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ETHICAL IMPLICATIONS OF AI IN THE CONTEXT OF TEACHING IN HIGHER EDUCATION

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ABSTRACT

The rapid integration of generative artificial intelligence (Gen-AI) into higher education has raised significant ethical concerns that remain insufficiently explored from a student-centered perspective. This study examines undergraduate perceptions of the ethical implications of Gen-AI in university teaching. A cross-sectional quantitative design was employed using a self-administered Likert-scale questionnaire applied to 162 first-semester Biotechnology students at a public university in Ecuador. The instrument demonstrated adequate reliability (Cronbach's α = 0.79). Results indicate that a majority of students perceive Gen-AI as a tool capable of improving teaching quality, personalizing learning, and enhancing accessibility for students with disabilities. However, substantial concerns were expressed regarding data privacy, algorithmic bias, social inequality, and the potential impact on student–teacher relationships. Notably, most respondents emphasized the need for formal regulation, transparency, and respect for student autonomy in the implementation of AI technologies. These findings highlight the importance of adopting responsible and ethically grounded AI strategies in higher education. The study contributes empirical evidence from a Latin American context and underscores the necessity of integrating student perspectives into institutional policies for ethical AI governance.

KEYWORDS: Generative AI, Higher Education, Undergraduate Attitudes, AI Ethics, Personalised Learning, Algorithmic Bias, Privacy-by-Design, Responsible-AI Policy.

1. INTRODUCTION

Education, since its beginnings, has been a fundamental pillar of society, constantly evolving and adapting to cultural and technological transformations (Chargoy, 2023). The digital era has incorporated different tools that are used as sources of knowledge and, in turn, foster innovation within the educational system (Granados et al., 2020).

In this sense, the evolution of technology is advancing by leaps and bounds, and the insertion of Artificial Intelligence (AI) is no exception. AI can be understood as the replication of human cognitive processes—learning, reasoning, and self-correction—within computational systems (Chen et al., 2020); consequently, it has become a ubiquitous resource, particularly within educational dynamics (Ayuso & Gutiérrez, 2022).

Arango et al. (2024) state that AI technologies support some of the teacher's actions, such as evaluation or process monitoring, yet categorically affirm that these tools can never replace the human dimension in education, reinforcing that technology complements rather than supplants the commitment and connection between students and teachers.

In a context where artificial intelligence is increasingly embedded in educational practices, ethical oversight becomes essential. Issues related to transparency, data privacy, algorithmic bias, and unequal access raise significant concerns that must be addressed before AI technologies are fully integrated into higher education. (Li, 2023)

In this sense, ethics becomes a substantial element, fundamentally in educational practice, because it demands ethical formation oriented from freedom, solidarity, authenticity, respect, dignity, autonomy, democracy, justice, and commitment, among others; so that all those who are participants in educational mobility, receive these essential components to promote educational integrity (Botinas et al., 2022).

From this point of view, the ethics contemplated in the inherent aspects of AI play a key role in ensuring a responsible development and implementation of this technology for the benefit of society. Given that such intelligence can have an enormous impact not only in labour and health but also in education and individual privacy, fairness, privacy, transparency and accountability must guide every educational deployment of AI (Selwyn, 2020).

Ethics in education plays a key role in preparing students to critically engage with AI technologies and to use them responsibly. Its impact undoubtedly acts coercively on the human being and only education can project equanimous and reflective learners; in other words:

> The ethics of AI is concerned with technological change and its impact on the lives of individuals, but also with the transformations occurring in society and the economy. Issues to do with prejudice and discrimination already indicate that AI is socially relevant. But it is also changing the economy and thus perhaps the structure of our societies. Therefore, education must play a central role in preparing future citizens who can navigate these challenges and take advantage of the opportunities that AI presents. (Coeckelbergh, 2021, p. 20)

However, the questioning of AI takes prominence because inexorably students use this instrument given its perennial immersion, which fulfills purposes that debase the quality and veracity of the academic doing, adding a challenge for teaching; according to Hutson (2024), The teacher takes on the challenging task of distinguishing plagiarism from AI-assisted work, which often replaces creativity and original thought in the digital age. Similarly, transparency and originality are other factors that imply the need for clarity of those who use AI, providing details that establish integrity in the work; so that scholars and readers, facing this adversity allows them to better understand the role of AI (Rivas et al., 2023).

Even, within AI the much acclaimed and highly controversial use of ChatGPT is adjacent to ethical scarcity, its use could generate negative consequences on students such as academic penalties, damage to their professional reputation, low grades, and ultimate expulsion (Dwivedi et al. (2023). There is also an underlying risk of the potential leakage of private personal data due to the collection of large amounts of data., discrimination and unfairness caused by algorithmic biases, and lack of integrity due to the abuse of technology (Akgun & Greenhow, 2022). Thus, the use of AI models in the classroom is seen as a complex and highly controversial issue (Klimova et al., 2023). It should be added, that according to Richard & Salazar (2020), people bear the responsibility to use AI-generated information ethically and in line with international human rights.

Beyond the educational sphere, yet inherently linked to it, lies the fact that the rapid evolution of AI is being shaped by major tech industry giants, who leverage information as a tool to condition human behavior. As Lanier (2018) asserts, business giants such as Facebook, Twitter, and Google modify behavior, given that analyzing people's behaviors disproportionately can compromise people's sensitive information regardless of the institution to

which they belong.

In this way, the instrumentation associated with AI is used in all its dimensions and from which the academic role is not exempt online learning platforms, educational applications, and multimedia resources have radically changed how students and teachers participate in the teaching-learning process, as well as in accessing and acquiring knowledge (Vital, 2021). As stated by Latorre et al. (2021), "the complexity and continuous change of the new environments forces us to rethink education from a vision of lifelong learning" (p. 13). It is therefore essential to reflect on the balance between technological evolution and respect for ethical principles within the educational practice (Hill, 2022).

According to the perspective of Marín (2019), as AI continues to evolve, ethical reflection addressing the associated ethical and social challenges becomes an urgent need. These concerns have led to an increase in the number of initiatives and discussions proposing documents regulating applied approaches. All this policy particularity is not only not limited to identifying ethical issues, but is a distilled regulation that can guide education in AI integration. Therefore, these technologies must be used responsibly and fairly by creating educational places where human values are respected.

2. LITERATURE REVIEW

2.1. Current State of AI in Education

Educational and academic practice has been permeated by the development of technology, which has advanced by leaps and bounds, and which is already more than shaped by modern and controversial AI (Tuomi, 2019). Moreover, the dizzying progress in technological research and innovation applied to machine learning in science has revolutionized the development of language generation models (Dwivedi et al., 2021). Consequently, the corresponding implementation has catalyzed the refinement of content creation technologies that enable innovations in both digital material production and scripting through a variety of AI tools, such as the ChatGPT generative model (Ali et al., 2024). In that sense, the adaptation and development of deep learning and AI technologies have created digital resources that associate audiovisual inputs, motion graphics, and various digital and script commands (Abukmell et al., 2021; Gui et al., 2023).

Generative AI, such as ChatGPT, is a machine learning paradigm that is unsupervised or has very little supervision that uses artificial content plus statistics and probabilities (Jovanović & Campbell, 2022). Although relatively simple, it results in a lack of objectivity regarding how generative AI models can be used in not only innovative but safe, reliable, and ethical ways (Jain et al., 2023). Put another way, the deficit of a response to the critical gaps in the literature reviewed suggests that researchers have not achieved good coverage of the wide range of challenges that can be enumerated based on existing research, especially in the educational domain (Ali et al., 2024).

Consequently, AI in education raises an important question about whether machines will eventually replace teachers; some studies, such as those by Felix (2020), are addressing this question in a context where others, such as Manyika (2017), argue that teachers will continue to be needed. However, AI promises to improve education by making it more personalized and efficient. According to Haseski (2019), AI will make individualized education possible by challenging the unique talents of each student and reducing the administrative duties of teachers. At the same time, the issue of dehumanization of teaching and the introduction of machines into these processes is strongly raised (Humble & Mezelius, 2019).

It is worth mentioning that AI has the potential to transform education by providing opportunities to excluded communities, such as people with disabilities and refugees. According to Sekeroglu et al. (2019), AI can help teachers to personalize education, improving the quality of learning; but also AI proposes a "dual teacher" model, where AI supports the human teacher in routine tasks, enabling a more student-centered approach (Gocen & Aydemir, 2020).

2.2. Implications and Gaps in Higher Education

AI is a different gear in terms of learning and teaching dynamics in higher education, but, at the same time, it demonstrates innumerable ethical, technological, and educational issues when confronted (Bellettini et al., 2024). In this sense, the ethical and institutional intrigue and concern result in the modification of the pedagogical and administrative approaches of university institutions, because the traditional ones are no longer effective; these problems are amplified by the lack of clear regulatory frameworks to guide the respective application (Arbeláez et al., 2021)

In this aspect, one of the most relevant challenges lies in the lack of technological and ethical literacy, this situation generates an indispensable integration of ethical dimensions that allow the promotion of

human and social values through innovative methodologies, autonomous learning, and digital games. This fact highlights the need for both teachers and students to carry out reflective practices that allow them to make ethical and effective use of AI tools (Tramallino & Zeni, 2024).

From the infrastructure point of view, Litardo et al. (2023), indicate that the lack of connectivity and technological resources, particularly in rural areas and in certain urban areas, is a barrier that maintains the current educational inequalities so that the reduction of the technological gap also hinders inclusion and equity in access to AI tools, and that the teachers are also part of the collective given the little or no updating of knowledge in technology, which manifests itself negatively in the teaching-learning of students.

On the other hand, the perspective of Guacán et al. (2023), adds that public policies should establish comprehensive frameworks to ensure the sustainable and equitable use of AI; so three specific actions are proposed, such as implementing policies to determine the criteria for use, ensuring equity in the development of pedagogical strategies and training teachers on how to operate these tools. The implementation of policies is a viable alternative to put all those who make up the educational apparatus at the technological and digital forefront.

Regarding teacher professionalization, Cedeño et al. (2024), highlight the inability of teachers to receive training in digital skills as a key obstacle. This implies that educating teachers on how to acquire skills in the AI domain will require a strong investment in training programs to enable the building of learning among educators. This teaching pathway facilitates the strategy adapted to student diversity. Based on the above, in higher education, AI integration faces multiple challenges from ethical and regulatory to infrastructure and training. Addressing these gaps in higher education would therefore require strong public policy, technology, investment, and teacher training measures to ensure equity of access and ethical use of AI.

2.3. Ethical Considerations of AI

Ethical oversight and regulation are crucial in a context where the emergence of AI in our daily lives is readily accepted. The ethical problems generated by AI are extraordinary. Several issues, such as opacity, work effect, and unregulated international AI waste, among several others, are added due to AI (Carsten, 2024). AI systems embedded in vast data sets can perpetuate social biases, resulting in unfair outcomes in critical areas such as hiring, lending, and criminal justice. Second, AI systems are often opaque, especially in critical areas such as healthcare and driverless vehicles, generating transparency and interpretability issues (Balasubramaniam, 2023).

Intellectual property concerns arise especially concerning digital creation using AI. The spread of fake news and social manipulation are additional examples of situations that are worsened by respective AI algorithms and that promote the division of society and allow the "brain" to be involved in eligibility procedures (Li, 2023). AI is at the same time a threat to the individual's privacy and security, thus the possibility of increased surveillance, highlighting the urgent need for preventive protection (Ahmad et al., 2021).

Seen in this way, the challenge of safeguarding privacy in AI systems requires strong actions, including strict regulations and security frameworks embedded in their development (Sadeghi et al., 2024). On the one hand, these measures ensure that individuals maintain sovereignty over their private data, which increases trust in these techniques. On the other hand, transparency regarding decision-making procedures should be mandatory, especially in corporations to monitor and analyze the rationale for decisions, enhancing accountability and democracy of outcomes (Arora & Raj, 2024).

2.4. Effect of AI on the Ethics of Teaching and Learning in Higher Education

The dilemma of the influence of AI on the ethics of teaching-learning in higher education, systems covers aspects ranging from personal data protection to pedagogical transformation. Therefore, the confidentiality of systems managed in education should not be violated, and the same should be done with strict adherence to the rights of the individual (Guaya & Chipuxi, 2023). At the same time, it is argued that students should gain the competencies to ensure the ethical handling of these data. As such, a balanced approach that not only facilitates but, at the same time, ensures the integrity and privacy of the information is critical (Rodriguez et al. 2023).

However, the adoption of AI in classrooms involves not only the technical area but also ethical and philosophical challenges. Gonzalez et al. (2023), point out that teachers need to be trained on what is possible, with AI and its limitations, so that it is trained in a way that it can be used rather than enabled. This proactive approach is paramount as incorrect use of AI could damage the learning process by compromising its quality and depth.

In the same way, tools such as augmented reality, analyzed by Cedeño et al. (2024), exemplify how

technology can convert education for students with special educational needs. In fact, Anchundia et al. (2024), express that these tools offer an integration of virtual elements with the physical environment and can be exceptionally helpful when dealing with students with Down syndrome, autism, and other motor disabilities in a classroom. However, the effectiveness of such technologies depends on the preparation of teachers; educators, students, and administrators are expected to participate in professional training to employ optimal technologies and benefit from them adequately (Cedeño et al., 2024).

In short, the incorporation of AI in higher education requires a careful stability of the use of its technological incentives and potentialities, and respect for ethical principles, denoting the preparation of the associated actors as an essential aspect to avoid risks and increase benefits.

Despite the growing body of literature on artificial intelligence in higher education, most existing studies focus primarily on technological adoption, instructional efficiency, or faculty perspectives. Limited attention has been given to undergraduate students' ethical perceptions, particularly in early stages of university education and within Latin American public institutions. Moreover, few empirical studies integrate ethical dimensions such as student autonomy, algorithmic transparency, regulatory demand, and social equity into a single analytical framework. This study addresses these gaps by providing quantitative evidence from first-semester undergraduate students, offering a student-centered ethical perspective on generative AI. By situating student perceptions within broader debates on responsible AI and educational governance, the present research advances existing knowledge and contributes context-specific evidence to inform institutional policy and ethical AI implementation in higher education.

3. MATERIALS AND METHODS

This study adopted a quantitative, descriptive, and cross-sectional research design with a non-experimental approach. The target population consisted of 280 first-semester undergraduate students enrolled in the Biotechnology program at a public higher education institution in Ecuador.

To determine the sample size, a simple random sampling method was applied using the formula for finite populations, ensuring an adequate level of representativeness. Based on this calculation, a final sample of 162 students was obtained.

Data collection was conducted through a self-administered questionnaire structured on a five-point Likert scale, ranging from "strongly disagree" to "strongly agree." The instrument comprised 16 items designed to assess students' perceptions of the ethical implications of artificial intelligence in higher education, including dimensions related to privacy, algorithmic bias, regulation, accessibility, transparency, and learner autonomy. The questionnaire items were developed based on a review of relevant literature and aligned with commonly discussed ethical principles in AI governance.

Prior to data analysis, the internal consistency of the instrument was evaluated using Cronbach's Alpha coefficient. The reliability analysis yielded a value of 0.794, exceeding the commonly accepted threshold of 0.70, thereby confirming the adequacy and internal consistency of the measurement instrument.

Data analysis was performed using IBM SPSS Statistics version 26. Descriptive statistical techniques, including frequencies, percentages, means, and standard deviations, were employed to summarize students' responses. Given the exploratory and descriptive nature of the study, inferential statistical analyses were not applied. However, future research could incorporate correlational or inferential methods to further examine relationships among variables and strengthen analytical depth.

4. RESULTS AND DISCUSSION

Once the information provided by the students had been collected, the reliability of the data obtained was analyzed using Cronbach's Alpha coefficient. The result of this test yielded a value of 0.794. This value is higher than the minimum acceptable threshold of 0.7 which establishes the validity of the internal consistency of the questions evaluated. Thus, these data show an adequate level of consistency, which allowed considering the present quality of the questionnaire used in the research.

Table 1: Reliability Analysis.

Cronbach's alpha	N of elements
.794	16

The following are the findings collected regarding the ethical implications of AI in higher education. These results seek to provide a comprehensive view of the challenges, opportunities, and dilemmas that arise when integrating this technology into university educational processes.

Table 2: Undergraduate Students' Perceptions of the Ethical Implications of AI in the Context of Teaching in Higher Education.

Alternative	Strongly disagree	Disagree	Neutral	Agree	Totally agree	Est. dev.
AI can significantly improve teaching in higher education.	2.76%	2.76%	28.28%	51.03%	15.17%	0.852
The use of AI in education may pose ethical risks related to student privacy.	4.14%	8.28%	43.45%	37.93%	6.21%	0.876
AI should be used to personalize learning according to the needs of each student.	2.76%	3.45%	19.31%	58.62%	15.86%	0.842
Automated decision-making using AI in education may generate biases.	1.38%	4.14%	47.59%	39.31%	7.59%	0.755
Automated decision-making using AI in education can lead to bias.	1.38%	4.14%	48.97%	40.00%	5.52%	0.725
There is a need to regulate the use of AI in the educational setting to protect the rights of students.	2.76%	8.97%	22.76%	51.72%	13.79%	0.924
AI could replace teachers in certain academic activities.	23.45%	28.97%	27.59%	14.48%	5.52%	1.161
The use of AI in educational processes must respect learner autonomy.	0.69%	1.38%	21.38%	65.52%	11.03%	0.649
The use of AI in education promotes more efficient and effective teaching.	2.07%	4.14%	45.52%	38.62%	9.66%	0.809
AI can perpetuate social inequalities in access to higher education.	2.76%	13.79%	49.66%	26.90%	6.90%	0.868
Students should be consulted about the use of AI in their learning processes.	1.38%	2.07%	21.38%	64.83%	10.34%	0.700
AI offers opportunities to improve educational accessibility for people with disabilities.	0.69%	2.07%	22.76%	60.00%	14.48%	0.707
AI could negatively affect the relationship between teachers and students.	5.52%	19.31%	36.55%	29.66%	8.97%	1.023
AI algorithms must be transparent and explainable in educational processes.	0.69%	0.69%	22.07%	56.55%	20.00%	0.715
Students need to understand how AI is being used in their education.	0.69%	0.69%	8.97%	63.45%	26.21%	0.652
The use of AI in teaching could improve equity in student assessment.	1.38%	6.90%	26.21%	54.48%	11.03%	0.817

4.1. Effect of AI on the Ethics of Teaching and Learning in Higher Education

Regarding whether AI can only improve university teaching, a significant proportion of students are convinced that it can indeed do so, scoring from agree to strongly agree. As seen in Table 2, more than 66.2 % of the responses fall into this category, with a mean of 3.76 and a standard deviation of 0.85, pointing to high overall expectations regarding AI's ability. Regarding the statement of whether AI should be used to personalize learning, 74.48 % of respondents selected "agree" to "strongly agree" on whether AI should be used to personalize learning. To the extent that AI can adapt to the needs of the individual, learners know that as long as AI can adapt to individual needs, they would have a say in this, a factor that plays a role in making the teaching-learning process inclusive and effective.

Another highlight is the students' belief in the opportunity for AI to improve educational accessibility to help people with disabilities. The same number of respondents agree or strongly agree, with 74.48 %. This assessment highlights the role of AI in removing accessibility barriers which is essential for educational equity. The analysis reveals a general agreement on the importance of transparency and explainability of algorithms. More than 76 % of respondents agree or strongly agree with the use of algorithms, which is 4.05 on average, with a standard deviation of 0.715. This result highlights the importance of responsibility in the use of technology.

4.2. Ethical Risks and Social Concerns

Students express significant concerns about the ethical risks associated with the use of AI in education. Since 45.7 % of the surveyed learners believe that AI may pose a threat to student privacy.

Therefore, it seems imperative to ensure clear regulations to protect the student-based decision-making process obtained through machine learning. The other equally important issue to address is the potential for bias in the automated intervention process. While 47.59 % of students agree with the neutrality of judgment, 46.9 % of respondents also believe that AI may allow for bias; that is, they are exposed to the task of teaching these technologies. Therefore, the technology should be designed to circumvent discrimination and use inclusive algorithms.

Aside from that, the belief that technology could perpetuate social inequality is striking. 33.8 % of respondents also agree or strongly agree. Therefore, AI must be accessible to all students regardless of their socioeconomic status. Finally, there is also concern that the use of AI will destroy student-teacher relationships. 38.62 % of respondents also have this challenge. Although not in the majority, some students are afraid that technology will destroy the humanity of education by eliminating fundamental personal interaction.

4.3. Regulation, Autonomy and Student Participation

Demanded regulation on the use of AI in education stands out as another relevant response. With over 65 % of respondents believing that we should not even begin to use AI in education without adequate legislation to protect student rights, this result highlights widespread fear of the worst fears. As a result, the implementation of such a measure not only halts its use and implementation across the field but also raises alarm about the current critical need for clearer regulations and guidelines. Where student privacy and equal access are crucial issues, maintaining AI systems without regulation would only serve to widen the gap and create fear and uncertainty about educational systems. Therefore, it must become a priority for both regulatory agencies and educational institutions.

At the same time, in this debate, there is an inalienable principle, the autonomy of the learner. 76.55 % of respondents think that AI should take into account and respect the willingness of learners to make decisions for themselves and be active participants in their experiences. In other words, AI should not replace the learner but favor their empowerment and participation. Similarly, 75.86 % believe that students should have the possibility to decide whether they agree with the AI to be implemented in their learning process. In other words, a symbiotic relationship is established in this area. All these community decisions will not only make AI more welcoming but also responsible and competent on the part of the students. On the other hand, not even discussing with students not to adapt their constraints to AI learning is immoral and, more importantly, ineffective: this approach is the most competitive in every way, as multilateralism ensures real-world and student solutions, while AI takes advantage of its transparency and efficiency.

5. DISCUSSION

Initially, it was evident that in this study there is a balanced relationship between optimistic and cautious approaches to the impact of AI in the higher education environment. The student body overwhelmingly agrees or strongly agrees that AI can also be adapted to make learning processes more personalized. In addition, the potential of AI presents a timely opportunity to enhance educational access for individuals with disabilities, a perspective supported by the majority of respondents. Finally, a large proportion of learners agree or strongly agree with the use of algorithms, emphasizing the essentiality of responsibility in the use of technologies.

These findings can be interpreted in light of widely recognized ethical frameworks for artificial intelligence, which emphasize principles such as transparency, fairness, accountability, and respect for human autonomy. Students' strong demand for algorithmic explainability and regulatory oversight aligns with responsible AI guidelines that advocate for human-centered and rights-based approaches in educational technologies. Similarly, concerns related to data privacy and algorithmic bias reflect core ethical principles emphasized in international discussions on AI governance, where privacy-by-design and bias mitigation are considered fundamental requirements. By linking student perceptions to these ethical principles, the results highlight the importance of translating abstract AI ethics frameworks into concrete institutional policies within higher education.

In this sense, according to Mero et al. (2024), their results are consistent with those already proposed, because AI enables the personalization of learning by adapting content and strategies to personal requirements, guiding autonomous learning through virtual teaching and automated feedback, and improving administrative efficiency by automating daily tasks. Similarly, Menacho et al. (2024), argue that AI can generate learner-centered learning (feedback and tutoring), enabling students to advance at their own pace and acquire a specific

guide, increasing learning efficiency.

Regarding the extent of AI for students with disabilities, the contributions of Valle (2023), are related to the proposed results, AI systems and instrumentation provide students with disabilities interaction, transmission of information, and undoubtedly a better articulation towards education. On the other hand, Bariffi (2021), argues that AI programming is useful in the transformation of speech to text, which implies facilitating the association of students with speech problems, without the need for an interpreter.

As far as the present research is concerned, ethical concerns remain considerably important. It was evident that several of the critical points in the students' responses (agree or strongly agree), include the risks of privacy protection, and automated decision-making processes. In addition, one-third of respondents claim that AI intensifies social inequalities, while another proportion of students express concern that AI may negatively affect the quality of open interaction between teachers and students.

These contributions are undoubtedly interconnected with the criteria of Añapa (2024) and Loján et al. (2024), who argue that data privacy, algorithmic bias, and equality in accessibility to technology are significant concerns for the student collective, and also for the teaching collective, given the generative multiplicity of AI. While, in the case of inequalities and concern between educators and learners, it seems to have a different connotation from the stipulated, since Freire et al. (2024), argue that students have an attachment to AI given that it is a transformative tool in university teaching and promotes educational quality and that it can be used as an element combined with teaching practice.

On the other hand, the present research has revealed that the majority of respondents think that it is necessary to establish rules to protect their rights and AI integration. The majority also believe that it is essential to respect the autonomy of students and to ensure that students are active participants in decisions related to its use. Not only is this one of the most important ethical rules about any process involving new technologies, but it is also a crucial strategy for ensuring that student data are used equitably and effectively.

In that line of thought, the perspective of Quinto et al. (2024), is also compatible with the results already mentioned, since the author's perspective is to focus attention on the laws and ethical regulations related to AI. That is, it should be used according to their interests based on the balance of benefits and ethical implications. Similarly, Gallent et al., (2024), emphasize that policies and regulatory frameworks must be adopted to address the problem. That is, AI must be able to be adapted ethically and be beneficial in education. Likewise, Oliveira et al. (2023), stated that to ensure that AI is properly adopted in higher education, educational policies that encourage inclusion must be enacted and sufficient teacher training must be provided. However, Supelano (2024), argued that it is possible to foster an AI culture under existing ethical and accountable principles, as long as AI processes are conducted transparently and fairly.

6. ETHICAL STATEMENT

This study involved human participants and was conducted in accordance with ethical principles for educational research. Participation was voluntary, and all respondents were informed about the purpose of the study prior to data collection. Informed consent was obtained from all participants. The questionnaire was administered anonymously, and no personally identifiable information was collected. Data were used exclusively for academic and research purposes, ensuring confidentiality and privacy throughout the research process.

7. CONCLUSIONS

In conclusion, with this research, it can be said that the study uncovers the dual perception of university students about the content and perception of ethos and feasibility of AI in higher education. At first glance, things abound that this technology promises to improve in case of successful implementation, although its downside: more efficient teaching models, personalization of learning processes, and greater accessibility to the educational world. These areas are also presented in very positive terms. Where 74.48% of respondents believe that AI should be used for deeper personalization of learning experiences. Similarly, a similar number of people agree that AI should be used to expand access to education, to particularly impact the rights of the disabled.

On the other hand, it has been possible to determine that several ethical and social concerns are becoming increasingly critical. In fact, about 45% of students believe that AI is associated with privacy threats and exacerbates disparities that already exist in society. Then there are the risks associated with the biases present in popular automated decision-making systems, as well as the potential negative impacts on human interaction, specifically between teachers and students, which has been noted by

38.62%. Together, these findings suggest the importance of developing inclusive systems that are adequately regulated, emphasizing transparency and fairness during implementation.

In terms of regulation, although autonomy and student participation, there seems to be a broad consensus. More than 65% of respondents feel the need to take into account the establishment of regulations to protect students' rights before AI is adopted. In addition, 76.55% feel it is important to protect students' autonomy, and 75.86% say it is very important to ask students whether we should adopt AI in the learning environment. Such figures suggest that a more ethical and collaborative adoption of AI will not only make it more user-friendly but also more aligned with student needs.

It is recommended to overcome the existing challenge, regulation of the use of AI in higher education is a key trend and should be maintained and strengthened. In this case, it can be implemented through the inclusion of guidelines in legislation and, if necessary, legal requirements. As a result, existing policies could grow and develop "to protect the implementation of AI in education, promote transparency, ensure equal opportunities and understand the equality of personalized outcomes." Therefore, these policies create an atmosphere of safety while implementing AI. However, it is also important to encourage the creation of inclusive and difference-oriented systems. Measures should be accessible to all, but at the same time, bias should be minimized as much as possible to take advantage of AI for the entire student population, mainly people with disabilities and those in vulnerable positions.

Similarly, another aspect that cannot be overlooked is the proactive participation of students in the formulation and evaluation of AI solutions. At the same time, it is necessary to foresee effective modalities for organizing feedback: on the one hand, allowing students to express their opinions and needs, and on the other hand, ensuring that technological solutions are well adapted to their reality and context of application. In terms of content, ethical and responsibility issues cannot be left out of training. Raising the awareness of teachers and students to the bioethical and socio-ethical risks of AI can form a balanced and critical view.

Finally, it identifies the need to seek a balance in this whole area of technology and human interactions. It must be ensured that supportive AI is simply one more dimension and never replaces the relationships between students and teachers. In this way, alienation and fear of technology will be reduced, and the strength of human ties in education will be much better matched. Overall, the above proposals not only address the current challenges in AI concerning higher education, but also ensure that these elements are ethical, effective, and focused on the prosperity of students.

From a practical perspective, the findings suggest that higher education institutions should develop clear institutional guidelines for the ethical use of generative AI. These guidelines should prioritize data privacy protection, algorithmic transparency, student autonomy, and inclusive access to AI-supported learning tools. Incorporating student participation in decision-making processes related to AI adoption may strengthen trust and foster responsible technology use within academic environments.

Future research should expand this line of inquiry by incorporating inferential analyses, comparative studies across academic disciplines, and longitudinal designs to assess changes in student perceptions over time. Additionally, examining faculty perspectives and institutional readiness could provide a more comprehensive understanding of ethical AI integration in higher education.

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