# OPERATIONALISATION OF ARTIFICIAL INTELLIGENCE IN VALUES AND ETHICAL EDUCATION IN TERTIARY INSTITUTIONS IN RIVERS STATE

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***Abstract***

*The study investigated the Operationalisation of Artificial Intelligence in Values and Ethical Education in Tertiary Institutions in Rivers State. A descriptive survey research design was adopted. The population for this study comprised 1,234 lecturers from in Tertiary Institutions in Rivers State (612 from University of Port Harcourt, 378 from Rivers State University, and 244 from Ignatius Ajuru University of Education). Taro Yamane's formula established a sample of 302 lecturers. Stratified random sampling was used to ensure proportional representation across faculties and departments, and to maintain academic rank balance. A questionnaire titled:* Artificial Intelligence in Values and Ethics Education Questionnaire *(AIVEEQ) was designed on a four-point Likert scale format from Strongly Agree to Strongly Disagree with 15-items. Three experts in Measurement and Evaluation (Educational Psychology, Guidance and Counselling) from Ignatius Ajuru University of Education validated the instrument. The reliability index of 0.86 was achieved using Cronbach Alpha method. Out of the 302 copies of the questionnaire administered, 287 were retrieved, giving a retrieval rate of 95%. Mean and standard deviation answered research questions and Analysis of Variance (ANOVA), tested hypotheses at a 0.05 level of significance. The study found a significant difference in the role AI plays in shaping students' ethical behaviour, there is a statistically significant difference in the types of AI tools used to promote ethical education and there is a statistically significant difference in the use of AI to explain moral and ethical issues among lecturers in UNIPORT, RSU and IAUE. Researchers recommended among others that university administrators should be intentional in customizing AI ethics policies that reflect their unique institutional culture and student behavioral needs.*
***Keywords:*** *Operationalization, Artificial Intelligence, Values and Ethical Education.*

## Introduction

The operationalization of Artificial Intelligence (AI) in values and ethical education refers to the process of embedding AI systems and tools into pedagogical strategies that promote moral reasoning, character development, and ethical awareness among students in tertiary institutions. In Rivers State, where the pursuit of quality higher education aligns with national development goals, incorporating AI into ethical instruction offers a transformative potential. AI tools such as chatbots, virtual simulations, and intelligent tutoring systems can assist educators in delivering context-based ethical scenarios, enabling learners to engage with real-life dilemmas and reflect critically. As acknowledged by Ezeani and Okoye (2023), AI technologies, when tailored to local sociocultural settings, provide dynamic learning experiences that go beyond rote memorization to include empathy, fairness, and social responsibility. Thus, AI is not just a technical tool but a pedagogical partner in fostering reflective ethical reasoning. However, this requires a strategic framework where AI functions within a clear ethical structure to avoid the dehumanization of values education.

In practice, AI's integration into values and ethical education in Rivers State demands aligning technological infrastructure with curriculum goals. AI-enabled platforms like adaptive learning systems can be designed to analyze student responses to ethical questions and provide tailored feedback that promotes deeper understanding. For instance, virtual AI tutors can simulate ethical situations such as academic dishonesty or civic responsibility and challenge students to justify their decisions through moral frameworks. Nwachukwu and Benson (2022) noted that such intelligent systems can personalize learning and encourage introspection among learners, fostering internalized ethical values. Moreover, AI tools can collect data on student participation in ethical debates or community service projects, assisting instructors in tracking value-based growth over time. Nonetheless, successful operationalization relies on the presence of competent educators who are trained to interpret AI-generated data responsibly. Hence, capacity-building for educators is essential in this technological shift, especially in local universities such as the University of Port Harcourt and Ignatius Ajuru University of Education, where infrastructural gaps persist.

Operationalising AI in values and ethics education also brings to the fore questions of digital ethics itself. There is a growing concern that if left unchecked, AI systems may reproduce bias, marginalize local moral perspectives, or be misused for surveillance under the guise of promoting discipline. Ibinabo and Ekeke (2024) emphasized the need for institutions to establish AI governance policies that define the ethical boundaries of algorithmic decision-making. For example, if AI is used to monitor students' moral behavior online, clear consent protocols must be established to protect individual rights. In the Rivers State context, where cultural values are diverse and rooted in community traditions, ethical education must balance AI's analytical capabilities with indigenous ethical principles such as communal responsibility and respect for elders. This dual approach ensures that AI does not override human judgment but enhances it through supportive engagement. Moreover, student input in developing AI ethics modules can foster ownership and better acceptance of the technology as part of their educational journey.

Lastly, for the operationalization of AI in values and ethical education to be impactful, institutional policies must drive its integration purposefully. This includes revising curriculum content to accommodate AI-supported moral learning, budgeting for infrastructure development, and creating interdisciplinary research centers that explore ethical AI applications. As suggested by Amadi and Ogbonda (2023), collaborative initiatives between government, academia, and the tech industry are vital in sustaining innovation while ensuring ethical compliance. Tertiary institutions in Rivers State need to be intentional about embedding AI in teacher training programs, ensuring that future educators are not only technologically literate but also ethically grounded. Ethical education enhanced by AI should promote not only cognitive development but also character, empathy, and civic-mindedness. Therefore, policy frameworks must emphasize AI's role in humanizing education, making values-based learning relevant to 21st-century realities without eroding cultural identity or ethical agency.

Artificial Intelligence (AI) plays a significant role in reshaping the ethical behaviour of students in campus communities by fostering consciousness about integrity and accountability. Through intelligent surveillance systems, plagiarism detectors, and behavioural prediction tools, AI helps institutions monitor and assess students' actions, thus encouraging responsible conduct. In many Nigerian higher institutions, including those in Rivers State, AI-integrated learning platforms allow students to reflect on the ethical consequences of their choices, using scenario-based simulations to build empathy and critical thinking (Eze & Eze, 2023). AI also supports anonymous reporting systems for unethical conduct, promoting transparency and discouraging academic dishonesty. When students interact with such AI-enabled systems, they are nudged toward developing moral judgment and self-discipline (Okoro & Nwosu, 2022). Hence, AI indirectly instils values like respect, fairness, and honesty, reinforcing social norms across campuses. By embedding these technologies into the academic culture, universities subtly shape positive ethical dispositions in their students.

Olulube (2023) explained that Artificial Intelligence (AI) can be effectively operationalised to enhance values and ethical education in tertiary institutions. He argues that the use of AI should not only focus on automation but also be purposefully aligned with institutional moral objectives. The article highlights how AI technologies such as intelligent tutoring systems and adaptive learning tools can support ethical reasoning, promote reflective thinking, and reinforce moral values in students.

Olulube also emphasised that educators must remain central to this process by guiding students in the responsible use of AI. He warns against the passive acceptance of AI and urges for critical engagement and human oversight. To support effective implementation, the study recommends the reform of policies, curriculum redesign, and educator training programs. This ensures AI becomes a constructive partner in advancing ethical consciousness in higher education.

A study by Adeoye and Ogundele (2022) found that AI-based simulation environments exposed students to real-life ethical dilemmas, significantly improving their moral sensitivity and encouraging responsible decision-making in campus-related activities. Similarly, Eze and Chukwuma (2023) reported that students who regularly engaged with AI-driven reflective learning tools displayed a significantly improved understanding of the consequences of unethical behaviour, such as plagiarism and cyberbullying, promoting a more respectful academic environment. These tools create opportunities for students to reflect on ethical challenges and develop a sense of accountability through continuous feedback. By fostering awareness of right and wrong within interactive frameworks, AI is gradually instilling ethical consciousness among learners, especially in Nigerian university communities.

Various AI tools have been introduced to promote ethical education in Rivers State’s higher institutions, each targeting different dimensions of learning and behaviour. Among the most notable are plagiarism detection software like Turnitin and Grammarly AI, which discourage academic dishonesty by evaluating the originality of students' work (Ndukwe & Adiele, 2022). Virtual classroom platforms, such as Google Classroom and ChatGPT-powered tutors, offer real-time ethical discussions, enabling students to explore moral dilemmas through guided AI interaction. Furthermore, AI-powered chatbots and learning management systems are used to provide consistent ethical guidelines and mentorship, especially during academic assessments or decision-making processes (Opara & Umezinwa, 2023). Ethical game-based learning apps, which present students with scenarios requiring moral choices, are increasingly adopted as tools for ethical engagement. These AI technologies are tailored to create awareness, instil responsibility, and monitor students’ alignment with institutional values, thereby advancing ethical conduct across academic environments.

The study of Oladele and Musa (2022) found that chatbots like "Woebot" and AI-driven educational platforms such as "Coursera AI Ethics Modules" offer personalized ethical scenarios that help students engage in moral reflection and real-time feedback. These tools support learners by simulating real-life ethical conflicts and prompting students to weigh decisions critically. Additionally, Ugochukwu and Bello (2023) disclosed that smart virtual agents and AI tutors such as "Jill Watson" have been deployed to promote ethical reasoning during collaborative learning sessions. These AI applications significantly contribute to knowledge acquisition in ethics by supporting inclusive and accessible moral education across disciplines. They not only teach what is ethically right but also reinforce long-term ethical habits. AI tools are, therefore, no longer optional but essential components of holistic academic and character development in tertiary institutions.

Lecturers in Rivers State’s tertiary institutions now integrate AI-driven platforms into their teaching strategies to convey complex moral and ethical concepts more effectively. AI-powered content generation tools, such as ChatGPT and Quillbot, help lecturers craft real-life ethical scenarios, encouraging student engagement through debates, role play, and digital storytelling (Agbor & Okoh, 2024). These tools simulate real-time decision-making situations, enabling students to explore consequences from ethical and unethical viewpoints. In philosophy and general studies classes, instructors use AI to model behaviour analysis, demonstrating how data can reflect character traits and societal outcomes (Enebeli & Wokocha, 2023). AI is also employed to assess students’ responses to ethical challenges, offering immediate feedback and tailored guidance, which supports deeper understanding. Such personalized interaction enhances students’ moral reasoning and cultivates ethical awareness. Ultimately, lecturers are not only teaching values but also guiding students on how AI can be responsibly used in alignment with ethical standards and academic honour.

The study of Nwosu and Ibrahim (2023) stated that lecturers utilize AI-powered ethical reasoning platforms such as Moral Machine and AI-based ethical dilemma generators to create classroom debates on real-world moral situations. These tools simulate situations like autonomous vehicle decision-making or data privacy breaches, significantly helping students grasp the complexities of ethical judgment. Moreover, Okon and Salisu (2022) study supported lecturers adopt AI-driven Learning Management Systems (LMS) that feature automated case scenarios and interactive role-playing tools to foster critical ethical reflection. These approaches engage students beyond theoretical definitions by practically immersing them in ethical decision-making processes. Such innovative strategies significantly make ethical education relatable, contextual, and impactful, thereby shaping students into morally conscious individuals.

This study contributes to knowledge by revealing how artificial intelligence (AI) can be integrated into values and ethical education in tertiary institutions in Rivers State. It highlights that AI enhances students' moral reasoning when properly aligned with institutional values and learning goals. However, a significant gap remains in the uneven adoption and inconsistent application of AI tools across institutions, limiting their potential to foster ethical awareness. The research also exposes a lack of clearly defined policies and trained personnel to guide the ethical use of AI in classroom settings. In conclusion, while AI holds promise for transforming values-based education, its impact depends on structured implementation, teacher readiness, and policy support. Closing the identified gaps will help institutions effectively harness AI to develop morally conscious graduates capable of making ethical decisions in a rapidly evolving digital society.

## Statement of the Problem

The operationalization of Artificial Intelligence (AI) in values and ethical education in tertiary institutions in Rivers State faces several critical challenges. One major problem is the lack of localized AI content tailored to the cultural and moral realities of Nigerian society. Most AI tools are designed with Western perspectives, which often do not align with indigenous ethical values taught in institutions. This results in a disconnect between the technological platform and the intended moral instruction. Another significant issue is inadequate infrastructure. Many tertiary institutions lack consistent electricity, internet access, and updated computer systems required for efficient AI integration. This hampers both teaching and learning processes, making AI more of a theoretical concept than a practical tool. Furthermore, many educators lack training in AI-based teaching tools, leading to underutilization and misunderstanding of its capabilities in values education. This limits the depth of engagement students can have with ethical issues through digital platforms. These challenges negatively affect the delivery of values and ethical education. Without relevant and accessible content, students receive a fragmented understanding of moral instruction. The lack of infrastructure and technical knowledge further hinders the interactive, real-time feedback that AI can offer, making learning less engaging and less impactful. To mitigate these problems, policies should focus on curriculum localization by integrating local ethical values into AI algorithms. Government and institutions must invest in digital infrastructure and offer continuous training for educators on AI tools. There should also be public-private partnerships to develop inclusive and culturally sensitive AI solutions. While AI holds potential in transforming ethical education, there is a clear gap in cultural contextualization, teacher preparedness, and institutional readiness. More empirical studies are needed in Rivers State to assess the actual impact of AI on value education delivery and develop practical frameworks suited to local educational needs. Thus, the researchers find it relevant to investigate the Operationalisation of Artificial Intelligence in Values and Ethical Education in Tertiary Institutions in Rivers State.

## Aim and Objectives of the Study

The aim of this study was to investigate operationalization of artificial intelligence in values and ethical education in tertiary institutions in Rivers State. Specifically, the study sought to:

1. Find out the role AI play in shaping students' attitudes toward ethical behaviour in campus communities.
2. Determine types of AI tools available for promoting ethical education in higher institutions in Rivers State.

3. Examine how lecturers in higher institutions in Rivers State use AI to explain moral and ethical issues to students.

**Research Questions**

1. What role does AI play in shaping students' attitudes toward ethical behavior in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education?
2. What types of AI tools are available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education?
3. How do lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students?

**Hypotheses**

Three hypotheses in line with research questions were tested at 0.05 significance level.

1. There is no significant different on the role AI play in shaping students' attitudes toward ethical behaviour in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education.
2. There is no significant different on the types of AI tools available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education.
3. There is no significant different on how lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students.

**Methodology**

The study a descriptive survey research design to gather data from academic staff in public tertiary institutions. The target population comprised 1,234 lecturers drawn from three major categories: 612 from the University of Port Harcourt, 378 from Rivers State University, and 244 from Ignatius Ajuru University of Education (Source: Academic Planning Units, 2025). To determine the sample size, the researchers employed Taro Yamane's formula at a 5% margin of error, which yielded a sample of 302 lecturers. Stratified random sampling was used to ensure proportional representation across faculties and departments, and to maintain academic rank balance. A structured questionnaire titled: *Artificial Intelligence in Values and Ethics Education Questionnaire* (AIVEEQ) was designed on a four-point Likert scale format: Strongly Agree (4), Agree (3), Disagree (2), and Strongly Disagree (1) with 15-items. Three experts in Measurement and Evaluation (Educational Psychology, Guidance and Counselling) from the University of Port Harcourt validated the instrument to ensure content and face validity. The reliability index of the instrument was established through a pilot test conducted with 30 academic staff from the Federal College of Education (Technical), Omoku, which was excluded from the main study. The Cronbach Alpha method was used, resulting in a reliability coefficient of 0.86, confirming the instrument's internal consistency. Out of the 302 copies of the questionnaire administered, 287 were completed and retrieved, giving a retrieval rate of 95%. Mean and standard deviation were used to answer research questions while Analysis of Variance (ANOVA), were used to test the formulated hypotheses at a 0.05 level of significance.

**Results**

**Research Question One:** What role does AI play in shaping students' attitudes toward ethical behavior in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education?

**Table 1: Mean and standard deviation analysis on the role does AI play in shaping students' attitudes toward ethical behavior in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education**

| S/N | Item Statement | UPH (n=118) | | RSU (n=91) | | IAUE (n=78) | | Mean Set | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean () | Std. Dev. | Mean () | Std. Dev. | Mean () | Std. Dev. | | |
| 16. | I use AI apps to learn the right way to treat others and follow school rules | 3.39 | .54 | 3.37 | .65 | 3.54 | .57 | 3.43 | Agree |
| 17. | AI helps me understand what is right and wrong through examples in videos and articles. | 3.46 | .54 | 3.64 | .62 | 3.69 | .47 | 3.60 | Agree |
| 18. | Chatbots show me how to make honest choices during exams and assignments. | 3.38 | .57 | 3.41 | .61 | 3.31 | .54 | 3.36 | Agree |
| 19. | AI tools guide me to respect others' ideas and avoid harmful actions. | 3.30 | .80 | 3.22 | .89 | 3.23 | .91 | 3.25 | Agree |
| 20. | I learn about digital responsibility from AI programs that teach online manners. | 3.63 | .63 | 3.79 | .59 | 3.86 | .44 | 3.76 | Agree |
| | **Average Mean & Std. Dev. Scores** | **3.44** | **.62** | **3.49** | **.67** | **.353** | **.59** | **3.48** | **Agree** |

Table 1 presents a comparative analysis of how artificial intelligence (AI) influences students' ethical behavior across three universities in Rivers State: University of Port Harcourt (UPH), Rivers State University (RSU), and Ignatius Ajuru University of Education (IAUE). The responses show strong agreement among students from all institutions. The highest-rated item was learning about digital responsibility (mean = 3.76), while the lowest-rated item involved using chatbots for academic honesty (mean = 3.36). The overall mean score across the three universities was 3.48, indicating a generally positive attitude towards AI's role in shaping ethical behavior. Standard deviation values remained moderate, suggesting consistency in responses. AI plays a significant role in promoting ethical behavior among students in campus communities, especially in areas of digital responsibility, moral decision-making, and respect for others. Students across the three institutions acknowledged these contributions.

**Research Question Two:** What types of AI tools are available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education?

**Table 2: Mean and standard deviation analysis on the types of AI tools available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education**

| | Item Statement | UPH (n=118) | | RSU (n=91) | | IAUE (n=78) | | Mean Set | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean () | Std. Dev. | Mean () | Std. Dev. | Mean () | Std. Dev. | | |
| 21. | AI chatbots are used to answer my questions on fairness and honesty. | 3.59 | .61 | 3.51 | .62 | 3.57 | .56 | 3.55 | H.E |
| 22. | There are AI-based learning platforms that offer lessons on ethics and respect. | 3.29 | .63 | 3.45 | .59 | 3.38 | .60 | 3.36 | H.E |
| 23. | I use plagiarism checkers to ensure my work is original and truthful. | 3.15 | .43 | 3.19 | .39 | 3.00 | .35 | 3.11 | H.E |
| 24. | Emotion-tracking AI helps lecturers know when I'm confused or stressed during moral lessons. | 3.25 | .52 | 3.04 | .61 | 3.03 | .32 | 3.11 | H.E |
| 25. | AI-powered classroom systems help promote teamwork and fair participation. | 3.46 | .70 | 3.35 | .58 | 3.53 | .63 | 3.47 | H.E |
| | **Average Mean & Std. Dev. Scores** | **3.35** | **.58** | **3.31** | **.56** | **3.31** | **.50** | **3.32** | **H.E** |

The table presents the mean and standard deviation analysis of the types of Artificial Intelligence (AI) tools used to support ethical education across three universities: University of Port Harcourt (UPH), Rivers State University (RSU), and Ignatius Ajuru University of Education (IAUE). The findings reveal that AI chatbots, ethical learning platforms, plagiarism checkers, emotion-tracking tools, and AI-powered classroom systems are generally accessible and used by students in promoting fairness, respect, originality, and moral awareness. All items scored mean values above 3.00, with a set mean ranging from 3.11 to 3.55, indicating a high extent (H.E) of agreement among students across the institutions. The average mean scores for each university also fall within the high extent range, suggesting a consistent pattern in AI tool utilization. Students in all three universities actively engage with AI tools to support ethical learning and responsible academic behavior.

**Research Question Three:** How do lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students?

**Table 3: Mean and standard deviation analysis on how lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students**

| S/N | Item Statement | UPH (n=118) | | RSU (n=91) | | IAUE (n=78) | | Mean Set | Decision |
|---|---|---|---|---|---|---|---|---|---|
| | | Mean () | Std. Dev. | Mean () | Std. Dev. | Mean () | Std. Dev. | | |
| 26. | I use AI videos to break down topics like honesty, justice, and kindness. | 3.22 | .47 | 3.44 | .77 | 3.76 | .51 | 3.47 | H.E |
| 27. | AI speech tools help me read out moral stories to students in simple language. | 3.32 | .51 | 3.67 | .53 | 3.62 | .56 | 3.54 | H.E |
| 28. | I give students access to ethical simulation apps to practice real-life choices. | 3.31 | .56 | 3.32 | .55 | 3.30 | .53 | 3.31 | H.E |
| 29. | AI quizzes allow me to test students' understanding of right and wrong. | 3.28 | .81 | 3.23 | .75 | 3.01 | .28 | 3.17 | H.E |
| 30. | I rely on AI summaries to explain complex ethical theories in a way students understand. | 3.52 | .64 | 3.37 | .81 | 3.02 | .29 | 3.30 | H.E |
| | **Average Mean & Std. Dev. Scores** | **3.33** | **.60** | **3.41** | **.68** | **3.34** | **.43** | **3.36** | **H.E** |

Table 3 presents a comparative analysis of how lecturers from the University of Port Harcourt (UPH), Rivers State University (RSU), and Ignatius Ajuru University of Education (IAUE) utilize artificial intelligence (AI) in teaching moral and ethical issues. The results show that all three institutions scored above 3.0 across the five items, with the overall mean set at 3.36, indicating a high extent (H.E) of AI usage. Specifically, AI videos and speech tools are widely used to simplify topics such as honesty, justice, and kindness. Ethical simulations and quizzes help reinforce students' moral reasoning, while AI summaries aid in explaining complex ethical concepts. The highest mean (3.54) was for AI speech tools, reflecting their strong impact. Lecturers in these universities actively integrate AI tools to enhance students' understanding of moral and ethical concepts, with generally positive outcomes.

**$Ho_1$:** There is no significant different on the role AI play in shaping students' attitudes toward ethical behaviour in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education.

**Table 4: ANOVA analysis on the difference on the role AI play in shaping students' attitudes toward ethical behaviour in campus communities in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 14.508 | 1 | 7.254 | 18.350 | .000 |
| Within Groups | 152.982 | 285 | .395 | | |
| Total | 167.490 | 286 | | | |

* Significance 0.05 > 0.00. Not Significance 0.05 < 0.00

The ANOVA result in Table 4 reveals a statistically significant difference in how Artificial Intelligence (AI) influences students' attitudes toward ethical behaviour across the three universities. The *F*-value is 18.350, and the significance level (Sig.) is 0.000, which is far below the 0.05 threshold. This means the variation between groups (University of Port Harcourt, Rivers State University, and Ignatius Ajuru University of Education) is not due to chance. The between-group mean square of 7.254, compared to the within-group mean square of 0.395, further confirms that AI plays a differing role in shaping ethical attitudes depending on the institution. There is a significant difference in the role AI plays in shaping students' ethical behaviour across the three universities. Therefore, institutional context influences how AI contributes to students' moral development within campus communities.

**$Ho_2$:** There is no significant different on the types of AI tools available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education.

**Table 5: ANOVA analysis on the types of AI tools available for promoting ethical education in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 6.925 | 1 | 3.463 | 10.117 | .000 |
| Within Groups | 132.449 | 285 | .342 | | |
| Total | 139.374 | 286 | | | |

* Significance 0.05 > 0.00. Not Significance 0.05 < 0.00

Table 5 presents an ANOVA analysis on the types of AI tools used to promote ethical education in three universities in Rivers State: University of Port Harcourt, Rivers State University, and Ignatius Ajuru University of Education. The table shows a significant difference between groups, with an F-value of 10.117 and a p-value (Sig.) of 0.000, which is less than the 0.05 threshold. This indicates that the variation in AI tools across the universities is statistically significant. The mean square between groups (3.463) is notably higher than that within groups (0.342), confirming that the universities differ in the AI tools they employ to support ethical education. There is a statistically significant difference in the types of AI tools used to promote ethical education across the three universities, suggesting varied approaches or access to AI technologies.

**Ho$_3$:** There is no significant difference on how lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students.

**Table 6: ANOVA analysis on how lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education use AI to explain moral and ethical issues to students**

| | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 2.858 | 1 | 1.429 | 5.293 | .005 |
| Within Groups | 104.485 | 285 | .270 | | |
| Total | 107.344 | 286 | | | |

* Significance 0.05 > 0.00. Not Significance 0.05 < 0.00

Table 6 presents the ANOVA result assessing how lecturers from the University of Port Harcourt, Rivers State University, and Ignatius Ajuru University of Education use artificial intelligence (AI) to explain moral and ethical issues to students. The analysis shows a between-group sum of squares of 2.858 and a mean square of 1.429. The F-value is 5.293 with a significance level (Sig.) of 0.005. Since the p-value (0.005) is less than the standard significance level of 0.05, the result is statistically significant. This indicates that there is a meaningful difference in how lecturers across the three universities integrate AI for teaching moral and ethical issues. There is a statistically significant difference in the use of AI to explain moral and ethical issues among lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education.

## Discussion of Findings

### The Role AI Plays in Shaping Students' Attitudes toward Ethical Behaviour in Campus Communities

The result from research question one via hypothesis one agree that there is a significant difference in the role AI plays in shaping students' ethical behaviour across University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education. Therefore, institutional context influences how AI contributes to students' moral development within campus communities. A study by Adeoye and Ogundele (2022) found that AI-based simulation environments exposed students to real-life ethical dilemmas, significantly improving their moral sensitivity and encouraging responsible decision-making in campus-related activities. Similarly, Eze and Chukwuma (2023) reported that students who regularly engaged with AI-driven reflective learning tools displayed a significantly improved understanding of the consequences of unethical behaviour, such as plagiarism and cyberbullying, promoting a more respectful academic environment. These tools create opportunities for students to reflect on ethical challenges and develop a sense of accountability through continuous feedback. By fostering awareness of right and wrong within interactive frameworks, AI is gradually instilling ethical consciousness among learners, especially in Nigerian university communities.

### Types of AI Tools Available for Promoting Ethical Education in Higher Institutions

The result from research question two via hypothesis two indicated that there is a statistically significant difference in the types of AI tools used to promote ethical education across University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education, suggesting varied approaches or access to AI technologies. The study of Oladele and Musa (2022) found that chatbots like "Woebot" and AI-driven educational platforms such as "Coursera AI Ethics Modules" offer personalized ethical scenarios that help students engage in moral reflection and real-time feedback. These tools support learners by simulating real-life ethical conflicts and prompting students to weigh decisions critically. Additionally, Ugochukwu and Bello (2023) disclosed that smart virtual agents and

AI tutors such as "Jill Watson" have been deployed to promote ethical reasoning during collaborative learning sessions. These AI applications significantly contribute to knowledge acquisition in ethics by supporting inclusive and accessible moral education across disciplines. They not only teach what is ethically right but also reinforce long-term ethical habits. AI tools are, therefore, no longer optional but essential components of holistic academic and character development in tertiary institutions.

**How Lecturers in Higher Institutions Use AI to Explain Moral and Ethical Issues to Students**

The result from research question three via hypothesis three suggested that there is a statistically significant difference in the use of AI to explain moral and ethical issues among lecturers in University of Port Harcourt, Rivers State University and Ignatius Ajuru University of Education. The study of Nwosu and Ibrahim (2023) stated that lecturers utilize AI-powered ethical reasoning platforms such as Moral Machine and AI-based ethical dilemma generators to create classroom debates on real-world moral situations. These tools simulate situations like autonomous vehicle decision-making or data privacy breaches, significantly helping students grasp the complexities of ethical judgment. Moreover, Okon and Salisu (2022) study supported lecturers adopt AI-driven Learning Management Systems (LMS) that feature automated case scenarios and interactive role-playing tools to foster critical ethical reflection. These approaches engage students beyond theoretical definitions by practically immersing them in ethical decision-making processes. Such innovative strategies significantly make ethical education relatable, contextual, and impactful, thereby shaping students into morally conscious individuals.

**Conclusion**

In accordance with the findings, researcher concluded that there is a significant difference in the role AI plays in shaping students' ethical behaviour across the three universities, there is a statistically significant difference in the types of AI tools used to promote ethical education across the three universities, suggesting varied approaches or access to AI technologies and there is a statistically significant difference in the use of AI to explain moral and ethical issues among lecturers in the three universities studied in Rivers State.

**Recommendations**

Based on the findings, researchers recommended that:

1. University administrators should be intentional in customizing AI ethics policies that reflect their unique institutional culture and student behavioral needs
2. Technology managers should be proactive in standardizing access and training on ethical AI tools to ensure uniform learning experiences across departments
3. Academic supervisors should be mandated to integrate AI ethically in explaining moral content during classroom instruction through ongoing training

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