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Between the Practical and the Problematic: ChatGPT in University Education for Business and Management Degrees

Entre lo práctico y lo problemático: ChatGPT en la educación universitaria de carreras en negocios y gestión

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Abstract:

This study examines how ChatGPT use relates to perceptions of academic usefulness, concerns, and perceived ethics among university students enrolled in business-related programs. Using a cross-sectional quantitative design, a structured questionnaire was administered to 118 business students at a Chilean university. The theoretical model was assessed using partial least squares structural equation modeling (PLS-SEM). The results indicate that ChatGPT use significantly influences students' perceptions of its usefulness as an academic tool, explaining 61.3% of the variance in this construct. In contrast, no significant relationship was observed with students' concerns, suggesting a functional yet largely unreflective appropriation of the tool. Furthermore, the perceived ethics construct was excluded from the final model due to limitations in convergent validity. These findings reveal a dissociation between the instrumental valuation of ChatGPT and the ethical problematization of its use. The study underscores the need for universities, particularly in business and management education, to design institutional policies, curricular guidelines, and pedagogical strategies that explicitly foster critical, ethical, and responsible engagement with generative artificial intelligence, rather than focusing solely on its functional benefits.

Keywords: ChatGPT, Business Education, Generative Artificial Intelligence, Academic Ethics, Student Perceptions.

Resumen:

Este estudio examina cómo el uso de ChatGPT se relaciona con las percepciones de utilidad académica, las preocupaciones y la ética percibida entre estudiantes universitarios matriculados en programas del área de negocios. Mediante un diseño cuantitativo transversal, se aplicó un cuestionario estructurado a 118 estudiantes de negocios de una universidad chilena. El modelo teórico fue evaluado utilizando modelamiento de ecuaciones estructurales por mínimos cuadrados parciales (PLS-SEM). Los resultados indican que el uso de ChatGPT influye significativamente en las percepciones de los estudiantes sobre su utilidad como herramienta académica, explicando el 61,3% de la varianza de este constructo. En contraste, no se observó una relación significativa con las preocupaciones de los estudiantes, lo que sugiere una apropiación funcional pero en gran medida poco reflexiva de la herramienta. Además, el constructo de ética percibida fue excluido del modelo final debido a limitaciones en la validez convergente. Estos hallazgos revelan una disociación entre la valoración instrumental de ChatGPT y la problematización ética de su uso. El estudio subraya la necesidad de que las universidades — particularmente en la educación en gestión y negocios— diseñen políticas institucionales, lineamientos curriculares y estrategias pedagógicas que fomenten explícitamente un compromiso crítico, ético y responsable con la inteligencia artificial generativa, en lugar de centrarse únicamente en sus beneficios funcionales.

Palabras clave: *ChatGPT, Educación en Negocios, Inteligencia Artificial Generativa, Ética Académica, Percepciones Estudiantiles.*

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Between the Practical and the Problematic: ChatGPT in University Education for Business and Management Degrees

| *Introduction*

The growing adoption of generative artificial intelligence (GAI) tools, such as ChatGPT, has significantly transformed teaching and learning processes in higher education, particularly in academic programs related to administration, business, and management (Gao et al., 2024; Gupta et al., 2025). These technologies, which are capable of generating coherent text and responding to complex questions in natural language, have been widely adopted by students to write essays, organize ideas, analyze cases, and solve quantitative problems (Bhaskar & Gupta, 2024; Jose et al., 2024).

Several studies have indicated that students view the use of ChatGPT positively due to its practical utility: it enhances efficiency, facilitates access to information, supports academic planning, and helps structure written text more effectively (Alfirević et al., 2024; Essien et al., 2024; Tran et al., 2024). However, this adoption has been accompanied by limited critical reflection on its pedagogical, cognitive, and ethical implications (Kauppinen, 2024; Naamati-Schneider & Alt, 2024), particularly concerning the development of ethical judgment and intellectual autonomy. Recent research warns that although ChatGPT may be effective for tasks associated with lower-order cognitive levels in Bloom's taxonomy, such as remembering, understanding, or applying, its impact is more limited when it comes to higher-order skills such as analyzing, evaluating, or creating original knowledge (Essien et al., 2024; Tran et al., 2024). Additionally, concerns have been raised regarding the erosion of writing skills, weakening of academic authorship, and superficial development of critical thinking (Gupta et al., 2025; Kauppinen, 2024). Despite this, a significant proportion of students appeared to express no major ethical concerns regarding its use, prioritizing practical functionality over ethical reflection or academic integrity (Bhaskar & Gupta, 2024; Naamati-Schneider & Alt, 2024).

This situation is particularly relevant in business schools, where future professionals are expected to develop strategic reasoning, ethical judgment, and intellectual autonomy. While some instructors have begun redesigning activities to integrate this technology using constructive pedagogical approaches (Tran et al., 2024), there is still limited empirical evidence exploring how business students interpret, value, and critically engage in the use of such tools throughout their academic journeys. This gap is further accentuated by the lack of studies in Latin American contexts, where sociocultural factors may influence either a critical or uncritical appropriation of technology (Alfirević et al., 2024). In light of this scenario, is essential to examine how university students in business-related programs perceive the use of ChatGPT, identifying both the reported benefits and the ethical risks or dilemmas they acknowledge or dismiss. This study aims to contribute context-sensitive evidence to the development of institutional policies, curricular decisions, and responsible teaching practices in the context of the growing integration of artificial intelligence in higher education.

This study aimed to analyze the effect of ChatGPT use on three key dimensions of student experience in higher education: functional perceptions, ethical and academic concerns, and perceived ethics. Using a structural model, this study seeks to evaluate how the self-reported use of this tool influences business students' assessments of its academic usefulness, the risks or tensions they identify, and the ethical considerations it raises in educational contexts. Specifically, the study proposes to: (1) examine the

effect of ChatGPT use on students' reported functional perceptions; (2) analyze the effect of use on concerns related to dependence, reliability, and authorship; and (3) assess the effect of use on perceived ethics, particularly regarding legitimacy, transparency, and academic responsibility in the use of generative artificial intelligence tools.

| *Literature review*

Use of ChatGPT in Management and Business Education

The use of generative artificial intelligence (GAI) tools such as ChatGPT has gained relevance in higher education programs in management and business because of their capacity to assist in writing, idea structuring, case analysis, and the resolution of quantitative problems (Gao et al., 2024; Gupta et al., 2025; Jose et al., 2024). Graduate students have reported using ChatGPT as support in complex courses, both in quantitative and strategic areas, to generate quick explanations, verify results, or begin drafting academic documents (Gupta et al., 2025).

From a pedagogical perspective, ChatGPT has been found to enhance students perceived efficiency, boost their confidence when facing complex tasks, and support their initial understanding of challenging topics (Bhaskar & Gupta, 2024; Tran et al., 2024). These functions align with the cognitive demands typical of management programs, which often combine analytical reasoning, argumentative writing, and decision making under pressure (Gao et al., 2024). As a result, some academics have begun redesigning teaching activities to incorporate ChatGPT as a supporting tool. This redesign aims to embed the tool within pedagogical processes that foster reflection, personalized learning, and the development of digital competencies (Tran et al., 2024). In particular, its use has been explored in preparing case analysis tasks, business decision-making simulations, and idea generation exercises, both individually and collaboratively (Bhaskar & Gupta, 2024; Jose et al., 2024).

However, the literature also highlights risks associated with unguided use of ChatGPT in these settings. Concerns have been raised regarding potential technological dependency, diminished cognitive effort, and excessive delegation of critical functions such as argumentation, reasoning, and original writing (Kauppinen, 2024; Naamati-Schneider & Alt, 2024). Moreover, not all students appear to possess the necessary competencies to critically evaluate the responses generated by the model, which may lead to uncritical acceptance of inaccurate or poorly substantiated content (Essien et al., 2024).

In addition, qualitative studies indicate that although many students value ChatGPT's immediate utility, there is limited problematization of its use from ethical or educational perspectives. In management contexts, where future professionals are expected to develop skills such as critical judgment and intellectual autonomy, this lack of reflection may represent significant tension in teaching and learning processes (Bhaskar & Gupta, 2024; Kauppinen, 2024). In summary, the use of ChatGPT in management education presents itself as a tool with high potential for supporting academic productivity and assisted learning. Nevertheless, its effectiveness depends on instructional support, development of institutional frameworks that regulate its integration, and preparation of students capable of using it in a critical, ethical, and strategic manner.

Beyond global debates, a growing body of Latin American scholarship is beginning to document how generative AI is being appropriated in higher education. Systematic and conceptual reviews indicate that, while universities in the region are experimenting with AI tools, their integration remains uneven

and is often constrained by infrastructural and regulatory gaps (García-Chitiva, 2025; González Torres et al., 2025). Empirical evidence from a Colombian university further reveals intensive student reliance on ChatGPT for written assignments and assessment-related tasks, frequently in the absence of formal institutional guidance, which reinforces ethical ambiguity around academic authorship and cognitive dependence (Vásquez Cardona et al., 2025). At the same time, recent work on generative AI governance in higher education suggests that institutional policy frameworks are only beginning to emerge and still pay insufficient attention to critical literacy and equity considerations (Jin et al., 2025). In the specific field of business and management education, evidence from students in Chile shows that functional perceptions encourage ChatGPT use, whereas academic and ethical concerns do not substantially limit its adoption, pointing to a largely uncritical, functionalist pattern (Serrano-Malebrán et al., 2025). Taken together, these studies highlight both the rapid diffusion of ChatGPT and related educational technologies in Latin American universities and the persistent misalignment between functional benefits and ethical reflection, underscoring the need for context-sensitive analyses such as the present study.

Student Perceptions of ChatGPT

The use of ChatGPT and chatbot technologies in university settings generates a range of student opinions. Overall, recent literature reveals a predominantly favorable perception, centered on the functional benefits of these tools, such as efficiency, constant availability, and usefulness for organizing ideas or understanding complex content (Jose et al., 2024). Gupta et al. (2025), in a study with graduate management students, found that ChatGPT was perceived as a valuable resource for completing quantitative tasks, as it enhanced students' confidence in solving complex problems, optimized response time, and allowed for stronger preparation for academic assessments. However, some participants also stated that frequent use of the tool might foster excessive dependency, reducing their ability to solve problems independently and undermining the depth of autonomous learning.

From a complementary perspective, Zou (2024) noted that the use of chatbots can stimulate students' interest in learning because of their 24/7 availability, customization capabilities, and the possibility of accessing immediate feedback. These features are valued as elements that enhance motivation, self-confidence, and perception of autonomy in the learning process. However, the same study acknowledges that in certain situations, students may experience skepticism regarding the accuracy of generated responses, which affects their confidence in using the tool for more complex problem-solving. In another study, Bhaskar and Gupta (2024) observed that many students used ChatGPT as a starting resource for written tasks, valuing its speed and clarity in organizing content. Nevertheless, they also detected a tendency to accept responses uncritically, which could limit the development of reflective thinking if not accompanied by instructional guidance or strategies to validate the received information.

In addition, Essien et al. (2024) analyzed the perceived impact of ChatGPT at different cognitive levels and reported that students found the tool useful for tasks involving remembering or understanding concepts but considered its usefulness to decrease higher-order activities such as analyzing, evaluating, and creating. This difference in perception is linked to the intellectual challenges posed by each type of task and the tool's limited capacity to foster critical thinking on its own. Taken together, the gathered evidence supports Hypothesis 1.

H1. ChatGPT use significantly affects students' perceptions.

Student Concerns Regarding the Use of ChatGPT in Education

Despite the widely recognized benefits of using ChatGPT in university settings, several studies have highlighted a range of student concerns. One of the main issues is related to the reliability of the generated content. In some cases, students identify responses that are inaccurate, incomplete, or factually incorrect, which can negatively affect learning when the tool is used without supervision or critical verification (Zou, 2024).

Similarly, technological overdependence has been identified as an emerging risk factor. Zou (2024) emphasized that the repeated use of chatbots may reduce emotional engagement with instructors and foster mechanized learning, affecting the development of interpersonal skills and student commitment to the learning process. This concern intensifies when students stop viewing their professors as primary sources of guidance and begin to rely exclusively on automated responses, even though they may be subject to biases or inconsistencies. Another concern is the risk of involuntary or automated plagiarism. Bhaskar and Gupta (2024) argue that, although many students do not intend to copy content explicitly, the use of text generated by ChatGPT without proper paraphrasing or conceptual understanding may lead to submitting work without real mastery of the subject matter, raising questions about authorship and academic ethics.

Ambiguity surrounding the acceptable use criteria was also noted. Essien et al. (2024) observed that many students are unclear when the use of ChatGPT constitutes legitimate assistance versus academic dishonesty, which can generate anxiety, especially in contexts where institutions have not established clear policies on its implementation and limits. Additionally, concerns have been raised regarding data privacy and lack of transparency in AI models. Zou (2024) warned that by using ChatGPT, students may unintentionally disclose sensitive information without being certain about how it is processed, stored, or potentially reused. Collectively, these findings support Hypothesis 2.

H2. ChatGPT use directly and positively affects students' concerns.

Perceived Ethics

The use of artificial intelligence tools such as ChatGPT in educational contexts has sparked an ethical debate involving issues such as authorship, transparency, academic fairness, and responsibility in the use of generative technologies. While students appreciated the practical benefits of these tools, they also expressed concerns about their ethical implications (Bhaskar & Gupta, 2024). One of the main concerns identified in recent literature is the risk of unintentional plagiarism. Bhaskar and Gupta (2024) pointed out that when using ChatGPT to complete assignments, students may submit automatically generated content without fully understanding its origin or applying critical judgment, raising questions about the authenticity and academic integrity of the submitted work. Similarly, the lack of transparency in the response-generation processes of AI models has been recognized as a problematic factor. Essien et al. (2024) observe that many students do not understand how the responses are constructed, or whether they are based on reliable or verified sources, making it difficult to establish clear ethical criteria for their use in evaluative contexts.

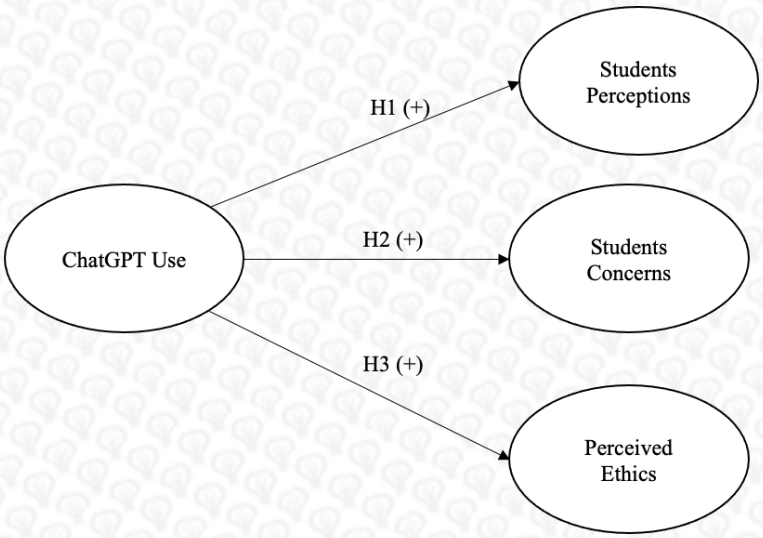
Zou (2024) added that students may face ethical dilemmas when they are unsure of the extent to which it is legitimate to use a chatbot to complete assignments, especially when institutions have not established clear guidelines. This ambiguity, combined with the high availability of the tool, may lead students to use practices that border the limits of legitimate authorship without engaging in deep ethical reflections. Furthermore, there are concerns regarding the biases embedded in AI models. Although

students may not always recognize this explicitly, some studies, such as Zou (2024), indicate that responses may be influenced by the data used to train the model, raising ethical questions related to fairness, neutrality, and informational equity. Taken together, these findings support Hypothesis 3.

H3. ChatGPT use directly and positively affects perceived ethics.

Figure 1

Proposed Model



The theoretical model proposed in this study posits that ChatGPT functions as an exogenous variable that directly influences three key dimensions of students' academic experience: functional perceptions, academic and ethical concerns, and perceived ethics. This approach is grounded in recent studies that document both instrumental benefits and emerging ethical dilemmas associated with the use of generative artificial intelligence in educational contexts (Bhaskar & Gupta, 2024; Kauppinen, 2024; Mourtajji & Arts-Chiss, 2024). Accordingly, a structural model of causal relationships was formulated and analyzed using the PLS-SEM technique, with the aim of identifying the extent to which self-reported use of this tool impacts students' functional evaluations, concerns, and reported ethical tensions within business-related programs. This model is illustrated in Figure 1.

| *Methodology*

Population and Sample

This study was conducted using a cross-sectional quantitative design to analyze the perceptions of university students in management-related programs regarding the use of ChatGPT in educational contexts. The target population consisted of undergraduate students from the Faculty of Economics and Administration at Universidad Católica del Norte, Antofagasta campus, totaling 899 students enrolled in 2023, according to official data from the Chilean Ministry of Education. The minimum sample size calculated using G*Power software (Faul et al., 2007) was 90 students.

The sample was selected through non-probabilistic convenience sampling, based on criteria of accessibility and voluntary willingness to participate. Students from the following degree programs were included: business engineering, public accountant and auditor, and information and management control engineering. Data were collected between October and November 2024 using a self-administered questionnaire. The inclusion criterion was having used ChatGPT at least once in the previous month. Because of this non-probabilistic design, the findings cannot be statistically generalized to all business students in Chile and should be interpreted as evidence from this specific institutional context.

A total of 129 responses were obtained. Eleven questionnaires were excluded due to missing values and inconsistent answers, resulting in 118 valid cases for analysis. The final sample consisted of 54 women and 64 men, with ages ranging from 18 to 26 years (mean, 21 years). Prior to the final administration of the questionnaire, a pilot test was conducted with 30 participants to identify potential comprehension issues and validate the structure of the instrument. The demographic data are presented in Table 1.

Table 1

Demographic Data

Variable		N	%
Gender	Female	54	45.8
	Male	64	54.2
Age	18-20 years	58	49.2
	21-23 years	54	45.8
	24-26 years	6	5.1
Academic Level	First year	19	16.1
	Second year	55	44.6
	Third year	19	16.1
	Fourth year	17	14.4
	Fifth year	8	6.8
Degree Program	Business Engineering	45	41.3
	Information and Management Control Engineering	33	30.3
	Public Accountant and Auditor	31	28.4
Most Used Platform	ChatGPT	103	87.3
	Claude	2	1.7
	Gemini	6	5.1
	Other	7	5.9

The measurement instrument used in this study consisted of a structured, self-administered questionnaire designed to assess university students' perceptions regarding the use of ChatGPT in educational contexts. The questionnaire was developed based on the theoretical model proposed by Farhi et al. (2023), which examined the relationships between ChatGPT usage, student perceptions, concerns, and perceived ethics associated with this tool.

The scales used to measure the constructs were adapted from previous empirical studies. The items measuring ChatGPT use and student perceptions were drawn from the work of Haleem, Javaid, and Singh (2022), who addressed the functionalities, perceived benefits, and potential of this technology in educational settings.

Student concerns were assessed using items developed by Welding (2023), focusing on their perceptions of the ethical, cognitive, and academic risks associated with the use of generative artificial intelligence in completing assignments. The construct of perceived ethics was operationalized using items adapted from Malmström, Stöhr, and Ou (2023), who explored ethical attitudes toward artificial intelligence tools in higher education through a national survey.

All items were evaluated using a five-point Likert scale (1 = strongly disagree; 5 = strongly agree), in line with standard practices in quantitative research on educational technologies (Hair et al., 2022). The items were translated and culturally adapted to the Spanish-speaking context using a forward and backward translation process and subsequently validated by a panel of experts in education and technology to ensure semantic equivalence.

Prior to the final administration of the instrument, a pilot test was conducted with 30 students sharing similar characteristics with the target sample. This phase enabled the refinement of item wording and ensured the clarity, relevance, and comprehensibility of the items, without altering the original conceptual structure of the constructs. The final version of the questionnaire was used for data collection, and validation was conducted through reliability and validity analyses using partial least squares structural equation modeling (PLS-SEM).

| *Results*

Measurement Model Evaluation

The validity and reliability of the model constructs were assessed using Hair et al. (2022) approach. Internal reliability was evaluated using Cronbach's alpha (α) and composite reliability (CR). All values exceeded the acceptable threshold of 0.70 (Dijkstra & Henseler, 2015; Fornell & Larcker, 1981) for the constructs ChatGPT Use, Perceptions, and Concerns, indicating satisfactory internal consistency.

Second, convergent validity was assessed using the average variance extracted (AVE) and individual item loadings. Standardized factor loadings exceeded 0.70, and AVE values were above the 0.50 threshold for all the constructs, confirming adequate convergence (Hair et al., 2019).

An exception to these criteria was observed in the construct of Ethics, where Cronbach's alpha (0.629) and AVE (0.180) did not meet the minimum required levels, indicating low reliability and convergence. Consequently, this construct was excluded from the final model to preserve the statistical quality of analysis. Table 2 presents the reliability and convergent validity indicators.

Table 2

Construct Reliability and Validity

Construct	Item	Loading	Cronbach's Alpha	Composite Reliability (ρ_A)	Composite Reliability (ρ_C)	Average Variance Extracted (AVE)
ChatGPT Use	ChatGPT is a cutting-edge and trending writing model.	0.715	0.888	0.896	0.915	0.643
	ChatGPT helps students write essays and articles.	0.864				
	ChatGPT helps students translate languages and compose poetry.	0.778				
	ChatGPT is a formidable tool for increasing human productivity.	0.770				
	ChatGPT represents a revolution in natural language processing capabilities.	0.829				
	ChatGPT is full of creative ideas to share with students.	0.846				
	ChatGPT provides students with the best possible ideas for writing.	0.705				
Student Perceptions	ChatGPT is an effective problem-solving tool.	0.827	0.833	0.836	0.883	0.603
	A key feature of ChatGPT is its ability to acquire knowledge from human users.	0.721				
	ChatGPT is important in education as it helps students find	0.849				

Construct	Item	Loading	Cronbach's Alpha	Composite Reliability (ρ_A)	Composite Reliability (ρ_C)	Average Variance Extracted (AVE)
	answers to their questions.					
	ChatGPT provides students with useful website links for educational purposes.	0.769				
	It is unethical for students to rely on ChatGPT to complete their assignments.	0.894				
	I am concerned about relying on ChatGPT for educational purposes.	0.855				
Student Concerns	I worry that relying on		0.907	0.777	0.895	0.637
	ChatGPT may undermine the purpose of education.	0.916				
	Relying on ChatGPT may negatively affect students' critical thinking abilities.	0.705				
	ChatGPT may provide unreliable data, putting students' efforts at risk.	-0.247				
Perceived Ethics	I avoid writing assignments with ChatGPT to prevent ethical dilemmas.	-0.205	0.629	-0.093	0.251	0.180
	I only use ChatGPT to get creative ideas related to education.	0.219				

Construct	Item	Loading	Cronbach's Alpha	Composite Reliability (ρ_A)	Composite Reliability (ρ_C)	Average Variance Extracted (AVE)
	ChatGPT should only be used by students with special needs (dyslexia, ASD).	0.453				
	Developing ethical guidelines for ChatGPT use is the institution's responsibility.	0.814				
	The use of AI tools should be banned in educational institutions.	0.251				

Discriminant validity was assessed using the Fornell–Larcker criterion, which requires that the square root of the AVE for each construct be greater than its correlations with any other construct in the model. This condition was met for all combinations analyzed, as shown in Table 3, confirming adequate discriminant validity among the constructs.

Table 3

Discriminant Validity Analysis – Fornell–Larcker Criterion

	ChatGPT Use	Student Perceptions	Student Concerns
ChatGPT Use	0.798		
Student Perceptions	0.130	0.802	
Student Concerns	0.011	0.783	0.776

Structural Model Evaluation

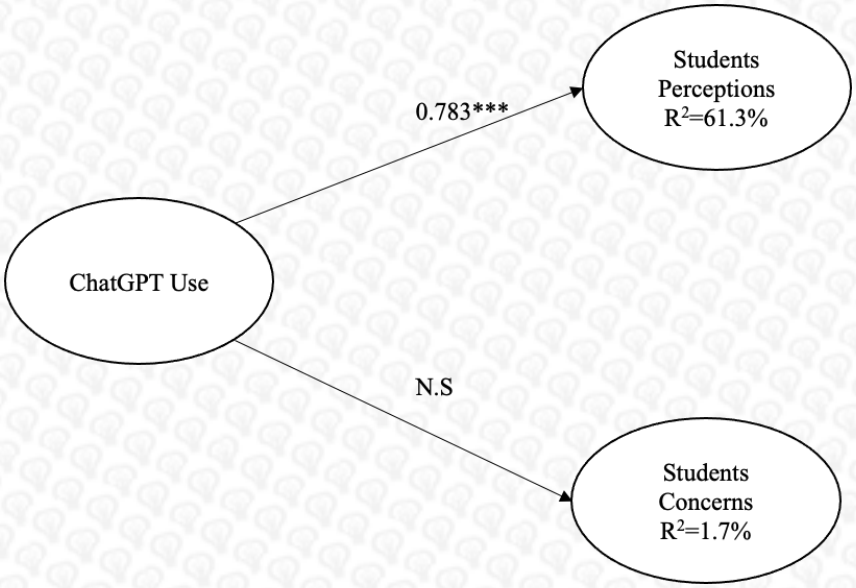
The structural model was evaluated once the measurement structural model was validated. This involved analyzing the coefficients of determination (R^2), path coefficients (β), p-values, and Standardized Root Mean Square Residual (SRMR) index. The SRMR value was 0.083, below the threshold of 0.09 proposed by Henseler et al. (2016), indicating an acceptable overall model fit.

The analysis of the coefficients of determination shows that the model explains 61.3% of the variance in the Student Perceptions construct, which is considered a substantial explanatory power. In contrast, the variance explained in the Student Concerns construct was only 1.7%, representing weak predictive power (Chin, 1998).

Although the path from ChatGPT use to Student Concerns was not statistically significant and the model explained only a very small portion of the variance in this construct ($R^2 = 0.017$), this suggests that students' worries about ChatGPT are largely independent from their frequency of use. In other words, concerns may be driven by broader institutional, social, or ethical narratives rather than by students' direct experience with the tool. The results are shown in Figure 2.

Figure 2

Structural Model Results



Regarding structural relationships, ChatGPT use showed a positive and statistically significant effect on student perceptions ($\beta = 0.783$, $p < 0.001$), supporting Hypothesis H1. However, its relationship with level of concern was not significant ($\beta = 0.130$, $p = 0.523$), leading to the rejection of Hypothesis H2. Table 4 presents path coefficients and their respective significance levels are presented in Table 4.

Table 4

Hypothesis Testing Results

Path	Path Coefficient	P-Value	Result
ChatGPT Use → Student Perceptions	0.783	0.000	Supported
ChatGPT Use → Student Concerns	0.130	0.523	Not supported

| *Discussion*

The results of this study confirm that ChatGPT use has a positive and statistically significant effect on university students' perceptions of business-related programs, but not on their concerns, partially aligning with and qualifying previous evidence. The finding that ChatGPT use explains 61.3% of the variance in student perceptions, but only 1.7% in concerns, suggests a dissociation between the functional perception of technology and critical reflection on its implications. The strong standardized path coefficient from ChatGPT use to Student Perceptions ($\beta = 0.783$) indicates that even moderate increases in reported use are associated with substantial gains in perceived usefulness and effectiveness, underscoring how salient the functional benefits of the tool are in students' everyday academic experience. The very low explained variance for Student Concerns indicates that simply using ChatGPT more often does not substantially increase or reduce students' anxieties about the tool. In our sample, concerns appear to be relatively stable attitudes that are weakly related to actual usage, and may instead reflect general discourses about academic integrity, fears of technological dependency, or personal ethical beliefs. This result reinforces the idea that functional adoption can coexist with limited ethical reflection, and that interventions aimed at critical and ethical awareness cannot rely on usage patterns alone. It is also plausible that the low explained variance reflects limitations of the measurement instrument and the absence of additional explanatory variables in the model, such as institutional communication about AI or course-level assessment policies.

This pattern has been reported in recent studies. For instance, Tran et al. (2024) found that students highly valued ChatGPT for tasks such as writing, idea exploration, and organizing thought processes, especially during the early stages of learning. Similarly, Essien et al. (2024) noted that the positive impact of these tools is concentrated mainly at the lower levels of Bloom's taxonomy, such as remembering and understanding, while their ability to promote higher-order skills, such as analyzing, evaluating, and creating, remains limited. This supports the interpretation that students perceive their immediate practical utility but not necessarily as a tool for fostering critical thinking or intellectual autonomy.

Despite this favorable functional assessment, the lack of a significant relationship between ChatGPT use and student concerns seems to indicate limited ethical problematization among students. This is consistent with Kauppinen (2024), who warns that the integration of generative technologies into education, without formative guidance, tends to obscure risks such as the loss of authorship skills or the superficial construction of knowledge.

In this regard, the findings of the present study align with the argument made by Tran et al. (2024), who suggest that the uncritical appropriation of ChatGPT is mediated by the absence of clear institutional policies, that contribute to the functional normalization of its use, even when students acknowledge potential ethical dilemmas. At the curricular level, this represents a challenge for business schools, which traditionally emphasize strategic judgment, responsibility, and intellectual autonomy as core competencies.

On the other hand, the exclusion of the Perceived Ethics construct from the final model, due to its low reliability and convergent validity, may also be interpreted as empirical evidence of the difficulty in capturing such reflexivity in contexts where the use of AI tools has not yet been accompanied by a robust normative or pedagogical framework. Studies, such as those by Alfirević et al. (2024) showed that the implementation of chatbots or personalized models as educational resources may be positively received, but their effectiveness depends heavily on the type of ethical and methodological training that

accompanies their integration. As a result, the final model does not empirically test the originally hypothesized effect of ChatGPT use on perceived ethics, and our conclusions regarding this dimension must be interpreted cautiously and primarily at a conceptual level.

Taken together, these findings reinforce the need to promote pedagogical approaches that not only explore the technical use of ChatGPT, but also develop students' critical skills to question, validate, and reflect on the generated information. As Tran et al. (2024) have emphasized, integrating artificial intelligence into instructional design requires rethinking assessment activities, fostering active learning methodologies, and developing competencies such as evaluating AI output, designing effective prompts, and engaging ethically in human-machine interactions.

Finally, this study contributes evidence from a Latin American context, still underrepresented in current literature, highlighting that even in environments with lower technological institutionalization, the global pattern of uncritical, functionalist, and utility-driven adoption is replicated. This finding supports the need for policies that address the ethical, cognitive, and formative dimensions of generative AI use in higher education, particularly in fields such as business, where ethical judgment and responsible decision making are essential competencies.

| *Implications*

Implications for Academia

The findings of this study offer important implications for the academic field, particularly for business and management education programs. First, the results confirm the need to advance toward a pedagogical redesign that integrates the use of generative artificial intelligence (GAI), such as ChatGPT, not only as a functional tool but also as an object of critical reflection. Uncritical adoption by students, primarily aimed at completing tasks more quickly or structuring ideas, presents significant challenges regarding the development of critical thinking, academic authorship, and knowledge ethics (Essien et al., 2024; Tran et al., 2024).

In this context, it is necessary to incorporate formative spaces into curricula that promote critical digital literacy, an understanding of how generative models work, and ethical judgment in their use. This can be addressed through cross-disciplinary courses, interdisciplinary workshops, and specific evaluative components that encourage students to question the use of AI in educational settings. As Bhaskar and Gupta (2024) point out, the risk of cognitive delegation and loss of authorial agency can be mitigated when the use of these tools is mediated by didactic strategies that prioritize metacognition, source validation, and intellectual responsibility.

Moreover, it is recommended to foster active student-centered methodologies, where AI serves as a supportive resource but not a substitute for complex cognitive processes. Activities such as comparative analysis between human and AI-generated responses, critical co-creation of prompts, or algorithmic bias evaluation can become valuable formative experiences that stimulate higher-order cognitive and ethical competencies (Alfirević et al., 2024; Kauppinen, 2024).

Implications for Educational Management

From an institutional perspective, the results of this study highlight the need to establish clear and updated regulatory frameworks for the use of generative artificial intelligence technologies in higher

education. The absence of concrete and shared guidelines within institutions creates grey areas that can lead to ambiguous practices, student anxiety, conflicts surrounding authorship and academic integrity (Bhaskar & Gupta, 2024; Zou, 2024).

Universities are encouraged to develop explicit institutional policies that define permitted uses of GAI, outline its role in assessment processes, and specify mechanisms for detecting and preventing automated plagiarism. These policies should be accompanied by ethical protocols and clear guidance embedded in course syllabi, to reduce regulatory ambiguity and provide a shared frame of reference for both faculty and students (Essien et al., 2024).

Additionally, it is recommended to implement ongoing professional development programs for faculty, aimed at building pedagogical competencies related to the ethical and didactic use of these tools. This includes both technical updates and the integration of strategies for designing assessment activities that incorporate GAI use critically, without compromising students' intellectual autonomy.

Finally, the results support the creation of institutional mechanisms such as observatories, interdisciplinary committees, and academic networks that monitor the impact of these technologies, share best practices, and generate adaptive guidelines in response to emerging technological changes (Serrano-Malebran et al., 2025). These actions would contribute to the development of academic governance frameworks that not only regulate but also enhance the use of artificial intelligence in alignment with the principles of educational quality, equity, and integrity (Alfirević et al., 2024; Kauppinen, 2024).

Conclusion

This study provides empirical evidence on the perceptions, uses, and concerns of university students in business-related programs regarding the use of ChatGPT as an academic support tool. Based on the analysis conducted, it can be concluded that students exhibit a marked functional valuation of generative artificial intelligence (GAI), focusing on its usefulness in organizing ideas, completing tasks, and accessing information quickly. This positive perception is reflected in the significant relationship between ChatGPT use and student perceptions, confirming that the tool has been appropriated as an instrumental resource with high perceived effectiveness.

However, the results also show that this appropriation is detached from the critical reflection on its ethical or formative implications. The absence of a significant relationship between ChatGPT use and student concerns suggests limited problematization of issues such as authorship, automated plagiarism, model transparency, and the reliability of generated content. This dissociation reinforces previous findings indicating that although students value the immediacy and functionality of these tools, they do not always possess the ethical or pedagogical frameworks needed for critical use (Essien et al., 2024; Kauppinen, 2024).

Theoretically, these findings extend previous models of educational technology and AI adoption by showing that strong functional perceptions can coexist with relatively weak links between use and ethical or academic concerns. This pattern challenges simplified risk–benefit assumptions and suggests that, in a Latin American business education context, the functional and ethical dimensions of ChatGPT appropriation may be partially decoupled. The exclusion of the Perceived Ethics construct from the final model further underscores the conceptual and measurement complexity of this dimension, highlighting

the need for refined scales that disentangle moral judgment, institutional trust, and perceived fairness of AI tools.

From institutional and curricular perspectives, this study highlights the need to rethink strategies for integrating generative technologies into higher education. The incorporation of such tools into educational processes cannot be limited to technical enablement; structured support is required to promote the development of advanced ethical, cognitive, and digital competencies. This implies both a redefinition of teaching practices and a design of clear institutional policies aligned with the emerging challenges of artificial intelligence in educational environments.

In summary, generative artificial intelligence represents a significant opportunity to transform teaching and learning processes in business education. However, its full potential will only be realized if accompanied by responsible academic governance that aligns technological development with principles of integrity, autonomy, and critical thinking.

This study has several limitations that should be considered when interpreting the results. First, it was conducted in a single higher education institution in Chile, focusing on business programs, which limits the generalizability of the findings to other disciplinary or geographic contexts. Additionally, one of the originally considered constructs, Perceived Ethics, had to be excluded from the final model due to low reliability and convergent validity, reducing the scope of the analysis in a key dimension of the current debate on artificial intelligence in education. Finally, the exclusively quantitative methodological approach limits the ability to capture nuances, contradictions, or dilemmas experienced by students in their everyday use of this technology.

These limitations open up several future research directions that could enrich the understanding of the phenomenon under study. Longitudinal and/or experimental studies are recommended to accurately assess the sustained effects of generative artificial intelligence use on variables such as critical thinking development, academic authorship, and intellectual autonomy. It is also relevant to replicate this study in other academic programs and universities, both nationally and internationally, in order to compare usage patterns, perceptions, and technological appropriation across different disciplinary and cultural contexts. Another important avenue is the design and validation of specific measurement scales to robustly and contextually capture the perceived ethical dimension of tools, such as ChatGPT. Finally, it is suggested that quantitative approaches be complemented with qualitative or mixed methods, allowing for access to more complex narratives about the motivations, resistances, learning processes, and tensions that students experience when interacting with artificial intelligence technologies during their academic training.

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