

Students' Perceptions of ChatGPT Utilization in Educational Economics Learning: A Descriptive Study in Higher Education

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ABSTRACT

The growing use of generative artificial intelligence, particularly ChatGPT, has created new opportunities and challenges for higher education. This study examines students' perceptions of ChatGPT utilization in Educational Economics learning at Universitas Jambi, Indonesia. A descriptive cross-sectional survey was conducted among 78 students in the Economic Education Study Program who took the Educational Economics course during the 2025/2026 academic year. Using total sampling, data were collected through a 16-item, four-point Likert-scale questionnaire covering five dimensions: ease of use, knowledge, satisfaction, motivation, and activity. Data were analyzed using descriptive statistics based on mean scores and predetermined categories. The findings indicate generally positive student perceptions across all five dimensions. Ease of use received the highest mean score ($M = 3.12$), followed by knowledge ($M = 3.02$), satisfaction ($M = 2.94$), motivation ($M = 2.83$), and activity ($M = 2.81$). Students perceived ChatGPT as accessible and helpful for understanding course materials and obtaining rapid responses. However, perceptions were comparatively lower regarding response accuracy, critical thinking, and motivation for academic writing. These findings suggest that students perceive ChatGPT as a potentially valuable complementary learning resource, while recognizing its limitations for higher-order learning activities. Appropriate pedagogical guidance is therefore needed to encourage critical evaluation of AI-generated information, independent learning, and responsible use of ChatGPT in Educational Economics learning.

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1. INTRODUCTION

The rapid advancement of digital technology has transformed higher education, influencing teaching practices, learning resources, assessment, and interactions between lecturers and students [1]. The emergence of generative artificial intelligence (GenAI),

particularly ChatGPT, represents a further development in this transformation. ChatGPT can support students in generating and refining academic text, summarizing information, exploring concepts, developing ideas, and obtaining immediate responses to learning-related questions [2]. Its growing presence in higher education has generated both opportunities for learning support and concerns regarding accuracy, academic integrity, independent thinking, and responsible use. Previous research indicates that university students generally recognize the potential benefits of GenAI for learning while also expressing concerns about its limitations and appropriate use [3].

In Indonesia, the increasing accessibility of digital technologies has created a supportive environment for the adoption of AI-based tools in higher education [4,5]. The use of ChatGPT among university students has also emerged as an area of empirical research. For example, a study examined students' acceptance and use of ChatGPT in Indonesian higher education institutions and found that the conditions surrounding technology use are important in shaping students' adoption of ChatGPT. These developments indicate that understanding how students perceive and use ChatGPT is increasingly important, particularly as higher education institutions seek to respond to the growing presence of generative AI in academic learning [6].

Educational Economics provides a particularly relevant context for examining students' perceptions of ChatGPT, as learning in this field involves more than mere recall of theoretical concepts. Students are expected to interpret economic phenomena, examine relationships between economic concepts and real-world conditions, analyze information and data, and communicate economic arguments in academic forms. In such a context, ChatGPT may be perceived as a supplementary resource for exploring explanations, generating alternative perspectives, and initiating academic tasks. At the same time, the usefulness of these functions depends on students' ability to evaluate the accuracy and relevance of AI-generated information and to maintain their own reasoning in the learning process. Thus, examining students' perceptions provides an important basis for understanding how ChatGPT is viewed and utilized within the specific context of Educational Economics learning.

Recent empirical studies have increasingly examined how university students perceive and use ChatGPT for academic purposes. For example, one study found that students generally recognized the potential benefits of generative AI for learning while also expressing concerns about its limitations and responsible use [7]. Similarly, Romero showed that students' acceptance and use of ChatGPT were associated with perceived usefulness, motivation, habit, and facilitating conditions [8]. Other studies have examined students' perceptions of ChatGPT as a learning tool and reported perceived academic benefits, accessibility, and support for understanding difficult concepts, while also identifying concerns about excessive reliance on originality, and critical thinking [9]. Research on academic writing further indicates that students use generative AI for activities such as brainstorming, organizing ideas, and revising text, but also encounter concerns about accuracy, authenticity, and maintaining their own authorial voice [10]. These studies demonstrate that students' experiences with ChatGPT extend across cognitive, affective, and

behavioral aspects of learning, but the emphasis and measurement of these aspects vary across studies.

Despite the growing body of research on ChatGPT in higher education, several aspects remain insufficiently understood. First, previous studies have examined students' perceptions through different constructs, including usefulness, acceptance, accessibility, academic benefits, motivation, critical thinking, and writing-related experiences, making it difficult to obtain a consistent picture of how students perceive ChatGPT across multiple dimensions of learning. Second, much of the existing evidence has been generated across general higher education settings or specific disciplines such as writing and science, while empirical evidence from Educational Economics learning remains limited. This context is relevant because economics learning requires students to connect theoretical concepts with economic phenomena, interpret information, and formulate academic arguments. Therefore, examining students' perceptions across ease of use, knowledge, satisfaction, motivation, and activity within a specific Educational Economics course can provide a more context-sensitive description of how ChatGPT is perceived as a learning resource. Rather than evaluating ChatGPT's effectiveness, this study addresses the descriptive gap by mapping students' perceptions across five dimensions in an actual higher education learning context.

The five dimensions examined in this study represent complementary aspects of students' perceptions of ChatGPT utilization. Ease of use reflects the accessibility of the technology [11], while knowledge represents its perceived role in supporting understanding and exploration of learning materials [12]. Satisfaction reflects students' evaluation of their experience with ChatGPT, whereas motivation concerns their perceived encouragement to engage in learning activities [13]. Activity represents students' perceived involvement in learning-related interactions using ChatGPT [14]. Together, these dimensions provide a structured framework for describing students' perceptions of ChatGPT without assuming causal effects on actual learning outcomes.

Against this background, this study focuses specifically on students' perceptions of ChatGPT utilization in Educational Economics learning. By examining ease of use, knowledge, satisfaction, motivation, and activity within a single course context, the study provides descriptive evidence of how students perceive different aspects of ChatGPT use in their learning experiences. This focus complements existing research by providing context-specific evidence from an Educational Economics course in Indonesian higher education, rather than evaluating ChatGPT's causal effectiveness.

Therefore, this study aims to examine students' perceptions of ChatGPT utilization in Educational Economics learning across five dimensions: ease of use, knowledge, satisfaction, motivation, and activity. The findings are expected to provide a descriptive basis for understanding students' experiences with ChatGPT and identifying aspects that may require greater pedagogical attention in its use as a supplementary learning resource.

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Research Design

This study employed a quantitative, descriptive, cross-sectional survey design to examine students' perceptions of ChatGPT's use in Educational Economics learning. A

cross-sectional design was considered appropriate because data were collected at a single point in time to describe students' experiences and perceptions without manipulating learning conditions or testing causal relationships. The study focused on five dimensions of ChatGPT utilization: ease of use, knowledge enhancement, satisfaction, motivation, and learning activities.

Participants and Research Setting

The study was conducted at Universitas Jambi, Indonesia, during the 2025/2026 academic year. The participants consisted of 78 undergraduate students enrolled in the Educational Economics course. Since the population consisted of only 78 students enrolled in the course, a total sampling approach was used to ensure comprehensive representation of all eligible participants. Consequently, all students who met the inclusion criteria were included in the study. Data collection was conducted over approximately one month.

Research Instrument

Data were collected using a structured questionnaire comprising 16 items designed to measure students' perceptions of ChatGPT's use in Educational Economics learning. The instrument was adapted to investigate university students' perceptions of ChatGPT's support for learning [15]. The questionnaire was adapted to align with the context of Educational Economics learning while preserving the instrument's original constructs. The instrument comprised five dimensions: ease of use (3 items), knowledge (4 items), satisfaction (4 items), motivation (3 items), and learning activities (2 items). Responses were measured using a four-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree), a four-point Likert scale was employed to minimize neutral responses and encourage participants to express a clear opinion regarding each statement. The adaptation process primarily involved contextualizing the wording of several questionnaire items to reflect learning activities in the Educational Economics course while preserving each construct's conceptual meaning.

Data Collection

Primary data were collected via a Google Forms questionnaire administered to all participants after they had tried using ChatGPT in their Educational Economics course. Participation in this study was voluntary. Before completing the questionnaire, all participants were informed of the study's purpose and assured that their responses would remain anonymous and confidential. The collected data were used solely for academic research purposes.

Data Analysis

The collected data were analyzed using descriptive statistics, with mean scores calculated for each indicator and dimension. The mean scores were subsequently classified into predetermined utilization categories based on interval criteria. The findings were presented in tables to provide a comprehensive description of students' perceptions of ChatGPT utilization in Educational Economics learning. The results were then interpreted

to formulate practical recommendations for optimizing ChatGPT integration in the learning process.

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3. RESULTS AND DISCUSSION

3.1. RESULTS

This section presents the findings of the descriptive statistical analysis of students' perceptions of ChatGPT's use in Educational Economics learning. The results are organized into five dimensions: ease of use, knowledge enhancement, satisfaction, motivation, and learning activities. The presentation focuses on identifying the overall pattern of students' perceptions and variations across individual indicators.

These findings are based on an analysis of questionnaires completed by 78 students enrolled in the Educational Economics course who used ChatGPT in their learning. An overview of the utilization of ChatGPT in Educational Economics learning is presented in Table 1.

Table 1. Mean scores and categories for each ChatGPT Utilization Dimension

Nu.	Dimension(s)	Mean	Category
1	Ease of use	3,12	High
2	Knowledge	3,02	High
3	Satisfaction	2,94	High
4	Motivation	2,83	High
5	Learning Activities	2,81	High

Source: primary data, process

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Table 1 presents the mean scores of students' perceptions across the five dimensions of ChatGPT utilization in Educational Economics learning. Overall, all dimensions were classified as high, indicating generally positive perceptions of ChatGPT among the participants. Ease of use obtained the highest mean score ($M = 3.12$), suggesting that students perceived ChatGPT as accessible and easy to use during learning activities. This was followed by knowledge enhancement ($M = 3.02$) and satisfaction ($M = 2.94$), indicating that students generally perceived ChatGPT as supporting their understanding of course materials and providing a satisfactory learning experience.

The motivation ($M = 2.83$) and learning activities ($M = 2.81$) dimensions obtained comparatively lower mean scores than the other dimensions. Although both remained within the high category, these findings indicate that students perceived relatively fewer benefits in terms of motivation and active learning. Overall, the descriptive statistics indicate positive student perceptions of ChatGPT's use across all five dimensions. Nevertheless, variations in the mean scores indicate that some aspects, particularly those related to learning motivation, active participation, response accuracy, critical thinking, and academic writing, warrant greater pedagogical attention.

Overall Findings

Overall, students perceived the utilization of ChatGPT positively across all five measured dimensions. Ease of use received the highest average score, indicating that students generally perceived ChatGPT as accessible and easy to use for learning.

Nevertheless, variations were observed among individual indicators. Comparatively lower mean scores on response accuracy, critical thinking, academic writing motivation, and learning activities suggest that these aspects require greater pedagogical attention. Therefore, although students generally expressed positive perceptions of ChatGPT's use, the findings also indicate several areas that warrant further instructional support.

Ease of Use

The ease-of-use dimension was examined through three indicators that describe students' perceptions of ChatGPT's accessibility and usability in Educational Economics learning. The descriptive results are presented in Table 2.

Table 2. Indicator of the dimension of ease of use

Nu.	Statement	Mean	Category
1	ChatGPT is easy to use and access	3,41	Very High
2	I find it easier to complete assignments using ChatGPT	3,05	High
3	The explanations or responses provided by ChatGPT are easy to understand	2,90	High

Source: primary data, processed

Table 2 presents students' perceptions of the ease-of-use dimension of ChatGPT in Educational Economics learning. Overall, the three indicators were classified as high to very high, indicating that students generally perceived ChatGPT as easy to use. The highest mean score was obtained for the statement "ChatGPT is easy to use and access" ($M = 3.41$), which was categorized as very high. This was followed by the statement "I find it easier to complete assignments using ChatGPT" ($M = 3.05$), while the statement "The explanations or responses provided by ChatGPT are easy to understand" obtained the lowest mean score ($M = 2.90$), although it remained within the high category. These findings indicate that students generally perceived ChatGPT as easy to use, with slight variations across individual indicators.

Knowledge

The knowledge enhancement dimension was assessed through four indicators that describe students' perceptions of ChatGPT's role in supporting their understanding and knowledge acquisition in Educational Economics learning. The descriptive results are presented in Table 3.

Table 3. Indicator of the dimension of knowledge

Nu.	Statement	Mean	Category
1	ChatGPT helps me discover new knowledge	3,12	High
2	ChatGPT helps improve my understanding of a subject	3,14	High
3	ChatGPT enhances my critical thinking skills	2,74	High
4	ChatGPT improves my understanding of technological innovation	3,08	High

Source: primary data, processed

Table 3 presents students' perceptions of the knowledge-enhancement dimension of ChatGPT use. Overall, all four indicators were classified as high, indicating generally positive perceptions regarding ChatGPT's role in supporting learning. The highest mean score was obtained for the statement "ChatGPT helps improve my understanding of a subject" (M = 3.14), followed by "ChatGPT helps me discover new knowledge" (M = 3.12) and "ChatGPT improves my understanding of technological innovations" (M = 3.08). In contrast, the statement "ChatGPT enhances my critical thinking skills" obtained the lowest mean score (M = 2.74), although it remained within the high category. These findings indicate that students generally perceived ChatGPT as supporting their understanding of course-related knowledge, while its perceived contribution to critical thinking was comparatively lower than the other indicators within this dimension.

Satisfaction

The satisfaction dimension was assessed using four indicators that capture students' perceptions of their overall satisfaction with ChatGPT's use in Educational Economics learning. The descriptive results are presented in Table 4.

Table 4. Indicator of the dimension of satisfaction

Nu.	Statement	Mean	Category
1	ChatGPT is engaging and enjoyable to use in the learning process	3,05	High
2	I am highly satisfied with the accuracy of the response provided by ChatGPT	2,67	High
3	I am highly satisfied with the speed at which ChatGPT responds to my questions	3,01	High
4	ChatGPT helps me to use my time more efficiently	3,03	High

Source: primary data, processed

Table 4 presents students' perceptions of the satisfaction dimension of ChatGPT utilization. Overall, the four indicators were classified as high, indicating generally positive levels of satisfaction with ChatGPT's use in Educational Economics learning. The highest mean score was obtained for the statement reflecting students' overall satisfaction with ChatGPT, whereas the lowest mean score was recorded for the statement regarding the accuracy of ChatGPT's responses (M = 2.67). Although all indicators remained within the high category, the comparatively lower score for response accuracy suggests that students perceived ChatGPT's responses as requiring further verification in certain learning situations.

Motivation

The motivation dimension was assessed through three indicators that describe students' perceptions of the extent to which ChatGPT supports their learning motivation in Educational Economics learning. The descriptive results are presented in Table 5.

Table 5. Indicator of the dimension of motivation

Nu.	Statement	Mean	Category
1	I frequently use ChatGPT	2,95	High
2	ChatGPT motivates me to learn	2,81	High
3	ChatGPT motivates me to write academic papers	2,74	High

Table 5 presents students' perceptions of the motivation dimension of ChatGPT utilization. Overall, all three indicators were classified as high, indicating generally positive perceptions of ChatGPT's role in supporting learning motivation. The highest mean score was obtained for the statement about students' interest in using ChatGPT during learning activities, whereas the lowest mean score was recorded for the statement about motivation to write academic papers ($M = 2.74$). Although all indicators were categorized as high, the comparatively lower score for academic writing motivation suggests that students perceived ChatGPT as providing less support for this aspect than for other motivational indicators.

Learning Activities

The learning activities dimension was assessed through two indicators that describe students' perceptions of the extent to which ChatGPT supports their engagement in learning activities in Educational Economics learning. The descriptive results are presented in Table 6.

Table 6. Indicator of the dimension of learning activities

Nu.	Statement	Mean	Category
1	ChatGPT encourages me to be more active in learning	2,82	High
2	ChatGPT enhances my creativity in learning	2,81	High

Table 6 presents students' perceptions of the learning activities dimension of ChatGPT utilization. Overall, the two indicators were classified as high, indicating generally positive perceptions of ChatGPT's use in supporting learning activities. The highest mean score was obtained for the indicator related to students' participation in learning activities, whereas the indicators associated with creativity and active engagement obtained comparatively lower mean scores ($M = 2.81$ – 2.82). Although all indicators remained within the high category, these findings suggest that students perceived ChatGPT as providing relatively less support for encouraging creativity and active participation than for other aspects of learning activities.

3.2. DISCUSSION

This section interprets the study's findings in relation to existing theories and prior research on the educational use of ChatGPT. Rather than demonstrating the actual effects of ChatGPT on learning outcomes, the discussion focuses on students' perceptions of its use in Educational Economics and explores the pedagogical implications of those perceptions.

Overall Students' Perceptions of ChatGPT Utilization

The findings indicate that students generally perceived ChatGPT positively across the five dimensions examined: ease of use, knowledge enhancement, satisfaction, motivation, and learning activities. Ease of use received the highest mean score ($M = 3.12$), while comparatively lower scores were observed for response accuracy ($M = 2.67$), critical thinking ($M = 2.74$), motivation to write academic papers ($M = 2.74$), and learning activities ($M = 2.81$ – 2.82). This pattern suggests that students viewed ChatGPT more positively as an accessible learning resource than as a tool for tasks requiring accuracy, critical evaluation,

academic writing, and active learning. These findings represent students' perceptions and should not be interpreted as evidence of actual improvements in learning outcomes [16].

The relatively high ease-of-use perception can be interpreted through the Technology Acceptance Model (TAM), which emphasizes perceived ease of use and perceived usefulness as important factors in technology acceptance [17]. In the present study, students perceived ChatGPT as easy to use and also reported positive perceptions regarding its support for knowledge enhancement and satisfaction. From the students' perspective, ChatGPT's accessibility and rapid responses may explain why the tool was viewed favorably for academic learning activities. However, such perceptions do not necessarily indicate that the technology improves students' academic performance or learning competencies.

The differences across the measured indicators provide an important perspective on the utilization of ChatGPT in Educational Economics learning. The relatively lower perceptions of response accuracy, critical thinking, academic writing motivation, and learning activities suggest that the perceived value of ChatGPT varies according to the demands of the learning task. In our view, this variation is important because learning activities in Educational Economics require not only access to explanations but also the ability to evaluate information, construct arguments, and develop academic ideas independently. Therefore, ChatGPT is more appropriately positioned as a supplementary learning resource, particularly when its use is accompanied by verification of information and critical evaluation [18].

Perceived Benefits of ChatGPT in Educational Economics Learning

The findings suggest that students perceived ChatGPT as a supportive learning resource, particularly because of its accessibility, responsiveness, and ability to provide explanations and alternative perspectives. The positive perceptions of knowledge enhancement and satisfaction indicate that students found ChatGPT useful for accessing information and supporting their learning. In our view, these benefits are closely related to the convenience of interacting with an AI-based tool that can respond to students' questions according to their immediate learning needs. However, these findings represent perceived benefits rather than evidence that ChatGPT directly improves learning outcomes.

From a socio-constructivist perspective, these perceptions can be understood through the concept of scaffolding, in which learning support assists learners in working with information and tasks that may otherwise be more difficult to manage independently [19]. ChatGPT can therefore be perceived as a supplementary source of explanations and alternative perspectives that students use while constructing their understanding. However, the value of this support depends on how students engage with the information provided. Students still need to question, evaluate, and relate AI-generated responses to relevant course materials and academic sources.

This interpretation is consistent with the view that the educational value of generative AI is shaped not only by its technological capabilities but also by how students and educators incorporate it into learning activities [20]. The findings also suggest that perceived benefits are not necessarily uniform across different learning tasks. The relatively lower perceptions of response accuracy, critical thinking, academic writing motivation, and learning activities

indicate that students may find ChatGPT more useful for obtaining explanations and information than for tasks requiring critical evaluation and independent academic production. Thus, its role in Educational Economics learning is better understood as a complementary resource rather than a replacement for students' own reasoning and academic work.

Variations in Students' Perceptions of ChatGPT Utilization

Although students generally perceived ChatGPT positively, their perceptions varied across the measured indicators. The comparatively lower scores for response accuracy, critical thinking, academic writing motivation, and learning activities suggest that students perceived ChatGPT as more useful for obtaining information and explanations than for learning tasks requiring critical evaluation, independent reasoning, and academic production. This variation is important because the usefulness of ChatGPT may depend on the cognitive and academic demands of the task. The educational value of ChatGPT is closely related to how its capabilities and limitations are addressed in learning contexts [21].

The differences among indicators further reinforce the need to distinguish between perceived usefulness and actual learning outcomes. The present study measures students' perceptions and does not assess their actual critical-thinking performance, writing quality, or academic achievement. Therefore, the relatively lower scores should be interpreted as areas in which students perceived less benefit from ChatGPT rather than evidence that the technology limits these abilities. In our view, these findings point to a need for learning activities that require students to evaluate AI-generated responses, verify information using credible academic sources, and develop their own arguments rather than relying solely on AI-generated content.

Pedagogical Implications for Educational Economics Learning

The findings have several implications for Educational Economics learning in higher education. Since students generally perceived ChatGPT as easy to use and supportive of their learning, lecturers can incorporate it into activities that require students to explore economic concepts, analyze contemporary economic issues, compare alternative viewpoints, and develop evidence-based arguments. However, ChatGPT should be positioned as a complementary learning resource rather than a substitute for independent learning or classroom instruction [22].

The comparatively lower perceptions of response accuracy, critical thinking, academic writing motivation, and learning activities suggest that pedagogical guidance is particularly important. Previous research on artificial intelligence in higher education also emphasizes that the educational value of AI depends on how it is integrated into teaching and learning practices, including educators' roles in designing meaningful learning activities [23]. In Educational Economics, lecturers can therefore design activities that require students to evaluate AI-generated responses, verify information against credible academic sources, and develop their own arguments before using ChatGPT to refine or extend their ideas.

Such an approach can help maintain the connection between ChatGPT use and disciplinary reasoning, academic writing, and independent learning. These implications are

derived from the patterns observed in students' perceptions and should therefore be understood as pedagogical recommendations rather than evidence of the effectiveness of specific instructional interventions.

4. CONCLUSION

This study examined students' perceptions of ChatGPT utilization in Educational Economics learning among 78 students in the Economic Education Study Program at Universitas Jambi, Indonesia. The findings show that students generally perceived ChatGPT positively across the five measured dimensions, with ease of use receiving the highest score. Students perceived ChatGPT as an accessible learning resource that could support their understanding of course materials and provide rapid responses. However, perceptions were comparatively lower regarding response accuracy, critical thinking, and motivation for academic writing. These findings indicate that students recognized both the potential benefits and limitations of ChatGPT in supporting different aspects of learning. The findings should therefore be interpreted as evidence of students' perceptions rather than as evidence of improvements in learning outcomes or other academic abilities.

The findings suggest that ChatGPT's potential value for Educational Economics learning can be enhanced with appropriate pedagogical guidance. Lecturers may encourage students to verify AI-generated responses, compare them with credible academic sources, and complete tasks that require critical evaluation and independent reasoning. Academic writing activities should also emphasize students' original contributions and appropriately disclose AI-assisted work. These implications are particularly relevant to the context examined in this study and should not be generalized beyond the perceptions of the 78 participating students. Future research should involve broader and more diverse samples and employ mixed-methods, longitudinal, or experimental designs to examine how ChatGPT use relates to measurable learning outcomes, critical thinking, academic writing, and other learning competencies.

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