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Thinking with Algorithms, Reading with Discernment: Artificial Intelligence, Critical Reading, and Academic Satisfaction in Accounting

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ABSTRACT

The study explores how the strategic use of artificial intelligence (AI), critical reading habits, and academic satisfaction are articulated among accounting students at UNTRM during the 2025-II semester. A quantitative, applied approach was used, under a non-experimental, cross-sectional, and correlational design. The sample, stratified by study cycles, consisted of 139 students from a population of 213. Three Likert-type questionnaires were used to measure strategic use of AI, critical reading, and academic satisfaction, which were subjected to content validation by expert judgment and internal reliability analysis. The results show predominantly high levels of strategic AI use and positive associations with critical reading and academic satisfaction, especially when both dimensions are in high ranges. These findings suggest that AI can become a valuable educational support when integrated as a complement to critical reading and not as a substitute, recognizing the limitations of a cross-sectional study based on self-reports.

Keywords: strategic artificial intelligence; critical reading; academic satisfaction; accounting education; university students.

INTRODUCTION

In a very short time, generative artificial intelligence (AI) has gone from being a topic of curiosity to becoming a tool that appears in almost any conversation about higher education. Today, it is normal for students to consult ChatGPT, Gemini, or Copilot to clarify a question, ask for an example, summarize a text, or test a first draft of an assignment. This almost daily presence forces universities to ask themselves questions that go beyond technology: how do we want our students to think, how do they learn, and what place should AI have in that process?

An intense debate has opened up around this issue. Some highlight the opportunities: support for understanding complex topics, quick explanations, new ways to practice what has been learned. Others emphasize the risks: copying without processing, relying too much on automatic responses, or undermining academic authorship. Ultimately, the concern is clear: if students become accustomed to delegating too much to algorithms, what happens to their ability to read, analyze, and construct their own arguments?

In accounting education, this discussion is not just theoretical. Many processes that were previously done by hand are now handled by specialized software, and several routine tasks tend to be automated. However, accountants are still responsible for interpreting figures, assessing situations, warning of risks, and communicating decisions. Therefore, the way future professionals use AI during their studies is not a minor detail: it is not the same to resort to these tools just to "get by" as it is to use them to organize ideas, explore alternatives, and critically review what is being learned.

At this point, critical thinking and critical reading habits become key. It is not just a matter of reading a lot, but of reading well: underlining, taking notes, asking questions, comparing. A student with stronger reading habits tends to question what AI offers, contrast information, correct, and adjust. On the other hand, when reading is superficial, any "well-written" answer is more likely to be accepted without further review. In other words, AI can engage in dialogue with the student, but that dialogue depends on how much the student is willing to read and think for themselves.

Academic satisfaction adds another layer to this scenario. This concept is not limited to being happy or unhappy with grades, but rather how the student feels about their educational process: whether they perceive meaning in their degree program, whether they feel supported by their teachers, whether they find the courses consistent with what they expect from the profession. In a context where AI is increasingly integrated into study, it is reasonable to ask whether these tools are associated with a more positive, more neutral, or even more frustrating academic experience.

In Latin America, and particularly in Peru, these issues are beginning to gain ground in the educational debate, but there is still relatively little empirical work that looks closely at what is happening in specific classrooms, with specific degree programs and very diverse regional realities. Public universities in regions such as the Amazon also face their own challenges: unequal access to technology, first-generation university students, connectivity limitations, but also a strong commitment to local development and social mobility.

The Toribio Rodríguez de Mendoza National University of Amazonas (UNTRM) is an example of this type of institution. The Professional School of Accounting brings together students with very different backgrounds, resources, and experiences, who at the same time face a labor market that demands digital skills, financial information management, and the ability to work with automated systems. In this context, very specific questions arise: How do these students use AI? What kind of academic reading do they report? How satisfied are they with the training they receive?

Based on these concerns, the study that gave rise to this article aims to analyze the associations between the strategic use of AI, critical reading habits, and academic satisfaction among accounting students at UNTRM during the 2025-II semester. The starting point is not that AI is "good" or "bad" in itself, but rather that its impact depends on how it is integrated into study practices and the educational environment in which it is used. The quantitative, non-experimental, and cross-sectional design of the study provides an initial snapshot of this relationship at a specific point in time, with the aim of providing evidence to guide pedagogical decisions and institutional policies on the place AI should occupy in university accounting education.

THEORETICAL FRAMEWORK

Digital Transformation and the Emergence of Generative AI in Universities

In recent years, it has become almost impossible to talk about higher education without mentioning technology. What were once complementary resources—virtual classrooms, reading repositories, online assessments—are now part of the basic structure of many courses. Against this backdrop, a new player has emerged: generative artificial intelligence.

Tools such as ChatGPT, Gemini, and Copilot allow texts, examples, and summaries to be produced in a matter of seconds. They not only "store" information, but also propose explanations, reformulate ideas, and simulate conversations. For this reason, several authors refer to these applications as cognitive aids and not just as technological platforms. In practice, however, there are two perspectives: those who see AI as an ally for better learning and those who perceive it as a threat to reading, effort, and academic authorship.

In the university classroom, these debates become very concrete. Some students rely on AI to review concepts, find examples, or improve their writing. Others use it almost exclusively to "get out of a tight spot," without carefully reviewing what they receive. And there are also teachers who are curious and eager to experiment, while others express concern about plagiarism, copying, or the loss of basic skills. Given this scenario, the question is no longer whether AI should be used, but **how** it can be integrated into educational practice and for what purpose.

Strategic use of Artificial Intelligence in Accounting Training

This study chooses to differentiate between a purely instrumental use of AI and a **strategic use**. Instrumental use occurs when students simply copy and paste answers, or when they rely entirely on what the system provides, without questioning or verifying it. This use saves time at best, but does not necessarily strengthen learning.

Strategic use, on the other hand, involves an active approach. The student asks the AI to produce a first draft, but then rewrites, corrects, and compares it with their readings. Or they use the tool to generate examples, outlines, and alternative explanations, which they then analyze in light of what they have seen in class. At this level, AI becomes a kind of "intellectual sparring partner": it helps them think, but does not replace their own thinking.

In the field of accounting, this distinction is particularly important. Much of the professional work relies on automated systems, accounting programs, and reporting platforms. However, significant errors, sensitive decisions, and risk warnings still depend on professional judgment. If, during their training, students become accustomed to using AI only as a shortcut, they are likely to transfer that logic to their professional practice. If, on the other hand, they learn to question and review what AI proposes, they become accustomed to maintaining control over the analysis process.

Therefore, when this paper refers to **the strategic use of AI**, it refers to the degree to which students say they use these tools intentionally, ethically, and critically: not to replace basic tasks, but to better organize information, generate alternatives, review arguments, and strengthen their own academic production.

Critical Thinking and Critical Reading Habits in the Age of AI

Critical thinking has been one of the stated goals of universities for decades. Beyond methodological fads, the idea of training professionals capable of analyzing information, evaluating arguments, and making reasoned decisions remains at the heart of the academic mission. One of the most concrete ways in which this purpose is expressed is in **critical reading habits**.

Reading critically involves more than just skimming a page. It involves pausing, underlining, taking notes, asking yourself what the author is saying, what they are basing their arguments on, what they are leaving out, and what the consequences of their arguments are. It also requires comparing sources: not settling for a single voice, but seeking out other perspectives, verifying data, and ultimately forming your own opinion.

In the field of accounting, this critical reading has a very specific purpose: standards, financial statements, audit reports, management reports, and specialized articles. It is not just a matter of understanding the technique, but of grasping the context, assumptions, and possible impacts of each decision. A professional who has not trained in critical reading runs the risk of relying too heavily on templates, software, or reports from others.

The advent of generative AI introduces an additional element. On the one hand, it can facilitate access to complex texts: it reformulates, summarizes, and explains technical terms. On the other hand, it can create the temptation to replace reading with an automatic summary. The balance is not easy to strike. If students maintain critical reading habits, AI can help them explore, clarify, or review what they have read. If those habits are weak, AI can reinforce the tendency to settle for superficial explanations.

In this work, **critical reading habits** are conceived precisely as the combination of frequency and depth with which students approach academic texts. It is not only how much they say they read that is measured, but how they do so and with what intention.

Academic Satisfaction in Technology-Mediated Contexts

Academic satisfaction is another key component in understanding the university experience. Broadly speaking, it has to do with how students value their time in college: how they perceive teaching, the curriculum, their relationship with their teachers, and their own sense of progress toward their professional goals.

When new technologies are integrated into the educational process, academic satisfaction can be affected in different ways. In some cases, the use of digital resources makes students feel more supported, more accompanied,

and better equipped to learn. In others, poorly explained or poorly regulated technology creates confusion, inequalities, or the feeling that assessment is becoming less clear and fair.

Generative AI falls into this same dilemma. For some students, discovering that they can interact with a system that responds, suggests ideas, and allows them to try out drafts can be a source of motivation and relief from tasks that were previously overwhelming. For others, it can cause mistrust or the impression that "anything goes," which undermines confidence in the validity of assessments and individual effort.

In this study, academic satisfaction is understood as the student's overall perception of their experience at the School of Accounting: how useful they feel the training is, how supported they feel, and how they value the learning environment in which they find themselves. It is also assumed that this perception may be associated with the way AI is integrated into their study routine and classroom work.

Relational Model between AI, Critical Reading, and Academic Satisfaction

With the above elements, the study proposes a model that does not attempt to explain "causes and effects" definitively, but rather **to explore relationships** between three dimensions: the strategic use of AI, critical reading habits, and academic satisfaction.

The starting point is simple:

- AI alone does not guarantee deep learning;
- Critical reading, without support, can become tedious or inaccessible;
- And academic satisfaction is built on the interaction between what the university offers, what the student does, and the tools that are part of their daily life.

Under this logic, certain associations are expected to be found: that those who report more strategic use of AI also show better critical reading habits; that both aspects are linked to higher levels of academic satisfaction; and that the combination of AI and strong critical reading goes hand in hand with more favorable educational experiences.

It is important to emphasize that, given the **non-experimental and cross-sectional** design of the study, these relationships are analyzed as correlations observed at a specific moment in time, not as proven causal links. The model guides the formulation of objectives and data analysis, but leaves the way open for future research with longitudinal designs or mixed approaches that allow for a more detailed understanding of how these dimensions intertwine over time.

METHODOLOGY

Study Approach and Design

The study was approached from a **quantitative perspective** because the main interest was to work with numerical data obtained from Likert-type scales and, based on these, to describe patterns and relationships between variables. The aim was not to intervene in the classroom or to implement an improvement program, but rather to observe how students were using AI, how they were reading, and how they valued their academic experience at a given moment.

Due to its practical intent, the research falls within the field of **applied** studies. The aim is not only to contribute to theory, but also to offer useful information for pedagogical reflection at the School of Accounting and, in general, at the UNTRM. The scope is **correlational**, in the sense that it explores associations between the strategic use of AI, critical reading habits, and academic satisfaction, without asserting that one variable directly causes changes in the others.

The design was **non-experimental and cross-sectional**. Teaching conditions were not modified, nor were treatment and control groups assigned; data were simply collected at a single point in time during the 2025-II semester. The image obtained, therefore, is a "snapshot" of the situation at that time, useful for recognizing trends but insufficient for discussing processes over time or causal effects.

Population and Sample

The population consisted of the **213 students** enrolled in the Professional School of Accounting at the Toribio Rodríguez de Mendoza National University of Amazonas (UNTRM) during the 2025-II semester. These students were distributed across cycles I, III, V, VII, and IX, which represent different stages of academic progress within the degree program.

Since it was impractical to evaluate the entire population with the available resources, it was decided to work with a **stratified probability sample**. A confidence level of 95% and a maximum margin of error of 5% were considered, resulting in a sample of **139 students**.

The strata were defined according to the cycle of studies, and within each one, students were selected at random, using the official enrollment lists as a frame of reference. This resulted in the following distribution: 39 students from cycle I, 31 from cycle III, 23 from cycle V, 22 from cycle VII, and 24 from cycle IX. This organization allowed us to include the voices of those just starting their studies and those about to graduate, which enriches the perspective on the use of AI, critical reading, and satisfaction throughout the educational journey.

Variables and Instruments

The study worked with three main variables: **strategic use of AI**, **critical reading habits**, and **academic satisfaction**. Each was defined and measured using a set of items grouped into Likert-type scales.

The **strategic use of AI** was understood as the way in which students incorporate generative AI tools into their studies, while seeking to maintain control over what they do. The question was not simply whether they "use" AI, but rather what they use it for, how often, how they review the answers they receive, and how aware they are of the ethical issues involved (authorship, honesty in assignments, acknowledgment of support, among others).

Critical reading habits were conceived as the set of practices that accompany the reading of academic and professional texts. In addition to reading frequency, aspects such as the use of analysis strategies (underlining, summarizing, outlining), the habit of comparing sources, and the willingness to question arguments before accepting an idea were considered.

Academic satisfaction was defined as the student's overall assessment of their experience at the School of Accounting. Items related to the perception of teaching, the relevance of the curriculum, faculty support, the classroom environment, and the feeling that the program meets their expectations and goals were included.

For each variable, a **Likert-type questionnaire** was constructed with five ordered response options (e.g., from "never" to "always" or from "strongly disagree" to "strongly agree"). The items were drafted based on previous references on educational technology, critical thinking, and academic satisfaction, but adapted to the language and context of the UNTRM.

Before definitively applying the instruments, two steps were followed:

- First, **content validation** was carried out **by expert judgment**, involving teachers with experience in research, accounting education, and the use of ICT in teaching. They reviewed the clarity of the items, their relevance, and their consistency with the theoretical dimensions.
- Second, a small **pilot test** was conducted with students with characteristics similar to the target population to detect possible ambiguities or difficulties in understanding.

Using the information from the pilot application, the **internal reliability** of the scales was calculated using Cronbach's alpha coefficient. The values obtained were equal to or greater than 0.70 in the three variables, which is considered acceptable for exploratory studies in the field of education.

Data Collection Procedure

The fieldwork was organized in coordination with the Accounting School Administration. First, the authorities were informed of the study's objectives, and permission was requested to enter the classrooms and administer the questionnaires. Once approval was obtained, dates and times were agreed upon that would interfere as little as possible with the normal class schedule.

In each section visited, the purpose of the research, the type of information to be collected, and how the data would be used were explained to the students. It was emphasized that their participation was **voluntary** and that their responses would be treated confidentially and anonymously. Only those who agreed to participate completed the questionnaire.

The questionnaire was administered in print or digital format, depending on the conditions of each group. Upon completion, the questionnaires were reviewed for possible omissions, and the database was created. Before statistical analysis, the consistency of the responses was reviewed, incomplete records were purged, and the data was checked for duplications.

Analysis Plan

The data analysis combined a **descriptive** part with an **exploratory** part.

At the descriptive level, frequencies and percentages were calculated for the basic categories of each scale, and means and standard deviations were estimated for the total scores. In order to facilitate the reading of the results, the scale scores were grouped into three levels: low, medium, and high.

In the case of **strategic use of AI**, whose theoretical score ranges from 10 to 50 points, the following ranges were established:

- low level: 10–23 points,
- medium level: 24–36 points,
- high level: 37–50 points.

For **critical reading habits** and **academic satisfaction**, with theoretical scores between 4 and 20 points, the cutoffs were:

- low level: 4–9 points,
- medium level: 10–14 points,
- high level: 15–20 points.

In addition, a **composite index** was constructed that adds the scores for strategic use of AI and critical reading (range 14–70 points). This index was also classified into three levels: low (14–32), medium (33–51), and high (52–70). We are aware that this recoding simplifies the information and may produce certain clustering effects, so its results are interpreted with caution, as a reading tool rather than a definitive measure.

At the exploratory level, **Spearman correlations (ϱ)** were calculated between the total scores of the three variables, given the ordinal nature of the scales and the distribution of the data. The assumed significance level was 0.05. **Contingency tables** were also created between the levels of the variables, which allowed patterns of association to be observed in terms of percentages.

Finally, a simple **multiple regression** model was tested, in which academic satisfaction was taken as the dependent variable and the scores for strategic use of AI and critical reading as predictor variables. This model was used for exploratory purposes only, without incorporating other covariates that could influence satisfaction (such as performance, gender, or internet access conditions). For this reason, the regression results are interpreted as indications of a relationship and not as conclusive evidence of causal influence.

Ethical Considerations

Throughout the study, efforts were made to respect the basic principles of research involving human subjects. Student participation was **voluntary** and was based on sufficient prior information about the objectives and use of the data. No names or personal codes were collected, so responses were treated anonymously and analyzed only in aggregate form.

The results were not used for administrative purposes or to modify grades, and in no case were participants identified individually. It is recognized, however, that the use of self-report questionnaires and the cross-sectional nature of the study may introduce biases (such as social desirability or the tendency to respond uniformly), which were taken into account when discussing the scope and limitations of the findings.

RESULTS

Level of Strategic use of AI

Specific objective 1 (SO1): Describe the level of strategic use of artificial intelligence among accounting students at UNTRM, according to dimensions of use and perception, impact on academic performance, and overall strategic use.

Table 1: Level of strategic use of artificial intelligence according to dimensions of ethical use, frequency, and purpose

Level	Use and perception of AI N (%)	Impact on academic performance N (%)	Strategic use of AI N (%)
Low	1 (0.7%)	1 (0.7%)	2 (1.4%)
Medium	26 (18.7%)	59 (42.4%)	39 (28.1%)
High	112 (80.6%)	79 (56.8%)	98 (70.5%)
Total	**139 (100%)**	**139 (100%)**	**139 (100%)**

Table 1 shows the distribution of students according to three indicators: use and perception of AI, impact on academic performance, and strategic use of AI. In all three cases, there is a consistent pattern of predominance of medium and high levels.

In the indicator of AI use and perception, 80.6% of students are at the high level, while 18.7% are at the medium level and only 0.7% are at the low level. This pattern suggests that generative AI is fairly well integrated into everyday academic life: most students say they are familiar with it, use it frequently, and perceive it as part of their usual repertoire of tools.

When analyzing the impact on academic performance, 56.8% are at a high level and 42.4% at a medium level; only 0.7% are at a low level. The distribution indicates that, although students do not attribute all their performance to AI, they do tend to consider it a useful support, especially for tasks such as organization, review, and clarification of content.

In the overall indicator of strategic use of AI, which integrates dimensions of ethical use, frequency, and purpose, 70.5% are at a high level, 28.1% at a medium level, and 1.4% at a low level. This result allows us to characterize the sample as a group that mostly reports conscious and relatively sophisticated use of AI, although there is still a sector—close to a third—that uses it in a more limited or incipient way, with room for further improvement.

Relationship between Strategic use of AI and Critical Reading Habits

Specific objective 2 (SO2): Identify whether there is a significant relationship between the strategic use of AI and students' critical reading habits.

In this case, reading habits were operationalized as **the promotion of reading**, differentiating between low, medium, and high levels.

Table 2. *Strategic Use of Artificial Intelligence vs. Encouraging Reading*

Strategic use of AI	Low reading promotion (4–9) N (%)	Medium promotion (10–14) N (%)	High promotion (15–20) N (%)	Total N (%)
Low (10–23)	2 (100.0%)	0 (0.0%)	0 (0.0%)	2 (1.4%)
Medium (24–36)	0 (0.0%)	26 (60.5%)	13 (13.8%)	39 (28.1%)
High (37–50)	0 (0.0%)	17 (39.5%)	81 (86.2%)	98 (70.5%)
Total	**2 (100.0%)**	**43 (100.0%)**	**94 (100.0%)**	**139 (100.0%)**

For this objective, we worked with the reading promotion indicator, which groups critical reading habits into three levels (low, medium, and high) and cross-referenced them with the levels of strategic use of AI (Table 2).

The table shows that the two students with low reading promotion (4–9 points) are entirely concentrated in the low level of strategic AI use (2 cases; 100%). Although this is a small proportion of the sample, this group illustrates a profile in which reported critical reading is low and AI use is also described as limited.

At the medium level of reading promotion (10–14 points), most students are at the medium level of strategic use of IA (26 students; 60.5%), while a smaller, group reaches the high level (17 students; 39.5%). This pattern suggests that when critical reading is at an intermediate level, the use of IA also tends to be in the middle range, with a certain percentage of students already integrating it more strategically.

The situation is different at the high level of reading promotion (15–20 points). In this group, 86.2% of students (81 cases) are at the high level of strategic use of AI, while 13.8% (13 cases) are at the medium level. No students with high critical reading skills report low strategic use of AI.

Taken together, these results describe a positive association between the two constructs: as students report stronger critical reading habits, the proportion of those who say they use AI more strategically increases. Given the cross-sectional design of the study, this association does not allow us to establish causal directions, but it does suggest that critical reading and strategic use of AI tend to coexist in the same student profiles.

Relationship between Strategic use of AI and Academic Satisfaction

Specific objective 3 (SO3): Establish the relationship between strategic use of AI and academic satisfaction as perceived by students.

Table 3. Strategic Use of Artificial Intelligence vs. Academic Satisfaction

Strategic use of AI	Low satisfaction (4–9) N (%)	Medium satisfaction (10–14) N (%)	High satisfaction (15–20) N (%)	Total N (%)
Low (10–23)	1 (100.0%)	0 (0.0%)	1 (0.9%)	2 (1.4%)
Medium (24–36)	0 (0.0%)	12 (50.0%)	27 (23.7%)	39 (28.1%)
High (37–50)	0 (0.0%)	12 (50.0%)	86 (75.4%)	98 (70.5%)
Total	**1 (100.0%)**	**24 (100.0%)**	**114 (100.0%)**	**139 (100.0%)**

Table 3 shows the joint distribution of strategic AI use levels and academic satisfaction. In general, low satisfaction is very rare, while high satisfaction accounts for the majority of cases, especially among students with high strategic AI use.

At the low strategic use level (10–23 points), there are two students; one of them has low satisfaction (4–9 points) and the other has high satisfaction (15–20 points). Although the number is small, this group illustrates that very low levels of strategic AI use appear to be associated with more fragile perceptions of satisfaction.

In the medium strategic use group (24–36 points), half of the students (12 cases; 50.0%) report medium satisfaction (10–14 points) and the other half report high satisfaction (27 cases; 23.7% of the total sample). This distribution suggests an intermediate situation: AI is already used with some frequency and purpose, but not all students in this group translate that experience into very high levels of satisfaction.

The picture changes in the high strategic use group (37–50 points). Here, there are no cases of low satisfaction, and the vast majority of students are at the high satisfaction level (86 cases; 75.4%), while 12 students (50% within the medium level) report medium satisfaction. This indicates that, in the sample analyzed, profiles with high strategic use of AI tend to have more positive perceptions of their academic experience.

In general terms, the table describes a consistent relationship: higher levels of strategic AI use are associated with a greater presence of high academic satisfaction, while low levels of use are linked to the few cases of low satisfaction. Again, these associations should be interpreted with caution, without inferring that AI "produces" satisfaction, but rather assuming that both dimensions align in certain student profiles.

Joint Influence of Strategic AI use and Critical Reading on Academic Satisfaction

Specific Objective 4 (SO4): To evaluate the joint influence of strategic use of AI and critical reading habits on academic satisfaction.

For this purpose, a joint index was constructed that combines the scores for strategic use of AI and critical reading habits, classifying students into low, medium, and high levels of the combination of both variables.

Table 4. Strategic Use of AI and Critical Reading Habits vs. Academic Satisfaction

AI + Critical Reading (combined level)	Low satisfaction (4–9) N (%)	Medium satisfaction (10–14) N (%)	High satisfaction (15–20) N (%)	Total N (%)
Low (14–32)	1 (100.0%)	0 (0.0%)	1 (0.9%)	2 (1.4%)
Medium (33–51)	0 (0.0%)	12 (50.0%)	31 (23.7%)	39 (28.1%)
High (52–70)	0 (0.0%)	12 (50.0%)	82 (75.4%)	98 (70.5%)
Total	**1 (100.0%)**	**24 (100.0%)**	**114 (100.0%)**	**139 (100.0%)**

For this objective, a composite index of strategic AI use and critical reading habits was constructed, with scores grouped into low, medium, and high levels (Table 4). This index allows us to observe how academic satisfaction is distributed when both dimensions are considered simultaneously.

Only two students are in the low combined level (14–32 points). One of them reports low satisfaction and the other reports high satisfaction. Although the size of the group prevents generalizations, the presence of the only case of low satisfaction at this level suggests a profile in which the combination of little strategic use of AI and incipient critical reading may be accompanied by a less satisfactory academic experience.

There are 39 students in the medium combined level (33–51 points). Of these, 12 (50.0% within the medium level) indicate medium satisfaction and 31 (23.7% of the total sample) indicate high satisfaction. This distribution reflects a transitional scenario: AI and critical reading are at an intermediate level, and academic satisfaction is divided between medium and high perceptions.

The high combined level (52–70 points) accounts for the majority of the sample (98 students; 70.5%). In this group, there are no cases of low satisfaction; 12 students report average satisfaction and 82 (75.4% of those with high satisfaction) are at the highest level of academic satisfaction. In other words, when AI is used strategically and critical reading habits are strong, the probability of finding students with high academic satisfaction increases significantly compared to the other groups.

Overall, the results in Table 4 describe a positive association between the combined level of strategic use of AI + critical reading and academic satisfaction. Profiles with a high combination of both dimensions tend to concentrate the highest levels of satisfaction, while low profiles appear to be linked to few experiences of reduced satisfaction. Given the cross-sectional and exploratory nature of the study, these relationships should be interpreted as empirical evidence that invites further research, rather than as definitive proof of causal influence.

DISCUSSION

The results of the study reveal something that was already intuited in daily practice: generative artificial intelligence is not an occasional accessory in the academic life of accounting students, but a resource that many have incorporated on a regular basis. The fact that most students use AI strategically at high levels suggests that these tools are already part of the study "landscape" at the UNTRM School of Accounting. This finding coincides with what has been reported at other universities, where AI appears to be increasingly integrated into writing tasks, information searches, and idea organization (Dempere, 2023; Cotton et al., 2023; Sousa et al., 2025; Suchanek & Kralova, 2025).

However, the picture is not uniform. The group that ranks in the middle in terms of strategic use points out that AI adoption is not progressing at the same pace among all students. Some use it naturally and critically; others still see it as an auxiliary resource, useful for certain tasks, but not fully incorporated into their way of studying. The literature on educational technology has pointed out that, even when tools are available, factors such as digital confidence, previous experience, and teacher support make important differences in how they are incorporated into practice (Muthuswamy et al., 2024; Tbaishat & Elfadel, 2025). What we see at UNTRM fits with this idea: it is not starting from scratch, but it has not yet reached mature and widespread use among the entire population.

The relationship between strategic use of AI and critical reading habits is one of the most thought-provoking points of the study. In simple terms, those who say they read more critically also tend to report more sophisticated use of AI. This does not prove that one causes the other, but it does suggest that, in practice, both dimensions move together. Several studies have warned that AI can play an ambivalent role: it can help break down complex texts and test alternative explanations, but it can also reinforce superficial reading when what the tool produces is accepted without question (Hargreaves, 2022; Peras et al., 2023; Salmerón et al., 2025). To the extent that UNTRM accounting students report reading more critically and using AI strategically, a profile seems to emerge in which technology does not replace reading effort but rather supports it.

Something similar occurs with academic satisfaction. The data indicate that the highest levels of satisfaction are concentrated in profiles with greater strategic use of AI, while the few cases of low satisfaction appear when that use is reduced. Again, it is not possible to say that AI "generates" satisfaction, but it is possible to say that students who feel more comfortable with their academic experience also tend to integrate AI as an ally in their studies. This coincides with research describing how, when technology is perceived as a clear and well-framed pedagogical support, it is often associated with a more positive learning experience (Almufarreh, 2024; Muthuswamy et al., 2024; Freeman et al., 2025).

Analysis of the combined index of strategic AI use and critical reading reinforces this interpretation. Where both dimensions appear at high levels, academic satisfaction also tends to be at the top of the scale. In contrast, the only case of low- satisfaction occurs at the lowest combined level. This convergence points to an idea that other reviews have suggested: AI tends to amplify what already exists in the educational environment. If the context favors reading, questioning, and teacher support, AI can be integrated as a support that enhances these processes; when these foundations are more fragile, the tool is more likely to be used in a superficial or merely instrumental way (Salido et al., 2025; Melisa et al., 2025; Evangelista, 2025).

From the perspective of accounting education, this finding is not insignificant. The profession is at a point where automated systems, increasingly sophisticated software, and a growing demand for analytical, ethical, and communication skills coexist (Ballantine et al., 2024; Mpanza, 2025; Tandiono, 2023). The fact that a large proportion of UNTRM students report combining critical reading, strategic use of AI, and high levels of academic satisfaction can be interpreted as an encouraging sign: the conditions are in place for accounting education that does not reject technology, but also does not delegate the core of professional judgment to it.

The context in which UNTRM is located adds important nuances. It is a regional public university located in the Peruvian Amazon, where challenges related to infrastructure, connectivity, and access to specialized resources persist. Even so, the results show that many students have managed to incorporate generative AI into their academic lives in a meaningful way. This speaks to their ability to adapt, but also to the need for the institution to accompany this process with clear policies, specific teacher training, and spaces for reflection on academic integrity and the responsible use of technology (Cabeza-Rodríguez et al., 2023; Vázquez-Parra, 2024; Tbaishat & Elfadel, 2025).

However, it is important not to lose sight of the limitations of the study. On the one hand, the cross-sectional design only allows us to work with a snapshot of reality; it is not possible to know how the use of AI, critical reading, and satisfaction evolve over time, nor what changes would occur if certain interventions were implemented. On the other hand, the use of self-report questionnaires may be affected by social desirability biases or by the tendency to respond in a manner consistent with each student's self-image. In addition, for reasons of scope, other variables that could nuance the results, such as academic performance, gender, dedication to study, or conditions of access to devices and connectivity, were not incorporated.

These caveats mean that the findings must be interpreted with some caution. Rather than offering definitive answers, the study provides clues and patterns that help to understand how the relationship between AI, critical reading, and academic satisfaction is shaping up at a specific point in time in an accounting school at a regional public university. This opens up a wide field for future research that combines quantitative and qualitative methods, incorporates longitudinal designs, and delves deeper into the voices of students and teachers, in order to understand not only how much AI is used, but also what it means for those who live with it every day in the classroom.

CONCLUSIONS

Generative AI is Already part of the Daily Lives of Accounting Students

In the sample studied, most students are at high levels of strategic AI use. This shows that these tools are no longer exceptional and have become part of the study routine. At the same time, the group that remains at medium levels reminds us that there are still trajectories of use under construction and that not everyone has reached the same level of critical appropriation.

Strategic use of AI and Critical Reading Tend to go Hand in Hand

The results suggest that those who report reading more critically also tend to report more strategic use of AI. It is not possible to say which comes first, but it is clear that, in practice, both aspects are associated: AI is used more effectively when reading habits are more solid, and reading is supported by new ways of working when AI is integrated with intention and judgment.

Profiles with Greater Strategic use of AI are Associated with Greater Academic Satisfaction

Most students who say they use AI intentionally, ethically, and consciously also report high levels of academic satisfaction. The few cases of low satisfaction are concentrated at the lowest levels of strategic use. This does not mean that AI alone explains satisfaction, but it does mean that, in this context, more positive academic experiences tend to go hand in hand with more thoughtful and responsible use of these tools.

The Combination of AI + Critical Reading is Associated with the Most Favorable Experiences

When looking at the combined index of strategic AI use and critical reading habits, it can be seen that high levels of both dimensions account for the highest proportion of satisfied students. The lowest combined level, on the other hand, is home to the only case of low satisfaction. This supports the idea that AI works best when embedded in an academic culture that values deep reading, analysis, and faculty support.

The Context of a Regional Public University Provides an Important Nuance

At UNTRM, a public university in the Peruvian Amazon, accounting students face challenges specific to their environment (infrastructure, connectivity, access to resources), but still show significant use of generative AI. This opens up an interesting space: AI can represent an opportunity to support educational processes in contexts with material limitations, as long as the focus remains on professional judgment, ethics, and academic authorship.

This is an Exploratory Study with Defined Scope.

The conclusions should be read taking into account the non-experimental and cross-sectional design of the study, as well as the use of self-report questionnaires. What is presented here are associations observed at a specific point in time, not evidence of causality. Rather than closing the issue, the results provide a basis for further research, with more complex designs and complementary approaches, into how AI, critical reading, and academic satisfaction are intertwined in university accounting education.

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