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Influence of Ethical Behavior on the Utilization of Artificial Intelligence Among Students in A Catholic School

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ABSTRACT

This research investigates the influence of ethical behaviors on the utilization of artificial intelligence (AI) among students in a Catholic school setting. With the increasing integration of AI in education, it is crucial to assess students' proficiency and ethical considerations when employing these technologies. The study aims to discern the levels of AI ethical behaviors in terms of academic integrity, ethical awareness, bias, and interest value, alongside their AI utilization levels in academic, utility, cost, and attainment contexts. Employing a descriptive-correlational research design, data were collected from 444 respondents across various educational levels, confirming the relationship between ethical behavior and AI utilization. The findings revealed a very strong positive correlation between students' ethical behavior and their engagement with AI tools, indicating that higher ethical standards foster greater utilization. Furthermore, the results showed that only the interest value significantly influenced AI utilization, underlining the importance of students' perceptions in shaping their AI engagement. This study culminates in the development of an AI policy and guidelines manual aimed at promoting responsible and ethical AI usage in educational settings. Recommendations include enhancing student orientation programs on AI ethics and utilization to ensure a balanced approach to technology integration in academic workflows.

KEYWORDS: AI behavior, AI utilization, ethical awareness, utility, academic, and interest value, Philippines.

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INTRODUCTION

The emergence of AI has brought complex ethical concerns on education and decision made by AI algorithms becomes potential in directly altering the lives of people which is seen as harmful and negative consequences for society [7]. Moreover, students' over-reliance to AI generative tools for their academic achievement goals can be result to the decline in critical thinking skills, handwriting skills disappearance, memorization, and mathematics solving skils. Thus, it leads to misbehavior toward ethical concerns, bias, and their interest in utilizing AI tools. The rapid integration of artificial intelligence (AI) into academic and professional settings has raised significant ethical concerns, particularly regarding its use in academic contexts. Previous studies [33] and [16], have explored the broader implications of AI in education, but few have specifically examined the ethical behavior of students in relation to AI utilization.

Artificial Intelligence (AI) has become a transformative force across various sectors, and education is no exception. In tertiary education, the integration of AI holds great promise for enhancing learning outcomes, improving instructional methods, and personalizing education experiences. However, the effective utilization of AI in education hinges upon the proficiency of students in understanding and leveraging AI technologies. Thus, measuring students' knowledge in the use of AI becomes paramount in ensuring the successful integration and utilization of these technologies in tertiary education settings. Despite the potential benefits of AI in education, its effective implementation hinges upon the readiness of students to engage with these technologies. Proficiency in AI literacy, including understanding fundamental concepts, principles, and applications of AI, is essential for students to fully harness the capabilities of AI-driven educational tools [11].

Research gaps such as maintaining academic integrity, fostering ethical awareness, and addressing biases when using AI tools persist in understanding how students navigate ethical dilemmas. These highlight the need for a focused investigation into the ethical dimensions of AI use among students, as their technical expertise positions them as key stakeholders in shaping future AI practices. Furthermore, while research has examined AI utilization in academic settings, such as its utility and cost-effectiveness [32], there is limited understanding of how these factors interact with students' ethical decision-making. For instance, determining how do students balance the benefits of AI tools with the ethical responsibilities of avoiding plagiarism or biased outcomes. Addressing these concerns is essential to developing a comprehensive understanding of the ethical and practical dimensions of AI use in education, particularly as AI tools become more pervasive in academic workflows.

This research demonstrates the underlying ramifications of having artificial intelligence (AI). This determined the persisting utilization behavior alongside the negative aspects of using it in modern times, as well as the plausible explanations behind the

students opting to utilize Artificial Intelligence (AI) despite knowing the risks that come with it. In this way, the current study will be providing rationale why learners depend on artificial intelligence even though they are aware of its repercussions.

RESEARCH OBJECTIVES

This study focused on determining the influence of ethical behavior on the utikization of AI among students in a Catholic school.

Thus, this sought answers to the following:

1. Identify the level of Al ethical behaviors of students in terms of:
1.1. Academic Integrity;
1.2. Ethical Awareness;
1.3. Bias; and
1.4. Interest Value.
2. Determine the AI utilization level of students in terms of:
2.1. Academic;
2.2. Utility;
2.3. Cost; and
2.4. Attainment.
3. Ascertain the significant relationship between students' AI ethical behavior and their AI utilization.
4. Determine the significant influence of students' AI ethical behavior on their AI utilization.
5. Develop an AI policy and guidelines manual in an educational setting.

REVIEW OF RELATED LITERATURE

The integration of AI and chatbots in particular brings about a paradigm shift in educational tools, introducing a diverse array of transformative applications. In the realm of education in various forms, including personalized learning platforms designed to enhance students' educational experiences, automated assessment systems that assist educators in evaluating student progress, and facial recognition systems that yield valuable insights into learners' behaviors [17]. In consonance, Ethics deals with the moral behavior of Artificial Moral Agents Theory (AMA), a field of research that deals with the creation of moral agents. As technology and robotics get smarter, robots or AI workers must behave more ethically and efficiently. We think of the ethics of artificial intelligence representatives as ethical artificial intelligence [5].

Currently, the most famous rules for controlling AI agents are Isaac Asimov's Three Laws of Robots in 1950. First law, A robot must not harm or wrongly allow humans to be harmed. Second rule, the robot must follow the command given by the human unless the command is inconsistent with the first rule. Third rule, the robot must protect its own life unless the guard interferes with the first or second rule. Students have become the most vulnerable persons who are asked to cooperate of the preeminent survey concerns [12]. Additionally, describing demographic profiles of the respondents will help generate thorough information specifically intended for the study conducted [6].

Students' AI Ethical Behavior

The academics' views on the advantages associated with the use of AI systems and their proposed solutions to maximize the advantages of AI use in research, teaching, and evaluation activities are also highlighted. All of this contributes to the development of a framework for the implementation of AI systems in the economic and business education in Romania. Results indicate an early stage of AI use and integration in the activities of academics from the analyzed universities: AI is predominantly used for the evaluation of students, which can be done automatically [26]. Academic integrity is an essential component of ethical behavior in education. The emergence of AI technologies undermines established concepts of academic honesty. While AI can improve learning experiences, it also raises issues about plagiarism and the legitimacy of student work. The authors contend that students must traverse these ethical dilemmas in order to retain academic integrity while utilizing AI's capabilities [9].

Ethical awareness among students is critical for appropriate AI use. Students typically lack an awareness of the ethical implications of AI technology [10]. This lack of knowledge can lead to abuse or over-reliance on AI tools without taking into account their possible impact on learning and assessment results. Bias in AI systems is another significant factor influencing ethical conduct. Understanding these biases is vital for students' ability to critically analyze the information offered by artificial intelligence (AI) and make educated decisions.

Students still need their teachers to learn challenging materials. But, it is plausible to be assisted by AI in the future given that critical analysis and reasoning will be considered [1]. Fabrication, falsification and plagiarism are the center focus of research misconduct. AI ethical implications have brought high demands in school settings. Thus, students should integrate ethics into reasoning in getting information from AI generative tools [2]. There is an extent in utilizing technology driven tools formulated specifically by AI generative tools to scrape any ideas when bias is inbuilt. This potent problem is widely acknowledged in the AI sector [14]. Generative AI tools have a huge impact to human growth and the government needs to protect and restrict the remarkable capacity of generative AI systems [2]. Students are more interest in AI-driven courses because they find it interesting to earn money [15]. This has become the reason educators seek technology-enhanced approaches to address the students' AI generative tools interest with safe, effective, and scalable AI generation.

Utilization of AI

AI's function in academic contexts is becoming more prominent. According to a poll conducted [8], 86% of students use AI tools for their studies, which might range from research aid to content development. While students regularly utilize these technologies, they typically report feeling underprepared for an AI-driven workforce, highlighting a need for more training and assistance [18].

The value of AI tools goes beyond academic success; they also provide cost-effective solutions for educational institutions. Meta-analysis found that incorporating AI into educational frameworks can save operational costs while boosting student engagement and learning results [10]. This dual advantage emphasizes the need to understand AI's practical uses as well as its financial implications. An ample amount of available AI generative tools which assist the students personalized learning utilization towards their assessment preparation, report writing, and analysis [19]. The regulation of government's policies on proper AI utilization might affect the students' academic assessment to help monitor the students' academic work in terms of originality and structure [4]. AI sometimes enhances overall efficiency, making life more effective, and easy to become skillful to become a proficient professional. AI provides benefits to develop softwares to support the learning process. AI enables the development of learning systems tailored to each students' abilities and learning styles, designed to help humans think and be able to analyze and identify patterns in thinking [27].

AI offers numerous advantages in tertiary education. It has the potential to revolutionize traditional teaching methods by providing personalized learning experiences tailored to individual student needs [23]. Through AI-driven adaptive learning platforms, students can receive customized instruction, feedback, and support, thereby maximizing their learning potential [13]. Additionally, AI-powered tools can assist educators in developing and delivering content more efficiently, freeing up time for personalized interactions with students [29]. Moreover, AI algorithms can analyze vast amounts of educational data to identify patterns, trends, and areas for improvement, facilitating evidence-based decision-making in curriculum development and pedagogical practices [20].

Relationship Between Ethical Behavior and Utilization

The relationship between ethical behavior and the use of AI tools is complicated. Greater levels of ethical awareness are associated with more responsible use behaviors among students [22]. Furthermore, knowing the ethical consequences of their activities may impact how students interact with AI systems, perhaps leading to more productive and responsible use. While the relationship between AI ethical behavior and utilization among IT students is still under investigation, preliminary research suggests a complex interplay between these factors. Ethical awareness and training can influence students' decision-making processes and promote responsible AI use. However, the specific factors that drive ethical behavior and the extent to which they impact utilization remain to be fully understood. This review highlights the need for further research to explore the relationship between AI ethical behavior and utilization among IT students. By understanding the factors that influence students' decisions and behaviors, educators and policymakers can develop effective strategies to promote responsible AI use and mitigate potential ethical risks [21].

The strong correlation further emphasizes the importance of cultivating ethical and mindful behavior in the use of AI, as it significantly impacts the frequency and manner of AI tool utilization. Ethical behavior is attributed to people's utilization and train of thoughts [3]. Educational programs may consider integrating behavioral development strategies to enhance the responsible and effective use of AI in learning environments. This is further agreed [24] that relationship between ethical behavior and utilization of generative tools had a positive impact.

Influence of Ethical Behavior on Utilization

Ethical behavior has a huge impact on how students use AI technologies. Students who are more aware of ethical issues are more likely to use AI resources responsibly [9]. This shows that creating an atmosphere that encourages ethical discourse about technology might improve the efficiency and integrity of AI use in learning environments. The relationship between students' AI ethical behavior and their utilization is complex and multifaceted. To ensure the ethical and responsible use of AI in education, it is essential to promote AI literacy, digital citizenship, and critical thinking skills among students. By fostering a culture of ethical AI use, we can harness the power of AI to improve education while mitigating potential risks [30]. This implies that when students perceive AI tools as valuable, engaging, or useful, they are significantly more likely to utilize them in their academic work. This relationship demonstrates that students' engagement with AI is primarily driven by their behavior of its relevance and benefits to their learning. Ethical behavior has a positive influence to students' utilization [25].

METHODOLOGY

The research employs a descriptive-correlational design to explore the students' ethical behaviors and utilization of artificial intelligence (AI) in the school setting. This design is appropriate because it allows for a detailed description of the levels of AI ethical behavior and AI utilization, as well as the exploration of the relationships between these variables. The study shall be conducted at the college department in one of the tertiary Catholic schools in Davao city. The study employed a stratified random sampling technique to ensure representation from various educational levels. The population was divided into three distinct strata: Junior High School, Senior High School, and College students. From each stratum, respondents were randomly selected, resulting in a sample consisting of 51 Junior High School students, 155 Senior High School students, and 238 College students, for a total of 444 participants.

The questionnaire has three parts and each part was adapted and ran through factor analysis. The first part focused on determining the students' most common AI used. The second part shall determine the ethical behavior manifested by the respondents. The last part shall identify the students' level of AI utilization. It underwent pilot testing to a secular institution

from junior high school, senior high school, and college students. Then the researchers ran the data for Confirmatory Factor Analysis (CFA). Based on the factor analysis results, all questions in every indicator is accepted.

The researchers requested consent and permission from the panel of experts to collect data. Then request permission to conduct a study. After receiving permission to conduct the survey, the researchers circulated the validated questionnaire and secure appointments with the department heads and personnel to distribute and collect data through the questionnaires. The researchers collected the surveys, total and evaluated the data. They presented the results. Lastly, draw conclusions based on the provided information and offered suggestions on the research findings.

This shall be utilizing descriptive statistics and multiple linear regression. Descriptive statistics shall be used to describe the commonly used generative AI, AI ethical behavior, and level of AI utilization. Multiple linear regression shall be used to provide the expected change in one unit variable, helps identify outliers, and models the relationship of the dependent and independent variables.

As this study involved human respondents, ethical considerations are specified as one of the most crucial aspects of the research. Privacy and anonymity are the paramount ethical considerations in the study. The respondents' identities will not be revealed, as they will express their preference not to have their identities disclosed in the study. Confidentiality in handling the data gathered from the respondents is also a key ethical consideration. The data collected is not shared with anyone else, and only the researcher has access to it.

Respondents were informed about the procedures, methods, and nature of the study, and they will be asked for their consent to participate in the interviews. They were not be coerced into participating, and the decision of those who refused to undergo the interview was respected. The researchers ensured that respondents may withdraw from participating at any time without liability on their part. To protect the data, all information collected were securely stored, and measures was taken to prevent unauthorized access. Additionally, respondents were be given a form without a signed paper that they may complete for the research survey, allowing them to provide their input comfortably and confidentially.

Protection of the respondents is one of the researchers' primary responsibilities, particularly in safeguarding the rights of the respondents and ensuring their protection from any harm.

RESULTS

Confirmatory Factor Analysis of AI Ethical Behavior and Utilization Constructs

Confirmatory Factor Analysis (CFA) was conducted to test whether the observed variables accurately represent the hypothesized latent constructs of AI Ethical Behavior and AI Utilization. Each construct was modeled as a latent variable comprising multiple observed items. Factor analysis is particularly suitable to extract few factors from the large number of related variables to a more manageable number, prior to using them in other analysis such as multiple regression or multivariate analysis of variance. It can be beneficial in developing of a questionnaire. Sometimes adding more statements in the questionnaire fail to give clear understanding of the variables. With the help of factor analysis, irrelevant questions can be removed from the final questionnaire [28]. She further added that to gauge the exactness of the sample questions and determine the number of factors to be extracted, Kaiser-Meyer-Olkin should be used to examine. CFA deciphers findings to confirm or disconfirm the underlying factor structures extracted. It tests how fit the data to statistically test the internal structure of instruments and relies on maximum likelihood estimation (MLE) to assess the suitability of the items [31].

Table 1. ***Kaiser-Meyer-Olkin Test***

Item	MSA	Decision
Overall MSA	0.977	Accept
1	0.981	Accept
2	0.972	Accept
3	0.977	Accept
4	0.974	Accept
5	0.971	Accept
6	0.977	Accept
7	0.97	Accept
8	0.97	Accept
9	0.961	Accept
10	0.968	Accept
11	0.969	Accept
12	0.973	Accept
13	0.977	Accept
14	0.979	Accept
15	0.981	Accept
16	0.973	Accept
17	0.963	Accept
18	0.949	Accept
19	0.978	Accept

20	0.958	Accept
21	0.968	Accept
22	0.977	Accept
23	0.981	Accept
24	0.976	Accept
25	0.977	Accept
26	0.972	Accept
27	0.975	Accept
28	0.978	Accept
29	0.979	Accept
30	0.976	Accept
31	0.978	Accept
32	0.985	Accept
33	0.985	Accept
34	0.984	Accept
35	0.979	Accept
36	0.981	Accept
37	0.985	Accept
38	0.981	Accept
39	0.977	Accept
40	0.984	Accept
41	0.976	Accept
42	0.981	Accept
43	0.983	Accept
44	0.982	Accept
45	0.982	Accept
46	0.978	Accept
47	0.979	Accept
48	0.986	Accept
49	0.983	Accept
50	0.982	Accept
51	0.95	Accept
52	0.98	Accept
53	0.977	Accept
54	0.969	Accept
55	0.989	Accept
56	0.981	Accept
57	0.981	Accept
58	0.978	Accept
59	0.976	Accept
60	0.977	Accept
61	0.975	Accept

To assess the suitability of the dataset for factor analysis, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy was conducted. The overall KMO value was 0.977, which exceeds the recommended threshold of 0.90, indicating marvelous sampling adequacy based on Kaiser's classification. This suggests that the patterns of correlations among variables are compact and likely to yield distinct and reliable factors. The individual Measures of Sampling Adequacy (MSA) for all items ranged from 0.949 to 0.989, with every item surpassing the minimum acceptable value of 0.60. These results confirm that each variable shared sufficient variance with other variables, and thus, none needed to be removed. All items were therefore retained for subsequent factor analysis. These findings support the appropriateness of proceeding with factor analysis on the data measuring students' AI ethical behavior and AI utilization. The strong MSA values demonstrate that the items are well-suited to identify latent constructs, reinforcing the reliability and integrity of the data structure.

Table 2. ***Factor Loadings (Structure Matrix)***

Items	F1	F2	F3	F4	F5	F6	D
1		0.647	0.849	0.687		0.612	Accept
2		0.64	0.85	0.689			Accept
3		0.642	0.861	0.675			Accept
4			0.824				Accept
5		0.619	0.874	0.627		0.613	Accept
6		0.64	0.864	0.649			Accept
7			0.812	0.613			Accept
8			0.825	0.612			Accept
9			0.675				Accept
10				0.783			Accept

11				0.822			Accept
12		0.606	0.643	0.858			Accept
13		0.63	0.687	0.873			Accept
14		0.632	0.681	0.875		0.608	Accept
15		0.659	0.622	0.804			Accept
16			0.634	0.86			Accept
17		0.608	0.665	0.886			Accept
18					0.801		Accept
19					0.786		Accept
20					0.829		Accept
21					0.792		Accept
22					0.806		Accept
23	0.638	0.619			0.772	0.654	Accept
24	0.613				0.815	0.611	Accept
25	0.631				0.824	0.622	Accept
26		0.619				0.818	Accept
27	0.618	0.636				0.842	Accept
28	0.611	0.616				0.826	Accept
29	0.604	0.676				0.851	Accept
30	0.616	0.651				0.84	Accept
31		0.759					Accept
32		0.863	0.61			0.614	Accept
33	0.673	0.845	0.604			0.666	Accept
34		0.814					Accept
35	0.62	0.839	0.615	0.61			Accept
36	0.683	0.852	0.641			0.605	Accept
37	0.716	0.816					Accept
38	0.678	0.87				0.647	Accept
39	0.697	0.714					Accept
40	0.694	0.847	0.604			0.616	Accept
41	0.773	0.735				0.677	Accept
42	0.738	0.799				0.703	Accept
43	0.764	0.785				0.723	Accept
44	0.637	0.787	0.607			0.659	Accept
45	0.769	0.756				0.635	Accept
46	0.721	0.802				0.656	Accept
47	0.752	0.81				0.66	Accept
48	0.743	0.822				0.67	Accept
49	0.828	0.69				0.655	Accept
50	0.836	0.723				0.627	Accept
51	0.699						Accept
52	0.841						Accept
53	0.827						Accept
54	0.817						Accept
55	0.797	0.727				0.694	Accept
56	0.788	0.709				0.65	Accept
57	0.798						Accept
58	0.767	0.658					Accept
59	0.859	0.681				0.644	Accept
60	0.841	0.673				0.638	Accept
61	0.834	0.688				0.609	Accept

The factor loadings in the results suggest that the items strongly represent distinct dimensions of how students use and perceive AI tools in academic contexts. Factor 1, with loadings ranging from 0.60 to 0.86, is associated with students' use of AI tools to enhance academic productivity, efficiency, and learning outcomes. Items such as "I make sure that AI tools help me solve my doubts effectively in my academics" (0.647) and "I am able to accomplish tasks more quickly in using AI" (0.863) show strong engagement with AI in academic contexts. Factor 2, with loadings ranging from 0.61 to 0.87, focuses on using AI for academic support, such as improving understanding of course materials and fostering creativity. Examples like "I make sure that AI tools improve my understanding of the course materials" (0.64) and "I make sure that I assess the outputs provided by AI tools for potential biases" (0.873) highlight the emphasis on understanding and ethically engaging with AI-generated content. Factor 3, with loadings between 0.60 and 0.88, represents a focus on assessing the ethical implications of AI in academic work. Items like "I make sure that I avoid using AI tools to complete assignments without proper acknowledgment" (0.675) and "I make sure to assess the outputs provided by AI tools for potential biases" (0.858) reflect a strong ethical stance. Factor 4, which includes items with loadings from 0.80 to 0.82, is related to students' behaviors regarding their reliance on AI to manage academic tasks. Statements such as "I make sure that I depend all my written works using AI" (0.801) and "I make sure that I formulate the questions using AI" (0.786) suggest a high level of AI dependence. Factor 5, with loadings ranging from 0.61 to

0.84, focuses on students' preference for AI-powered technologies, as seen in items like "I make sure that I want to use technologies that rely on AI" (0.806) and "I would find AI Chatbot easy to use" (0.802). Lastly, Factor 6, with loadings from 0.60 to 0.77, reflects students' investment in learning and experimenting with AI tools. Items such as "I am investing time and effort to learn artificial intelligence applications which is worthwhile for me" (0.828) and "I would look for ways to experiment with AI tools" (0.788) demonstrate a willingness to prioritize AI learning.

Large data sets, like these, need to use factor analysis to assemble common variables into descriptive factors. It confirms key factors rather than considering too many samples (questions) that may be trivial. Overall, all items show sufficient loadings on their respective factors, indicating that each factor represents a meaningful dimension of students' use and attitudes towards AI in academic settings. Therefore, the decision to Accept all items based on their factor loadings is warranted.

Profile of the Respondents

Below are the profiles of respondents according to their department and year level.

A. Profile of the Respondents according to Department

The data presents the distribution of respondents across different educational levels in a specific department. The majority of the participants belong to the College category, making up 53.60% of the total respondents, with 238 individuals. Senior High School students comprise 34.91% of the sample, representing 155 respondents.

B. Profile of Respondents according to Year Level

The data shows the distribution of respondents across various grade and college levels. Grade 7 has the smallest representation, with only 2.93% (13 respondents) of the total sample. The proportions gradually increase as the grade levels progress, with Grade 10 having 4.28% (19 respondents), and Grades 11 and 12 representing 22.97% (102 respondents) and 11.94% (53 respondents) respectively.

Most Common Generative AI Utilization

Table 3 shows the ranking of the students utilization of different AI tools. There was a total of 444 respondents who took part in answering the survey and ranked their answer on their frequency of AI utilization. The AI generated tools are ChatGPT, Gemini, Copilot, ScholaAI, Claude, and Meta AI. Frequency can be classified D (Daily), (5) five times per week, (3) thrice a week, 1 (Once a day), and DNU (Did Not Utilize). Results show that on daily basis, Meta AI has been frequently utilized (234 respondents) followed by ChatGPT (188 respondents) and Copilot is not utilized in daily basis. On the five times per week basis, ChatGPT ranked as the highest frequency of utilization (168 respondents) and ScholasrAI has the lowest (24 respondents).

Table 3. Most Common Generative AI Utilization

AI	D	R	5	R	3	R	1	R	DNU	R
ChatGPT	188	*2*	168	*1*	70	*5*	18	*6*		
Gemini	27	*4*	144	*2*	83	*3*	190	*1*		
Copilot			27	*5*	101	*2*	119	*2*	197	*1*
ScholarAI	69	*3*	24	*6*	123	*1*	79	*4*	149	*2*
Claude	11	*5*	125	*3*	65	*6*	100	*3*	143	*3*
Meta AI	234	*1*	84	*4*	80	*4*	46	*5*		

Legend: D - Daily 5 - 5 Times per week 3 - Thrice per week 1 - Once a week DNU - Did not utilize R - Rank

On thrice per week basis, ScholarAI has the highest frequency (123 respondents) and Claude has the lowest (65 respondents). On once a week basis, Gemini is the highest frequency (190 respondents) followed by Copilot (119 respondents) and close to it is Claude (100 respondents) and the lowest frequency on this basis is ScholarAI (79 respondents). However, there are students who did not utilize generative AI tools such as Copilot (197 respondents), ScholarAI (149 respondents), and Claude (143 respondents).

Level of Al Ethical Behavior of Students

The table presents the ethical behavior of the students as they utilized Artificial Intelligence (AI). The indicators are academic integrity, ethical awareness, bias, and interest value. The overall standard deviation of 0.117 with a mean score is 2.77 described as high indicating that there is a reflection of occasional occurrence manifested on their behavior as they utilize AI. Ethical awareness got the highest behavior mean which is 2.91 with SD of 0.035. It is followed by academic integrity with a mean of 2.85 with a standard deviation of 0.068. Then their interest value comes next with a mean of 2.77 with a standard deviation of 0.045.

Table 4. ***Level of Students' AI Ethical Behavior***

Indicators	SD	Mean	Description	Interpretation
Academic Integrity	0.068	2.85	High	It reflects occasional occurrence in the context.

Ethical Awareness	0.035	2.91		
Bias	0.189	2.55		
Interest Value	0.045	2.77		
Overall	0.117	2.77	High	It reflects occasional occurrence in the context.

And lastly, bias which has a mean rate of 2.55 with a standard deviation of 0.189. All indicators are described often indicating that students reflect on their behavior occasionally based on their context respectively.

Level of AI Utilization of Students

The table shows how students utilize the generative AI. The indicators are academic, utility, cost, and attainment. The overall mean is 2.68 with a standard deviation of 0.46, is described high which indicates that students occasionally or moderately use AI tools when needed. The highest the indicator is as students utilize AI is utility, with a mean of 2.73 with a standard deviation of 0.051.

Table 5. ***Level of Students' AI Utilization***

Indicators	SD	Mean	Description	Interpretation
Academic	0.066	2.70	High	It suggests that students occasionally or moderately use AI tools when needed.
Utility	0.051	2.73		
Cost	0.116	2.59		
Attainment	0.049	2.63		
Overall	0.046	2.68	High	It suggests that students occasionally or moderately use AI tools when needed.

This was closely followed by using it academically with a mean rate of 2.7 with a standard deviation of 0.051. The next indicator is attainment, with a mean of 2.63 with a standard deviation of 0.049. Last is their cost as they utilize AI with a mean of 2.59 with a standard deviation of 0.116. All indicators sometimes indicate that students occasionally or moderately use AI tools when needed.

Relationship between Students' Al Ethical Behavior and Utiization

A Pearson product-moment correlation was conducted to examine the relationship between students' AI ethical behavior and their AI utilization. The results revealed a very strong positive correlation, $r = .938$, $p < .001$, indicating that higher levels of ethical behavior in the use of AI are strongly manifested with higher levels of AI utilization.

Table 6. ***Relationship between Students' AI Ethical Bevaior and Utilization***

	Pearson	
	r	p-value
Behavior — Utilization	0.938***	< .001

* p<.05, ** p<.01,***p<.001

This suggests that students who exhibit more ethical awareness, integrity, and bias recognition are also more likely to engage with AI tools meaningfully in academic settings. The significance of the correlation at the .001 level indicates a very low probability that this relationship occurred by chance, confirming the robustness of the finding. The strength of this association underscores the integral role of ethical dispositions in shaping responsible and effective AI use among students. Given this strong correlation, ethical behavior may be considered a key factor in promoting appropriate and sustained AI integration in education. These findings provide empirical support for the formulation of AI policy and guidelines that emphasize ethical standards alongside technological competency. Greater levels of ethical awareness are associated with more responsible use behaviors among students [22]. Furthermore, knowing the ethical consequences of their activities may impact how students interact with AI systems, perhaps leading to more productive and responsible use.

Thus, there is a very strong, statistically significant positive correlation between students' AI ethical behavior and their AI utilization ($r = 0.938$, $p < .001$). This suggests that students who demonstrate more ethical behavior regarding AI are also more likely to use AI tools effectively.

Influence between Students' Al Ethical Behavior and Utiization

A multiple linear regression analysis was conducted to determine the influence of AI ethical behavior factors—academic, utility, cost, and attainment—on students' AI utilization. The regression model summarizes the relationship between several predictor variables (Academic Integrity, Ethical Awareness, Bias, and Interest Value) and a dependent variable, presumably related to AI tool use in academic settings. The unstandardized coefficients indicate the raw effect of each predictor on the outcome, while the standardized coefficients show the relative importance of each predictor. The t-values and corresponding p-values test whether each coefficient significantly differs from zero. The intercepts (Mo and M1) represent the predicted value of the dependent variable when all predictors are zero. Students who are more aware of ethical issues are more likely to use AI resources responsibly [9]. This shows that creating an atmosphere that encourages ethical discourse about technology might

improve the efficiency and integrity of AI use in learning environments.

Among the predictors, only Interest Value has a statistically significant effect on the outcome variable, with a standardized beta of 0.913, a t-value of 3.782, and a p-value of 0.013, which is below the 0.05 significance threshold. This indicates a strong and positive influence of students' perceived interest value in AI on the dependent variable.

Table 7. ***Influence between Students' Al Ethical Behavior and Utiization***

Predictor	B	SE	β	t-value	p-value	Interpretation
(Intercept)	1.294	0.339	—	-1.057	0.304	Not interpreted
Academic Integrity	0.183	0.160	0.273	1.146	0.304	Not Significant
Ethical Awareness	0.328	0.306	0.247	1.072	0.333	Not Significant
Bias	0.003	0.058	0.012	0.050	0.962	Not Significant
Interest Value	0.926	0.245	0.913	3.782	0.013	Significant

In contrast, Academic Integrity, Ethical Awareness, and Bias do not show significant effects, as their p-values (0.304, 0.333, and 0.962 respectively) are all above 0.05. This suggests that these variables, despite being conceptually relevant, do not significantly predict the dependent variable within this model. The relationship between students' AI ethical behavior and their utilization is complex and multifaceted. To ensure the ethical and responsible use of AI in education, it is essential to promote AI literacy, digital citizenship, and critical thinking skills among students. By fostering a culture of ethical AI use, we can harness the power of AI to improve education while mitigating potential risks [30].

AI Policy and Guidelines Manual in an Education Setting

The guideline on students' utilization of Artificial Intelligence (AI) in the school setting provides a structured framework for the responsible, ethical, and transparent use of generative AI tools in academic tasks. It outlines acceptable uses such as brainstorming, enhancing research questions, rephrasing original text, and performing grammar and spell checks. The policy emphasizes the importance of citing AI-generated content, disclosing AI usage, and verifying its originality using detection tools. Limitations on the extent of AI-generated content (no more than 25%) and consequences for misuse are also clearly defined. This ensures that students maintain academic honesty and do not rely excessively on automated tools.

CONCLUSION

The study focused on determining the AI behavior and utilization of students, relationship and influence of the variables.

Based on the results, college department has the largest number of respondents but grade 11 level has the higest number of respondents. MetaAI is the most commonly used generative AI tool followed by ChatGPT in daily basis however ChatGPT is the most commonly used generative AI tool in 5 times per week basis. Ethical awareness got the highest consideration toward students' AI utilization because they often verify the relevance, are aware of the ethics, assess, include references, and evaluate the information they get. This was closely followed by often considering academic integrity because rely their understanding on academic concepts and solve academic doubts while following the instructions of their teachers on how to properly use generative AI tools. Bias got the lowest mean among students AI behavior indicators indicating that they become dependent to AI on their written works and solving academic problems without disregarding the signs of bias.

Utility got the higest mean among students' AI utilization indicating that AI helps them understand difficult topics in various subjects an dcourse. This is closely followed by utilizing AI in their academics. Since they are already knowledgeable in using AI, they become dependent to completing their academic tasks to increase their chance in getting better grades.

Moreover, it is also found that students who have more responsible behavior towards AI tend to use generative AI tools in their academics. It further indicates that it is relevant to establish students' AI behavior since it significantly impacts their AI utilization. As a resut, it is only interest value has a significant influence on students' AI utilization. This shows that AI is driven by students' behavior in utilizing generative AI tools.

RECOMMENDATION

There may be students' orientation of properly utilizing generative AI tools from elementary to college to further increase their level of awareness. The teachers may also be equipped first of the orientation process to better understand the significance of the orientation. The proposed AI Utilization guidelines and policies may be actualized and used during the orientation of the teachers and students.

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