment, honesty, and moral behavior in academic setting (Balalle & Pannilage, 2025). Pertaining the results presented in the table, the statement "I believe using ChatGPT for assignments raises ethical concerns" received a mean score of 2.86 (SD = 0.84), indicating a moderate level of agreement among students. Half of the students (50%) remained neutral, while 27.1% disagreed and 4.3% strongly disagreed, suggesting that a significant number of students do not view ChatGPT use in assignments as a major ethical issue. However, 15.7% agreed and 2.9% strongly agreed, reflecting a minority of students who do perceive ethical concerns.

The statement "The use of ChatGPT in completing assignments should be monitored to ensure academic integrity" received a higher mean score of 3.47 (SD = 0.78), placing it in the moderate category but leaning toward agreement. A significant portion of students (48.6%) remained neutral, while 34.3% agreed and 10% strongly agreed, indicating that a considerable number of students support the idea of monitoring ChatGPT use for academic integrity.

The findings above suggest that while ethical concerns about ChatGPT use in academic assignments exist, students exhibit mixed perspectives, with a substantial portion maintaining a neutral stance. Although the ethical issue was not prevalent, a considerable number of students support the implementation of monitored measures to ensure proper academic use of ChatGPT. These results echoed the findings of (Pasaribu et al., 2025), who confirmed that while majority of students recognized issues of plagiarism, wider ethical considerations remain underrecognized. This alignment reinforces the argument that digital ethics may still not adequately emphasized in academic context.

Perceived levels of addiction of ChatGPT

Table 8. Perceived Levels of Addiction towards ChatGPT

Addiction Item	M	SD	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am concerned about becoming addicted to using ChatGPT in learning	3.19	1.01	7.1	14.3	38.6	32.9	5
I often find myself using ChatGPT even when I don't need it for learning tasks	2.97	0.98	6	18.6	44.3	24.3	4.3

Table 8 shows moderate concern regarding potential addiction to ChatGPT in academic learning. The statement "I am concerned about becoming addicted to using ChatGPT in learning" was at moderate range. While 38.6% of students remained neutral, 32.9% agreed, and 5% strongly agreed, some students recognize the possibility of become over reliance on ChatGPT. However, 14.3% disagreed, and 7.1% strongly disagreed, indicating that a portion of students do not view ChatGPT usage as potentially addictive.

The statement "I often find myself using ChatGPT even when I don't need it for learning tasks" was also in the moderate range. The majority of students (44.3%) remained neutral, while 24.3% agreed and 4.3% strongly agreed, implying that some students occasionally engage with ChatGPT unnecessarily. Meanwhile, 18.6% disagreed, and 6% strongly disagreed, indicating that a portion of students might not consider their use of ChatGPT excessive.

The findings suggest that while concerns about ChatGPT addiction exist, most students remain moderately aware of the potential for AI overuse. Borrowing the conceptualization from Yankouskaya et al. (2025), potential addiction could be viewed as dependency or addiction toward ChatGPT, which could include emotional dependence, attachment and habitual reliance to the tool to a certain degree. A noticeable portion acknowledges occasional unnecessary use, but strong concern about addiction are not dominant showing that over-reliance on ChatGPT was not prevalent. The majority of participants demonstrated that they were not bothered about addicted possibility, which might stem from low to moderate the frequency and duration of ChatGPT usage. This interpretation corresponds with (Albayati, 2024) who revealed through the TAM model that perceived usefulness and ease of use strongly shape students' engagement with AI tools. In the

same vein, (Eke, 2025) raises critical concerns on the possible impact of unregulated generative AI usage, which could corrode academic integrity.

Gender Differences in Attitudes

A normality test was conducted using the Kolmogorov-Smirnov and Shapiro-Wilk tests to determine if the attitude data followed a normal distribution. The results showed that the affective ($p = 0.001$), behavioral ($p = 0.002$), and cognitive ($p = 0.041$) attitude components significantly deviated from normality. Hence, a Mann-Whitney U test was used to compare gender differences in attitudes toward ChatGPT.

Table 9. Normality Test

	Kolmogorov-Smirnov[a]			**Shapiro-Wilk**		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Affective Mean	.142	70	.001	.958	70	.019
Cognitive Mean	.108	70	.041	.969	70	.083
Behavioral Mean	.136	70	.002	.947	70	.005
a. Lilliefors Significance Correction						

Table 10. Result of Mann Whitney U

Attitude Component	**Male (Mean Rank)**	**Female (Mean Rank)**	**Mann-Whitney U**	**p-value (Sig.)**
Affective Attitude	43.26	33.01	318.500	0.067
Cognitive Attitude	42.32	33.31	334.500	0.111
Behavioural attitude	46.56	31.95	262.500	0.009

The results in Table 10 revealed no significant gender differences in affective ($U = 318.5$, $p = 0.067$) or cognitive attitudes ($U = 334.5$, $p = 0.111$), indicating that male and female students have similar emotional responses and perceptions of ChatGPT's usefulness. However, a significant difference was found in behavioral attitudes ($U = 262.5$, $p = 0.009$), with male students (Mean Rank = 46.56) exhibiting higher engagement than female students (Mean Rank = 31.95). This suggests that males are more likely to integrate ChatGPT into their academic routines, such as studying, practicing, and retrieving information, compared to females.

Building on the results above, it is evident that male and female students relatively have similar attitude towards ChatGPT affectively and cognitively, implying that their perception from the lens of usefulness and emotional engagement when using ChatGPT are largely comparable. This finding is supported by Kim (2016) that gender plays insignificant role pertaining technology acceptance and usage. The same finding is also expressed in (Aksakallı & Daşer, 2025) whose study confirms that gender does not play a significant role concerning the perception on ChatGPT based the TAM (technology acceptance model). However, there seems to be a strong behavioral discrepancy between male and female participants. The data suggest that male students would highly likely to incorporate ChatGPT for academic related tasks compared to female students in the future. Even though there is no satisfactory explanation for the significant difference in behavioral aspect, it could be argued that male participants viewed ChatGPT hold more potentials in the future compared to their female counterparts (Bouzar et al., 2024). Hence, a closer

investigation to provide deeper insights necessitate further exploration on why the discrepancy between gender appears in certain component of learners' attitude towards ChatGPT.

Conclusion

The findings demonstrate that learners have moderately positive attitude towards ChatGPT with relatively low frequency and duration usage, nuanced gender differences, low potential for addiction, and moderate awareness of ethical consideration. The only significant difference was present in behavioral aspect implying male students would tend to use ChatGPT for academic learning. These findings underscore the necessity to comprehend how learners perceive AI tools for academic tasks which is vital to make informed decisions in adopting AI technology. Educational institution and stakeholders, and curriculum designers should take into account how learners view AI technology to uphold the academic integrity and minimizing unwanted negative impacts.

Regardless, this study presents several limitations in its attempt to capture the complete picture of learners' attitude towards ChatGPT and related variables. Firstly, this study solely relied on self-reported data, offering avenues for future research to incorporate qualitative perspectives. Secondly, the small number of participants as the population also limits the generalizability of the findings. Lastly, the ethical concerns which have been frequently emphasized in various studies on AI tools adoption deserve greater attention in subsequent research, particularly through the implementation of diverse methodological approach in other contexts.

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