

# Senior High School Students Perceptions and Awareness on the Ethical Implications of Artificial Intelligence

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## **Research Article**

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## **Abstract**

Artificial Intelligence aims to create intelligent devices that resemble humans by inducing intelligent behavior. This study aims to examine the senior high school students' perceptions and awareness on the ethical implications of artificial intelligence in terms of age, sex, and grade level. The study utilized a quantitative cross-sectional research design. The respondents of the study were 142 senior high school students currently enrolled in a public secondary high school in Eastern Philippines of the school year 2024-2025 and selected using stratified and systematic random sampling techniques. The study used an adapted survey questionnaire. Results revealed that senior high school students have a high perception and awareness towards ethical implications of artificial intelligence. Furthermore, result showed that there is a significant difference in terms of age of senior high school towards perceptions and attitudes on the ethical implications of artificial intelligence and there is no significant difference between perceptions and awareness in terms of sex and grade level. The study concludes that while students are largely optimistic about AI in education, proactive measures are crucial to ensure responsible and fair use of this technology. Further research should focus on addressing resource inequalities and translating ethical concerns into concrete policies and practices. The study emphasizes how urgently proactive steps must be taken to guarantee the ethical and responsible application of artificial intelligence in education, including addressing resource disparities and converting moral considerations into tangible rules and procedures. This highlighted a potential access to AI resources and training, raising concerns about equitable implementation.

Keywords: Artificial Intelligence; Awareness; Ethical Implications; Perceptions; Students

## **Abbreviations**

AI: Artificial Intelligence; AWM: Average Weighted Mean; EI: Ethical Implications.

## Introduction

Artificial Intelligence (AI) is a field of computer science that aims to create intelligent devices that resemble humans

by inducing intelligent behaviour in them Das et al. The idea of AI, which first surfaced in the laser, is the replication of human intelligence by computer. AI has become indispensable to human existence due to computer technology breakthroughs such as data proliferation, computing improvements, and group-breaking algorithms. Many elements of lives have been altered by its quick improvements, but this has additionally caused concerns about algorithmic bias, privacy, and the effects of automation on schools [1].



Artificial Intelligence is a range of industries including social media, applications for software, storage of data, operation for businesses, analytics, interactive platforms, and systems for communication [2]. Artificial Intelligence (AI) has advanced dramatically, revolutionizing several industries and opening up new opportunities for people all around the world Littman et al. Artificial Intelligence technology has enhanced lives and opened up new opportunities, but it has also brought up ethical issues that need to be resolved. The implementation of artificial intelligence systems carries a high risk of violating human rights and unfairly harming underprivileged communities UNESCO and Minssen, et al.

However, a study by Cardon further indicated that one AI's disadvantage is less significant understanding and genuine writing ability. AI literacy gives students the ability to distinguish between reliable facts and false information, encouraging precision in thought and cultivating an attitude focused on research.

Furthermore, based on the study of Gerlich, AI can fundamentally alter several data programs, as is evident in the present. AI was described as an artificial object Rajendra, et al. This reacts to its surroundings after it recognizes them. Within the same domain, a specific category of artificial intelligence systems known as generative AI (GenAI) can develop and produce content that has an affinity for humangenerated items various outputs can be computer code, text, photos, music, movies, or even a combination of various media Farrelly & Baker.

Moreover, the current development of generative AI chatbots has already complex problems with academic dishonesty that educational organizations encounter Oravec. Additionally, given the current momentum artificial intelligence has achieved, some researchers might be drawn to using these technologies in their scientific writing. These are not inherently negative practices. They may even improve teacher's professional development and students' educational experiences Selvanathan & Narayanan. As long as the rules of academic ethical principles are followed, these things are accessible. Researchers and students are highly tempted to stay away from academic ethics because even preventing plagiarism technology may fully recognize the fact that some text fragments are generated using AI-based methods Elaal A, et al.

In the Philippines, generative AI has gained popularity, particularly in institutions. Nevertheless, on January 18, 2023, several investigations were launched against UP Diliman students for allegedly submitting using artificial intelligence to meet academic criteria Estrellado. Moreover, Artificial Intelligence (AI) has advanced dramatically, revolutionizing several industries and opening up new opportunities

for people all around the world Littman S, et al. Artificial Intelligence technology has enhanced lives and opened up new opportunities, but it has also brought up ethical issues that need to be resolved. The implementation of artificial intelligence systems carries a high risk of violating human rights and unfairly harming underprivileged communities UNESCO and Minssen M, et al. However, there is no existing research conducted at Muertegui National High School about Artificial Intelligence. Thus, the researchers aim to examine the senior high school students' perceptions and awareness of the ethical implications of artificial intelligence in Muertegui National High School.

## Methodology

This chapter details the research design, data collection methods, surveys, sampling techniques, and data analysis procedures used to answer the research questions. It justifies the chosen methodology and addresses potential limitations.

# **Research Design**

This study utilized a quantitative cross-sectional research design to determine the ethical implications of artificial intelligence in terms of algorithmic bias and discrimination, data privacy, and transparency as perceived by senior high school students. Cross-sectional is a research design that examines the characteristics or outcomes of a population or a subset at one specific moment, capturing a broad overview without tracking changes over time. This approach helps identify associations and trends, although it cannot establish cause-and-effect relationships Kumar.

## **Respondents and Sampling Technique**

The respondents of this study were 142 senior high school students currently enrolled in Muertegui National High School in the school year 2024-2025. The researchers used Slovin's formula with a 5% margin of error to determine the sample size. The computed sample size is 142 out of 226 total populations. Stratified sampling and Systematic sampling techniques were used to determine the appropriate number of respondents. Stratified sampling is a fishbowl is done by the researchers in which the respondents are selected by drawing a random piece of paper from the bowl (Table 1).

Grade Level	Population Size	Sample Size	Number of Section	Sample Size per Section
11	119	75	3	26
12	107	67	3	23
Total	226	142	6	

**Table 1:** Sample Size Computation and Representation.

#### **Research Instruments**

The study used a self-administered survey questionnaire adapted from the study of Zahrani A and Alasmari [2] entitled Exploring the Impact of Artificial Intelligence on Higher Education: The Dynamics of ethical, social, and educational implications. In connection, the survey questionnaire consists of 8 items and is composed of two sections. First is the demographic profile of the respondents in terms of age, sex, and grade level. The second part is composed of 8 statements regarding perceptions of ethical implications. In addition, the researchers utilized a 5-point Likert Scale to measure the respondent's perception and awareness of the ethical implications of artificial intelligence which is identified as (5) Strongly Agree, (4) Agree, (3) Undecided, (2) Disagree, (1) Strongly Disagree. Similarly, in the study entitled Exploring the Role of Artificial Intelligence in Education, Students Preferences and Perceptions is used as adapted survey questionnaires.

Additionally, the study of Manrique and Palomares [3] entitled Embracing the Future: Exploring Teachers Perspective and Readiness for Integrating Artificial Intelligence (AI) in Mathematics Classroom in Selected Public and Private Senior High School is used as adapted

survey questionnaire.

# **Data Gathering Procedure**

Before the data gathering, the researchers were tasked to find and search for a survey questionnaire to be used. The researchers sent an email to the author asking permission to allow them to use the questionnaire. After the author's response, the researchers conducted a pilot testing of the survey questionnaire to all grade 11 and 12 students. After conducting the pilot testing the researchers proceed to the final data-gathering procedure where the researchers asked permission from the adviser to conduct a survey. The researchers personally distributed the survey questionnaire to the respondents so they could complete responsibly and honestly. Additionally, respondents' answers were collected for data analysis and interpretation. Before doing data analysis, researchers employ data management including data entering, data coding, and data cleaning [4].

## **Data Scoring and Interpretation**

The interpretation of the mean was based on the following:

Score	Range	Response Choice	Interpretation
5	4.51-5.00	Strongly Agree	It means that the perceptions and awareness of the ethical implications of senior high school students are observed all the time.
4	3.41-4.50	Agree	It means that the perceptions and awareness of the ethical implications of senior high school students are observed most of the time.
3	2.61-3.40	Undecided	It means that the perceptions and awareness of the ethical implications of senior high school students are observed sometimes.
2	1.81-2.60	Disagree	It means that the perceptions and awareness of the ethical implications of senior high school students are observed in a few instances.
1	1.00-1.80	Strongly Disagree	It means that the perceptions and awareness of the ethical implications of senior high school students are not at all observed.

# **Data Analysis Procedure**

The data gathered from research questions one, two, and three were statistically analyzed using descriptive statistics like frequency, percentage, mean, standard deviation, and average weighted mean.

Meanwhile, research question number four was statistically analyzed using a z-test to determine the significant

differences in the perceptions and awareness of senior high school students on the ethical implications of artificial intelligence at a 0.05 level of significance. The data were processed through IBM-SPSS V.27.

### **Results and Discussion**

This chapter presents the findings of the study such as the statistical data relative to the problem pointed out

in the statement of the problem of the study, along with the

interpretations and discussion on the implications of findings.

	f	%						
Age								
15-17	123	87%						
18-19	13	9%						
20 above	6	4%						
Total	142	100%						
	Sex							
Male	64	45%						
Female	78	55%						
Total	142	100%						
	Grade Level							
Grade 11	74	52%						
Grade 12	68	48%						
Total	142	100%						

**Table 2:** Demographic Profile of the Senior High School Students in terms of Age, Sex and Grade level.

Statement	Mean	SD	Verbal Interpretation
AI will play an essential role in education	3.8	.86	Agree
AI will replace some specialization in education	3.5	.83	Agree
I understand the basic principle of AI	3.7	.7	Agree
I am comfortable with AI terminology	3.5	.9	Agree
I understand the limitations of AI	3.8	.9	Agree
The presence of AI will benefit my work as a student	3.6	.9	Agree
All students should accept the development of AI	3.4	.9	Agree
I will be confident using AI for my assignments needs	3.6	1.0	Agree
I will have a better understanding when using AI	3.6	1.0	Agree
AI systems will have a positive impact on the world of education	3.6	1.0	Agree
Incorporating AI into the lecture system will facilitate the learning process	3.5	.9	Agree
Using AI in education will prepare me to be skilled in lecture practices	3.4	.9	Agree
AI will replace my future role as a student	3.3	1.0	Undecided
Willingness to use AI in education	3.4	.9	Agree
The use of AI should be maximized in assisting educational work	3.6	1.0	Agree
Average Weighted Mean	3.58		Agree

**Table 3:** Senior High School Student's Perception on the Ethical Implications of Artificial Intelligence.

Table 3 shows the perceptions of senior high school students regarding the ethical implications of Artificial Intelligence. The result showed that the majority of the respondents agreed that Artificial Intelligence has a limitation (M=3.8, SD=.9). While one remained undecided that AI can replace the role of the student (M=3.3, SD=1.0).

Overall, the average weighted mean (AWM) of senior high school students' perceptions on the ethical implications of Artificial Intelligence is 3.5 and verbally interpreted as Agree. Therefore, this means that senior high school students were slightly aware and conservative that AI has limitations. However, they also recognize that AI cannot replace the

human capacity for creative thinking, for envisioning novel solutions and for adapting to unforeseen circumstances. This finding contradict to the study of Herawi H, et al. which shows that Artificial Intelligence play an essential role in education and the respondents understand the limitations of AI [7].

Statement	Mean	SD	Verbal Interpretation
I understand how AI tutors provide personalized instruction for students' needs	3.85	.79	Agree
I am familiar with AI tools that respond and adapt to each students' skills and pace of learning	3.67	.87	Agree
I know how intelligent software can automatically generate problems	3.53	.91	Agree
I am aware of AI helpers that give feedback, hints, and answer to students in real time while they work	3.64	.96	Agree
I understand how AI tools assess students work and adjust their methods accordingly	3.65	.89	Agree
I know AI software can create customized test quizzes, and worksheets tailored to each student	3.78	.95	Agree
I have seen AI chatbots to let students ask questions by typing regular sentences	3.71	1.02	Agree
I understand how AI looks at where students make mistakes to identify and improve areas where knowledge is missing	3.78	.94	Agree
I know AI can recommend extra study materials and plans to students based on their progress in math	3.65	.89	Agree
I am familiar with AI tools that use data visual and graphics to help demonstrate abstract ideas	3.63	.85	Agree
I understand how AI uses simulated experiments to build students' deeper understanding of concepts	3.62	.85	Agree
I know AI can automatically flag students who are struggling in their school works	3.68	.95	Agree
Average Weighted Mean	3.68		Agree

**Table 3.1:** Senior High School Student's Perception on the Ethical Implications on Artificial Intelligence.

Table 3.1 shows the perception of senior high school students regarding the ethical implications of Artificial Intelligence. The results showed that the majority of the respondents agreed that Artificial Intelligence indicates a strong consensus among students that they recognize the value of AI tutors in tailoring educational experiences to meet individual learning requirements (M=3.8, SD=0.7). Similarly, even though it received the lowest score, there was still some agreement among senior high school students that AI helpers provide timely feedback, hints, and answers while

they work (M=3.5, SD=0.9). Overall, the average weighted mean (AWM) of senior high school students' perceptions on the ethical implications of Artificial Intelligence is 3.6 and verbally interpreted as Agreed. This high level of agreement suggests that students are not only aware of the existence of AI tutors but also appreciate their ability to adapt to different learning styles and needs. In connection to the study of Manrique P, et al. [3] revealed that most of the respondents understand the needs.

Statement	Mean	SD	Verbal Interpretation
I find AI integration in my classroom to be user-friendly and easy to navigate	3.8	.77	Agree
I believe that using AI tools is straightforward and intuitive for both teachers and students	3.6	.8	Agree
I perceive AI applications as accessible and not overly complex	3.5	.9	Agree

I consider AI integration to be a hassle-free process in terms of implementation	3.5	.9	Agree
I am convinced that using AI in teaching is a smooth and trouble-free experience	3.6	.9	Agree
I anticipate that AI integration will require minimal effort in terms of setup and management	3.4	.9	Agree
I see AI tools as a convenient addition to my studies	3.7	.8	Agree
I expect that AI integration will be seamless and enhance the teaching experience	3.5	.9	Agree
I envision AI as a tool that simplifies tasks and reduces administrative burden	3.5	.8	Agree
Average Weighted Mean	3.6		Agree

Table 3.2: Senior High School Student's Perception on the Ethical Implications on Artificial Intelligence.

Table 3.2 shows the perception of senior high school students regarding the ethical implications of Artificial Intelligence. The results showed that the majority of the respondents agreed that navigating the AI applications are likely comfortable and don't find them overly complex or confusing (M=3.8, SD= 0.7). The lowest result showed students anticipating a minimal setup and management effort for AI integration (M=3.4, SD= 0.9). Overall, the average weighted mean (AWM) of senior high school

students' perceptions on the ethical implications of Artificial Intelligence is 3.6 and verbally interpreted as Agreed. This positive perception suggests that the AI tools have been effectively designed with the student user in mind, making them accessible and engaging. The findings contradict to the study Manrique P, et al. [3], were most of the respondents find artificial intelligence to be a user-friendly in their classroom and it is easy to navigate [8].

Statement	Mean	SD	Verbal Interpretation
Ethical guidelines and regulations should be established to govern the use of AI in high school	3.8	.9	Agree
AI should be developed and used in a manner that respects students' autonomy and agency	3.6	.9	Agree
AI should be used responsibly to avoid exacerbating societal inequalities	3.7	.9	Agree
AI should not replace human interaction and support in the educational process	3.7	.8	Agree
AI algorithms should be designed to address potential biases and ensure fairness in high school	3.7	.9	Agree
The use of AI in high school should prioritize the ethical collection and the use of student data	3.6	.7	Agree
The use of AI in high school should be transparent and accountable	3.5	.9	Agree
There are concerns about data privacy and security when using AI technologies in high school	3.6	.9	Agree
Average Weighted Mean	3.7		Agree

Table 4: A. Senior High School Student's Awareness on the Ethical Implications on Artificial Intelligence.

Table 4 shows senior high school students' awareness of artificial intelligence's ethical implications. The results indicate that most respondents agreed high schools should have ethical guidelines and regulations governing AI use  $(M=3.8,\,SD=0.9)$ . The lowest result was regarding AI transparency and accountability in high schools  $(M=3.5,\,SD=0.9)$ . The overall average weighted mean (3.7) of senior

high school students' awareness of Al's ethical implications, which is verbally interpreted as Agree. The results reflect a positive attitude towards establishing ethical standards for AI in education, indicating that students are not only aware of the ethical implications but also advocate for structured regulations to ensure responsible use of AI technologies in their schools. This shows that students strongly believe that

ethical frameworks are necessary for AI in the classroom. Although there is still agreement on this statement, it is the least popular of the ones that were presented, suggesting that students may not be as certain or as strongly in agreement with the necessity of accountability and openness as they are with the other ethical factors. The findings were similar to the study conducted by Al-Zahrahi and Alasmari [2], which

revealed that the respondents emphasized the need for ethical guidelines, respect for student autonomy, avoidance of societal inequalities, preservation of human interaction, addressing biases, prioritizing data ethics, ensuring transparency and accountability, and addressing privacy and security concerns [9].

Statement	Mean	SD	Verbal Interpretation
I feel prepared to start using AI technologies in my study	3.7	.8	Agree
I have the knowledge needed to use AI tools effectively for instruction	3.7	.8	Agree
I am willing to invest time in learning how to use new AI tools	3.5	.9	Agree
I feel confident in my ability to troubleshoot issues with AI technologies	3.4	.9	Agree
I have access to the resources I would need to implement AI tools in my classroom	3.3	.9	Agree
My school provides sufficient training for using instructional technologies	3.4	.8	Agree
I stay up-to-date on new AI innovations that could enhance my knowledge	3.5	.9	Agree
I am excited by the potential for AI to improved student outcomes and effectiveness	3.7	.9	Agree
I feel ready to integrate AI into my daily study	3.5	.8	Agree
I am open to adjusting my study methods to incorporate AI innovations	3.5	.9	Agree
I believe that integrating AI technologies would enhance the overall effectiveness of my study	3.7	.8	Agree
I am willing to collaborate with colleagues to share insights and strategies for integrating AI into my classmate	3.6	.9	Agree
My education institution provides the necessary technological infrastructure to support the integration of AI tools	3.5	.9	Agree
I am committed to ongoing professional development to enhance my knowledge and skills related to AI in education	3.5	.9	Agree
Average Weighted Mean	3.5		Agree

Table 4.1: Senior High School Student's Awareness on the Ethical Implications on Artificial Intelligence.

Table 4.1 shows senior high school students' awareness of artificial intelligence's ethical implications. The results indicate that most respondents agreed that they are prepared to start using AI technologies in their study (M=3.7, SD=0.8). While one remained undecided about having access to the resources needed to implement AI tools in their classroom (M = 3.3, SD = 0.9). The overall average weighted mean (3.5) of senior high school students' awareness of AI's ethical implications, which is verbally interpreted as Agree. This

suggests that while many students believe they are prepared, a significant number may lack access to the necessary tools and resources to actually utilize AI effectively in their learning. This disparity in resource access could widen the existing achievement gap and hinder the equitable integration of AI in education. The results contradict the findings of Manrique P, et al. [3], who found out that students are prepared in using artificial intelligence in their study [10].

Statement	Mean	SD	Verbal Interpretation
I believe that AI integration will significantly enhance my knowledge	3.8	.9	Agree
I perceive AI as a valuable tool for improving educational outcome	3.6	.8	Agree
I view AI integration as a practical and effective approach to personalized learning	3.5	.8	Agree

I consider AI integration a time-saving solution in lesson planning and delivery	3.5	.9	Agree
I am convinced that AI will make more effective and efficient	3.6	.9	Agree
I anticipate that AI integration will lead to greater student engagement and motivation	3.4	.9	Agree
I see AI as a means to provide more individualized support to students	3.7	.9	Agree
I expect that AI will enhance the learning experience of students		.9	Agree
I envision AI as a tool for addressing diverse learning needs in the classroom		.9	Agree
Average Weighted Mean	3.6		Agree

**Table 4.2:** Senior High School Student's Awareness on the Ethical Implications on Artificial Intelligence.

Table 4.2 shows senior high school students' awareness of artificial intelligence's ethical implications. The results indicate that the majority improved their learning (M=3.8, SD=0.9). The lowest result showed that AI has the potential to create more diverse learning opportunities (M=3.8, SD=0.9). The overall average weighted mean (3.5) of senior high school students' awareness of AI's ethical implication, which is verbally interpreted as Agree. In conclusion, these results highlight the importance of integrating discussions about the ethical implications of AI into the curriculum, ensuring that students not only appreciate AI's benefits but also understand its broader impact on learning diversity and ethical considerations. These results contradict to the findings of Manrique P, et al. [3], the respondents shows that they believe that artificial intelligence will enhance their knowledge in studying [11].

<b>Grade Level</b>	Mean	Z	P-Value	Z-Crit	Decision
Perception	3.60				
		8.76	0	1.95	Reject the H <sub>1</sub>
Awareness	3.64				
Significant					
level=0.05					

**Table 5:** Significant Difference in the Perception and Awareness of Senior High School Students on the Ethical Implication of Artificial Intelligence in terms of Age (15-20 above).

Table 5 shows the z-result of Perceptions and Awareness on the Ethical Implications of Artificial Intelligence in terms of their age. Result showed that, since the p-value (0.00) is lesser that the level of significant (0.05) the decision would be, reject the null hypothesis and accept the alternative hypothesis. Overall, this means that there is significant difference in terms of age senior high school students' perceptions and awareness on the ethical implications of artificial intelligence. Therefore, senior high school students have different perceptions and awareness on the ethical implications of artificial intelligence. Similarly, based on

the study conducted by Manrique P, et al. [3], age negatively different with technology readiness, suggesting students may be more familiar with artificial intelligence [12,13].

<b>Grade Level</b>	Mean	Z	P-Value	Z-Crit	Decision	
Perception	3.65					
		5.61	2.00	1.95	Accept the H <sub>0</sub>	
Awareness	3.64					
Significant level=0.05						

**Table 6:** Significant Difference between Perception and Awareness of Senior High School Students on the Ethical Implication of Artificial Intelligence in terms of sex (male).

Table 6 shows the result of the z-test whether there is a significant difference between perception and awareness of senior high school students on the ethical implications of artificial intelligence in terms of sex (male). The result showed that, since the p-value (2.00) is higher than the level of significance level (0.05) the decision would be, accept the null hypothesis. Overall, this means that there is no significant difference between perception and awareness of senior high school students on the ethical implications of artificial intelligence. Therefore, both perception and awareness of senior high school students have no different views and opinions regarding artificial intelligence [14].

<b>Grade Level</b>	Mean	Z	P-Value	Z-Crit	Decision	
Perception	3.59					
		6.57	4.75	1.95	Accept the H <sub>0</sub>	
Awareness	3.64					
Significant level=0.05						

**Table 7:** Significant Difference between Perception and Awareness of Senior High School Students on the Ethical Implication of Artificial Intelligence in terms of sex (female).

Table 7 shows the result of the z-test whether there is a significant difference between perception and awareness

of senior high school students on the ethical implications of artificial intelligence in terms of sex (female). The result showed that, since the p-value (4.75) is higher than the level of significance level (0.05) the decision would be, accept the null hypothesis. Overall, this means that there is no significant difference between perception and awareness of senior high school students on the ethical implications of artificial intelligence. Therefore, both perception and awareness of senior high school students have no different views and opinions regarding artificial intelligence [15].

<b>Grade Level</b>	Mean	Z	P-Value	Z-Crit	Decision	
Perception	3.59					
		-6.30	2.96	1.95	Accept the H <sub>0</sub>	
Awareness	3.63					
Significant level=0.05						

**Table 8:** Significant Difference between Perception and Awareness of Senior High School Students on the Ethical Implication of Artificial Intelligence in terms of grade level (grade 11)

Table 8 shows the result of z-test whether there is a significant difference between perceptions and awareness on the ethical implications of artificial intelligence in grade 11. Result showed that, since the p-value (2.96) is higher than the level of significant (0.05) therefore the decision would accept the null hypothesis. Overall, this means that there is no significant difference between perceptions and awareness on the ethical implications of artificial intelligence in grade 11 which means they viewed artificial intelligence as the same [16,17].

<b>Grade Level</b>	Mean	Z	P-Value	Z-Crit	Decision
Perception	3.69				
		-5.64	1.69	1.95	Accept the H0
Awareness	3.66				
Significant level=0.05					

**Table 9:** Significant Difference between Perception and Awareness of Senior High School Students on the Ethical Implication of Artificial Intelligence in terms of grade level (grade 12).

Table 9 shows the z-test result of perceptions and awareness on the ethical implications of artificial intelligence. It can be observed that there is no significant difference in perceptions and awareness since the p-value (1.69). This means that grade 12 students have no different perceptions and awareness on the ethical implications of artificial intelligence. Furthermore, there is no significant difference between perceptions and awareness in grade 12 towards ethical implications of artificial intelligence. This means

that grade 12 students have no different perceptions and awareness on the ethical implications such as algorithmic biases and discrimination, transparency, and data privacy of artificial intelligence.

### Conclusion

This study investigated senior high school students' attitudes toward the ethical use of artificial intelligence (AI) in education. Based on the findings of senior high school students perceptions and awareness on the ethical implications of artificial intelligence is found that the students' observed most of the time. Also, the results revealed that senior high school students are agreed towards the ethical implications of artificial intelligence. Based on surveys and statistical analysis, show a generally positive view of AI's potential benefits such as personalized learning and increased efficiency. However, students also expressed awareness of AI's limitations and the importance of ethical guidelines to address issues like data privacy and algorithmic bias. This highlighted a potential disparity in access to AI resources and training, raising concerns about equitable implementation. The study concludes that while students are largely optimistic about AI in education, proactive measures are crucial to ensure responsible and fair use of this technology. Further research should focus on addressing resource inequalities and translating ethical concerns into concrete policies and practices.

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