



Perceived Influence of Generative Artificial Intelligence Utilisation on Effective Learning Among Postgraduate Guidance and Counselling Students in Universities in Rivers State

***Chiedozie, F. N., Agi, C.W., Onisoya, M., & Agbor, P. E.**

Department of Educational Psychology, Guidance and Counselling, Rivers State University, Nigeria

***Corresponding email:** favourchiedozie47@gmail.com

Abstract

The study examined the perceived influence of using generative artificial intelligence on effective learning among postgraduate guidance counselling students at universities in Rivers State. To achieve the study's purpose, the researcher formulated three (3) objectives and research questions to guide the study. A descriptive research design was used. The study population consisted of 373 students from the three (3) public universities in Rivers State. The study used census sampling. The instrument used for data collection was a self-structured questionnaire titled Generative Artificial Intelligence Utilisation and Effective Learning Questionnaire (GAIUELQ). The instrument was validated by experts in Measurement and Evaluation. Internal consistency reliability, assessed using Cronbach's alpha, was used to establish the reliability of the instrument, which obtained a reliability coefficient of 0.88. The study answered the research questions using descriptive statistics. The findings of the study revealed that ChatGPT can be beneficial when used appropriately but requires guided and balanced integration to avoid undermining key learning outcomes. These outcomes suggest that while ChatGPT has the potential to enrich learning experiences, it cannot replace the essential human, reflective, and experiential components of postgraduate professional education, particularly in counselling, where relational competence, ethical judgment, and independent decision-making are central. However, the study recommends that universities should develop clear institutional guidelines for the responsible and pedagogically appropriate use of ChatGPT to ensure it supports learning without encouraging over-reliance. Lecturers in Guidance and Counselling programmes should integrate ChatGPT as a supplementary teaching tool, particularly for engagement and preliminary understanding, while prioritising experiential and supervised learning for skill development. Organise training workshops for students on using ChatGPT critically and ethically, emphasising independent thinking, reflection, and professional judgment.

Keywords: Artificial Intelligence (AI), ChatGPT, Gen AI, Learning, engagement

Introduction

The situation in higher education is changing more rapidly than at any previous time, mainly due to the incorporation of new technologies into teaching and learning. One of the most significant developments is generative artificial intelligence (GenAI), a type of intelligent system that can produce content which resembles that of humans and provide responses that are appropriate to the context. A clear example of this is ChatGPT, which was developed by OpenAI and allows for real-time, interactive textual engagement covering a wide range of subjects (OpenAI, 2023). Such tools are altering the way students obtain information, build their knowledge, and acquire 21st-century skills. In African higher education, especially in Nigeria, researchers have started to record both the benefits and the difficulties

associated with GenAI. Chukwuere (2024) noted that Nigerian academics and students are increasingly using ChatGPT for generating ideas, getting assistance with writing, and carrying out research. Shittu et al. (2025) at the University of Ibadan found that learners have a moderate to high level of awareness of ChatGPT and generally hold positive views about it. Tarisayi (2024) from Stellenbosch University in South Africa stated that university lecturers see generative AI as useful for both research and for enhancing learning. Dake and Gbagbo (2025), in their systematic review covering several African countries, concluded that although generative AI improves access to educational resources and increases learning efficiency, the absence of clear ethical guidelines and institutional policies presents major risks to academic quality and integrity.

Effective learning for postgraduate students is not any longer simply a matter of accumulating content or factual knowledge. It is now generally accepted as a dynamic process in which learners actively interact with the material, grasp the concepts, apply their knowledge in practical or new situations, and reflect on their own progress. This kind of learning includes cognitive, metacognitive, emotional, and social aspects. For postgraduate students in the field of guidance and counselling, effective learning is essential since it gives them the necessary knowledge, skills, and ability to reflect in order to deal with complex client problems, carry out ethical practice, and make a real contribution to the counselling profession. Nevertheless, achieving effective learning is not without difficulties. Problems such as limited access to up-to-date resources, insufficient supervision during practicum placements, heavy workloads, and outdated teaching methods continue to prevent optimal results in many Nigerian public universities (Okorodudu, 2020). In Rivers State, where postgraduate counselling programmes also face similar problems relating to resources and supervision, there is a particular need for innovative and learner-centred support.

Generative artificial intelligence tools like ChatGPT have now become promising supplementary aids in postgraduate education. If used in a responsible manner within a human-centred approach, they are able to offer personalised explanations of psychological theories, give immediate feedback, enable interactive examination of ethical dilemmas, provide simulated counselling conversations, assist with academic writing and the synthesis of literature, and offer opportunities for reflective self-assessment. These features are in line with the reflective, experiential and skill-focused requirements of counsellor education (Kasneji et al., 2023). It is nevertheless essential to carefully deal with ethical issues such as academic integrity, overdependence, the spread of misinformation, and the possible decline in critical thinking in order to maintain the human-centred nature of counselling training (Tarisayi, 2024; Dake & Gbagbo, 2025). The present study is thus driven by the need to look at how postgraduate guidance and counselling students at the public universities in Rivers State make use of generative artificial intelligence to support effective learning. By examining the patterns of adoption, the perceived advantages, the challenges, and the ethical considerations in this particular context, the research aims to produce evidence-based insights which can help with the responsible integration of these tools, protect academic integrity, and contribute to the development of competent, reflective and ethically sound counselling professionals in Nigeria.

The concept of 'active engagement in learning' means the extent to which students put themselves fully into learning activities, for example by paying attention, showing curiosity, being dedicated and being determined to succeed. Behavioural engagement is one aspect of this and includes things such as attending when asked, sticking to a course of study and generally behaving in a fair and sportsmanlike way. Emotional involvement refers to the feelings, views and reasons that students connect with learning, such as curiosity and pleasure. Cognitive engagement involves the mental effort needed to understand, reflect on and solve problems (Olanrewaju & Ojo, 2025). 'Active engagement' means learning that is meaningful and results in the desired outcomes, such as the development of critical thinking skills and the ability to work independently (Ikpesu, 2021). Curiosity, optimism and passion are also signs of student involvement that have been linked to learning activities. Engaged students tend to form strong relationships with their educational institution, with their course work and with the personal development opportunities available to them. As part of their regular collaborative learning, they read, discuss, work on projects and study for exams (Ganiyu, 2021). According to Chukwu et al. (2025), students take an active part when they use AI tools, including generative AI, to supplement their curriculum across various subjects. Guidance and counselling include a wide range of activities aimed at helping people to become better, happier and more useful members of society. According to Chile et al. (2025), in the Nigerian context, it provides guidance and support regarding personal and educational decisions with the aim of helping people to discover and develop their potential for happiness and social usefulness. Another

definition of guidance and counselling is to help people reach their full academic, occupational and psychological potential so that they can be productive members of society and lead satisfying lives. People can benefit from counselling by gaining a better understanding of themselves, developing a plan to achieve their goals and working through problems relating to their relationships and emotions (Esere, 2020). Human beings engage in a process called knowledge acquisition when they are trying to build or improve their cognitive structures. This process involves acquiring, organising and internalising new information, skills or understanding. It consists of moving from a basic knowledge of facts to a deeper understanding, application and integration of that information in order to solve problems and make decisions. The four main elements of effective knowledge acquisition in educational settings are content exposure, resource engagement, reflection and practice—supported by technology that gives instant feedback and offers personalised pathways (Okoronkwo, 2024). Using artificial intelligence tools such as ChatGPT to gain knowledge means making use of these technologies to speed up the retrieval of information, provide explanations, model situations and encourage independent investigation. Obiwuru (2024) states that students' ability to retrieve, synthesise and apply information through interaction with tools can improve their retention of subject matter and their ability to transfer that knowledge. The use of generative AI in higher education includes brainstorming new ideas, creating maps of available resources and making connections between new and existing knowledge in order to speed up the shift from memorisation to comprehension. Digital and AI-supported methods of knowledge acquisition meet the gaps in traditional learning in the Nigerian environment by providing flexible, on-demand resources that promote personalised growth and the development of skills for professional practice (Abdullahi et al., 2024).

To help people become better, happier, and more useful members of society, guidance and counselling involve a wide variety of activities. Another way of defining guidance and counselling is that it helps people to reach their full academic, professional, and psychological potential so that they may be productive members of society and lead satisfying lives. The aim of counselling is to enable clients to become more aware of themselves, to clarify their goals, and to deal with problems concerning their relationships and emotions (Agi, 2024). Those who study postgraduate guidance and counselling at the university level are referred to as postgraduates. According to Ernest-Ehibudu (2023), they undertake further education and training so as to be qualified to offer assistance to others in educational, vocational, and personal matters within institutions and in the community. The postgraduate advising and counselling programmes at universities in Rivers State, such as UO Port Harcourt and Rivers State University, focus on preparing students for careers in Nigerian higher education. It is for this reason that these students often look into ways in which new platforms, such as ChatGPT, might aid their professional development, their ability to assist clients, and their acquisition of knowledge in the field of counselling (Oyor, 2025).

The cultivation of critical thinking is achieved step by step through the development of abilities in analysis, evaluation, inference, and explanation as a result of actively dealing with the subject matter, reflecting on it, and practicing it. In higher education, such skills emerge when students are prompted to question information, compare different sources, and apply what they know to new situations rather than just accepting information on its face. Over time, students acquire these skills by working with a variety of materials, discussing their ideas with one another, and putting their understanding to the test in practical terms (Ogunbadejo et al., 2025). In Nigeria, the use of artificial intelligence tools to foster critical thinking enables students to shift from a passive to an active approach involving evaluation and independent reasoning in higher education. They learn to verify the outputs given by these tools, combine them with their own thoughts, and develop their own opinions rather than relying entirely on ready-made answers (Obiwuru, 2024).

Guidance and counselling consist of procedures which enable people to cope with the problems they experience in different areas of life so as to become more effective, satisfied, and useful members of society. In Nigeria, it offers assistance and advice on educational and personal matters in order that individuals may discover and develop their potential for both personal happiness and social usefulness. It helps students to get a better understanding of themselves, to make well-informed choices, and to cope with the difficulties they encounter in their everyday lives and studies (Agi, 2024). Guidance and counselling is also seen as a process by which individuals can develop their educational, vocational, and psychological potential in order to achieve personal happiness and social usefulness. It aids people in gaining a better self-understanding, in setting goals, and in resolving problems in emotional and interpersonal matters. It enables people to build up their self-confidence, improve their relationships, and deal with

difficult situations using better skills. Postgraduate guidance and counselling students are those who are undertaking postgraduate degrees in the field of guidance and counselling at the university level. They carry out further study and training in order to be prepared for professional positions in which they will assist others with educational, vocational, and personal problems in educational institutions and in the community. These students acquire more in-depth methods for supporting clients, carry out research into counselling needs, and apply practical techniques in actual situations. In universities in Rivers State, such as Rivers State University and the University of Port Harcourt, postgraduate guidance and counselling programmes concentrate on these professional preparations within the Nigerian higher education system. These students frequently look into how new tools like ChatGPT can help in the development of critical thinking in counselling practice, in providing client support, and in their own self-directed professional development. They study how to use technology to remember important counselling ideas, apply them during sessions, and assist clients in thinking more clearly about their own problems (Agi, 2024).

Even though there is increasing global interest in and use of digital learning tools, a large number of postgraduate programmes in Guidance and Counselling at universities in Rivers State still depend greatly on traditional, lecture-based methods of teaching. This strong reliance usually hinders students' ability to take an active part, carry out critical analysis, and apply the theoretical knowledge and skills which are important for effective counselling practice. There are a number of difficulties that lead to this restriction, such as limited access to current academic materials, a very high ratio of faculty members to students, and a lack of opportunities for experiential and practice-based learning. Together, these factors prevent the all-round development of the key counselling competencies amongst postgraduate students. In the absence of solid evidence, universities run the risk of either not making use of a resource that could be highly transformative or of adopting it without having a clear plan in place to get the most out of it and to reduce any possible disadvantages. The present study is intended to deal with this important gap in knowledge by thoroughly examining the effects of using ChatGPT on these fundamental aspects of effective learning among postgraduate Guidance and Counselling students at universities in Rivers State. It does this in order to provide educational stakeholders with guidance on the best ways to incorporate AI tools into postgraduate programmes, and thus to help improve counselling education and to prepare competent, reflective practitioners who are ready to face the current challenges.

The purpose of this study is to examine the perceived influence of the utilisation of generative artificial intelligence on effective learning among postgraduate Guidance and Counselling students in Universities in Rivers State. Specifically, the study is aimed at achieving the following objectives:

1. examine the influence of ChatGPT utilisation on active engagement in learning among postgraduate Guidance and Counselling students in Universities in Rivers State.
2. determine the influence of ChatGPT utilisation on knowledge acquisition among postgraduate Guidance and Counselling students in Universities in Rivers State.
3. investigate the influence of ChatGPT utilisation on the development of critical thinking among postgraduate Guidance and Counselling students in Universities in Rivers State.

The following research questions guided the study;

1. What is the influence of ChatGPT utilisation on active engagement in learning among postgraduate Guidance and Counselling students in Universities in Rivers State?
2. What is the influence of ChatGPT utilisation on knowledge acquisition among postgraduate Guidance and Counselling students in Universities in Rivers State?
3. What is the influence of ChatGPT utilisation on the development of critical thinking among postgraduate Guidance and Counselling students in Universities in Rivers State?

Methodology

The study used a descriptive survey research method. Descriptive research is defined as "involving the observation and measurement of the variables of interest without altering them" (Creswell & Creswell, 2023). It is a frequently used approach among researchers in the fields of education and the social sciences. This method was chosen since the present study seeks to describe, examine and assess how graduate students in Guidance and Counselling programmes make use of generative AI tools such as ChatGPT in order to achieve effective learning. The study took place in the

public universities of Rivers State. Rivers State is situated in the Niger Delta region of the South-South geographical zone of Nigeria. The total population included 373 postgraduate students from three universities in Rivers State: 71 from the University of Port Harcourt (UNIPORT), 57 from Rivers State University (RSU), and 245 from Ignatius Ajuru University of Education (IAUE). (The relevant departments are those of the UNIPORT, RSU, and IAUE's Department of Educational Psychology, Graduate School of Education, and Guidance and Counselling.) The sample for the research consisted of 373 postgraduate students, both male and female, from three (3) universities in Rivers State. The research covered the entire population. All the students in each group were included in the study by employing a census sampling method since the total population was small ($N=373$).

A questionnaire which was self-constructed and called the Generative Artificial Intelligence Utilization and Effective Learning Questionnaire (GAIUELQ) was employed in order to gather the data. The researcher prepared the questionnaire in two sections, labelled A and B, one being used to obtain demographic information and the other to find out the respondents' views on the various topics in question. The instrument contained a total of 46 items, which were spread over nine parts, there being five items in each section. The statements were evaluated on a 4-point scale, with each answer carrying a certain number of points: 4 for Strongly Agreed, 3 for Agreed, 2 for Disagreed and 1 for Strongly Disagreed. The students were asked to complete the questionnaires, which were then used for data analysis. The students were given copies of the questionnaires to fill in, and this was done in order to obtain their opinions regarding the use of generative artificial intelligence for effective guidance and counselling among postgraduate guidance and counselling students in universities in Rivers State. The face and content validity of the questionnaire were established by a panel of expert judges—three supervisors who are experts in Guidance and Counselling at Rivers State University, Nkpolu-Oroworukwo, Port Harcourt—who examined the questionnaire with regard to its clarity, the appropriateness of the language, the extent of content coverage, and the adequacy and relevance of the items in relation to the purpose of the study and the research questions, and made the necessary corrections and modifications which served as the basis for the final version of the instrument. In order to assess the reliability of the instrument, Cronbach's alpha was applied. The instrument was administered to 30 students who were not part of the target group using Cronbach's alpha. The reliability figure obtained was 0.88, indicating that the clusters of items in the instrument were reliable. Obilor (2018) defined the Cronbach alpha method as a measure of internal consistency, showing how closely the items in a set are related to one another. The researchers first visited each of the three universities and secured approval from the department heads to collect student data using the instrument. With the help of two qualified research assistants, the researchers then distributed 373 copies of the instrument to the selected students after having received approval from the department head. The researchers provided the students with detailed instructions on how to complete the questionnaire, including giving examples. There was a gap of two weeks between the time the questionnaires were distributed and when they were collected. Yet all 373 (that is, 100%) of the distributed questionnaires were completed accurately, returned in good condition, and were used for data analysis. Descriptive statistics were used to respond to the research questions.

Results

Table 1: Summary of mean and standard deviation on the influence of ChatGPT utilisation on active engagement among postgraduate Guidance and Counselling students in Universities in Rivers State, $n=373$

S/N	Items	Mean	SD	Remarks
1	ChatGPT keeps me actively involved during my learning sessions.	2.99	1.09	Moderate Influence
2	I use ChatGPT to participate more effectively in class discussions.	2.94	1.03	Moderate Influence
3	ChatGPT encourages me to explore additional learning materials beyond lectures.	2.93	1.03	Moderate Influence
4	Using ChatGPT helps me stay focused on my academic tasks.	3.43	0.61	High Influence
5	ChatGPT stimulates my curiosity and makes learning more interactive.	2.88	1.06	Moderate Influence
	Active Engagement	3.04	0.80	Moderate Influence

Table 1 shows the mean and standard deviation of responses on the influence of ChatGPT utilization on active engagement among postgraduate Guidance and Counselling students in Universities in Rivers State. The results indicate that all the items recorded mean scores above the benchmark mean of 2.50, suggesting that ChatGPT utilisation has a noticeable influence on students' active engagement. Specifically, Item 1 (Mean = 2.99, SD = 1.09), Item 2 (Mean = 2.94, SD = 1.03), Item 3 (Mean = 2.93, SD = 1.03), and Item 5 (Mean = 2.88, SD = 1.06) all show a moderate influence of ChatGPT utilisation on various aspects of students' active engagement. This implies that students moderately agree that ChatGPT supports their participation, involvement, and interaction in academic activities. Item 4 recorded the highest mean score (Mean = 3.43, SD = 0.61), indicating a strong influence of ChatGPT utilisation on active engagement. The relatively low standard deviation further suggests that respondents were consistent in their views regarding this item. The overall mean score for active engagement (Mean = 3.04, SD = 0.80) reveals that ChatGPT utilization has a moderate influence on active engagement among postgraduate Guidance and Counselling students in the universities studied. Therefore, ChatGPT serves as a supportive tool that enhances students' active engagement in their academic activities.

Table 2: Summary of mean and standard deviation on the influence of ChatGPT utilisation on knowledge acquisition among postgraduate Guidance and Counselling students in Universities in Rivers State, n=373

S/N	Items	Mean	SD	Remarks
1	ChatGPT helps me understand complex Guidance and Counselling concepts.	1.87	0.50	Low Influence
2	I acquire new knowledge more effectively through ChatGPT-assisted learning.	2.45	0.54	Low Influence
3	ChatGPT provides relevant examples that enhance my understanding.	1.87	0.94	Low Influence
4	I use ChatGPT to clarify difficult course topics.	2.99	0.10	Moderate Influence
5	ChatGPT supports my continuous learning and knowledge improvement.	2.50	0.50	Moderate Influence
	Knowledge Acquisition	2.34	0.27	Low Influence

Table 2 presents the mean and standard deviation of respondents' views on the influence of ChatGPT utilisation on knowledge acquisition among postgraduate Guidance and Counselling students in Universities in Rivers State. The results show variation in respondents' perceptions across items. Item 1 (Mean = 1.87, SD = 0.50), Item 2 (Mean = 2.45, SD = 0.54), and Item 3 (Mean = 1.87, SD = 0.94) all recorded mean scores below the benchmark mean of 2.50, indicating a low influence of ChatGPT utilization on these aspects of knowledge acquisition. This suggests that a considerable number of respondents did not strongly perceive ChatGPT as enhancing their understanding or mastery of course content in these areas.

However, Item 4 recorded a mean score of 2.99 (SD = 0.10), indicating a moderate influence of ChatGPT utilization on knowledge acquisition. Similarly, Item 5, with a mean score of 2.50 (SD = 0.50), also reflects a moderate influence, suggesting that ChatGPT contributes to certain dimensions of students' learning and comprehension. The overall mean score for knowledge acquisition (Mean = 2.34, SD = 0.27) falls below the criterion mean of 2.50, indicating that ChatGPT utilization has a low overall influence on knowledge acquisition among postgraduate Guidance and Counselling students in the universities studied. This implies that while ChatGPT may support specific learning tasks, its general impact on students' knowledge acquisition is perceived to be limited.

Table 3: Summary of mean and standard deviation on the influence of ChatGPT utilisation on the development of critical thinking among postgraduate Guidance and Counselling students in Universities in Rivers State, n=373.

S/N	Items	Mean	SD	Remarks
1	ChatGPT challenges me to analyse issues from different perspectives.	1.50	0.50	Low Influence
2	I use ChatGPT to compare diverse viewpoints on counselling theories.	3.49	0.52	High Influence
3	ChatGPT helps me to evaluate information before forming conclusions.	1.51	0.51	Low Influence
4	ChatGPT encourages me to generate innovative ideas in my field.	2.50	0.50	Moderate Influence
5	Using ChatGPT improves my ability to reason logically and critically.	2.66	0.68	Moderate Influence
	Critical Thinking	2.33	0.29	Low Influence

Table 3 presents the mean and standard deviation of respondents' perceptions on the influence of ChatGPT utilisation on the development of critical thinking among postgraduate Guidance and Counselling students in Universities in Rivers State. The results reveal mixed perceptions across the different items. Item 1 (Mean = 1.50, SD = 0.50) and Item 3 (Mean = 1.51, SD = 0.51) recorded mean scores well below the criterion mean of 2.50, indicating that ChatGPT utilisation had little influence on these aspects of critical thinking development. This suggests that respondents generally did not perceive ChatGPT as significantly enhancing their ability to independently analyse, evaluate, or reason critically in these areas. In contrast, Item 2 recorded the highest mean score (Mean = 3.49, SD = 0.52), indicating that ChatGPT utilisation strongly influenced a specific dimension of critical thinking. This suggests that students strongly acknowledged ChatGPT's role in supporting certain higher-order thinking processes, such as idea generation or clarifying complex concepts.

Item 4 (Mean = 2.50, SD = 0.50) and Item 5 (Mean = 2.66, SD = 0.68) both recorded mean scores at or above the benchmark mean, indicating a moderate influence of ChatGPT utilisation on the development of critical thinking. These findings suggest that ChatGPT contributes moderately to students' reflective thinking and problem-solving skills. However, the overall mean score for critical thinking (Mean = 2.33, SD = 0.29) falls below the criterion mean of 2.50, indicating that ChatGPT utilisation has a low overall influence on the development of critical thinking among postgraduate Guidance and Counselling students in the universities studied. This suggests that although ChatGPT may enhance certain aspects of thinking, its overall impact on the development of critical thinking skills remains limited.

Discussion

Perceived influence of ChatGPT utilisation on active engagement

The results indicate that the use of ChatGPT has a significant and positive effect on the level of active engagement among postgraduate Guidance and Counselling students at universities in Rivers State. Active engagement, comprising the behavioural, cognitive, and emotional aspects of learning, was considerably improved as a result of using ChatGPT. The students stated that the tool had a moderate to high impact on various important factors such as their participation in learning sessions, their exploration of extra learning materials, the stimulation of their curiosity, and their ability to maintain focus on academic tasks. This shows that ChatGPT acts as an interactive and responsive resource which promotes greater involvement in the learning process. These findings are in line with Fredricks et al. (2004), who defined engagement as a multi-dimensional concept involving behavioural participation, cognitive investment, and an emotional connection with learning activities. Because it offers immediate, interactive replies, personalised explanations, and academic help when needed, ChatGPT seems to strengthen all three of these dimensions. They also agree with the findings of Kasneci et al. (2023), who noted that generative AI tools can improve students' concentration, decrease learning-related frustration, and promote deeper cognitive processing through real-time feedback and by clarifying complex concepts. In a theoretical sense, the results support Vygotsky's (1978) sociocultural theory, especially the idea of scaffolding, according to which ChatGPT functions as a digital scaffold that helps students remain engaged when dealing with difficult material. The results also correspond with Siemens'

(2005) connectivism theory, which stresses the importance of digital tools and networks in enabling continuous interaction, knowledge building, and learner engagement in modern learning environments. Nevertheless, the study's overall level of engagement is moderate and this means that ChatGPT cannot by itself serve as a complete solution. Its effectiveness is largely determined by the way it is incorporated into the teaching process and by the quality of the pedagogical support offered (Kahu, 2013). If used without proper guidance, dependence on ChatGPT might result in only superficial engagement rather than in deep and meaningful learning.

Perceived influence of ChatGPT utilization on knowledge acquisition

The results of this study show that the use of ChatGPT has a significant yet modest effect on the process of acquiring knowledge among postgraduate Guidance and Counseling students at universities in Rivers State. The students regarded ChatGPT as offering only a moderate level of support for knowledge acquisition, a process that includes understanding, absorbing, and applying academic material. Although the tool was found to be useful in some specific areas, its overall contribution to achieving a deep and thorough mastery of the subject matter seemed to be limited. This mixed outcome is clear from both the descriptive statistics and the regression analysis. The descriptive analysis showed that the majority of the items used to measure knowledge acquisition obtained moderate mean scores, indicating that most students did not feel that ChatGPT had a substantial impact on their understanding of complex Guidance and Counseling concepts or on gaining new theoretical knowledge. Nevertheless, the students did recognise moderate advantages in certain respects, for example in clarifying difficult course topics and in supporting ongoing learning. This implies that ChatGPT works more usefully as a supplementary resource for providing immediate clarification and reinforcement rather than as a main means of fostering deep conceptual understanding. These findings are in agreement with those of Kasneci et al. (2023), who noted that generative AI tools such as ChatGPT are good at surface-level knowledge acquisition—for instance, by giving explanations, producing summaries, and offering quick clarifications—but do not automatically lead to deeper conceptual learning unless the learners critically engage with the content generated. Likewise, Sallam et al. (2023) stated that students often find ChatGPT helpful when dealing with immediate learning problems and in reinforcing their understanding, although its effect on the construction of comprehensive knowledge remains moderate when the tool is used without structured academic guidance.

Perceived influence of ChatGPT Utilisation on the Development of Critical Thinking

The study shows that the use of ChatGPT has a considerable but generally negative effect on the development of critical thinking among postgraduate Guidance and Counselling students at universities in Rivers State. Even though ChatGPT helps with some specific elements of higher-order thinking, the descriptive and regression results together show that greater dependence on ChatGPT is linked to a lower development of key critical-thinking abilities, such as independent analysis, the evaluation of evidence, logical reasoning, and reflective judgement. The descriptive results indicate that the students as a whole did not see ChatGPT as greatly helping them to analyse issues from multiple points of view or to critically assess information before coming to conclusions. This implies that even though ChatGPT can deliver information quickly and produce coherent replies, it does not necessarily encourage the kind of evaluative and reflective processes that are at the heart of critical thinking. In the field of Guidance and Counselling, where professionals have to carry out ethical reasoning, conduct contextual analysis, and make nuanced decisions, this result is especially important. This conclusion is in agreement with those of Kasneci et al. (2023), who cautions that large language models such as ChatGPT can lead to reduced deep cognitive engagement when students accept the generated responses without critically examining them. Khalil and Er (2023) reached a similar conclusion, finding that an uncritical acceptance of AI-generated content tends to impair the evaluative and reflective processes. The regression analysis also strengthened this worry by showing a statistically significant negative relationship between the use of ChatGPT and the development of critical thinking. The negative coefficient means that higher levels of ChatGPT use are associated with a decline in critical-thinking skills among students. Theoretically, the results are in line with Facione's (1990) definition of critical thinking as a deliberate, self-regulated process which includes analysis, evaluation, inference, and explanation.

Conclusion

According to the results of this study, it is concluded that the use of ChatGPT has a mixed impact on effective learning among postgraduate Guidance and Counseling students at universities in Rivers State. It acts as a useful educational resource capable of promoting active engagement and aiding knowledge acquisition. At the same time, greater

dependence on ChatGPT is linked to a decrease in critical thinking. These findings indicate that although ChatGPT can improve some aspects of learning, it cannot take the place of the essential human, reflective, experiential, and relational elements of postgraduate counselling education. In a discipline in which relational competence, ethical judgment, empathy, and the ability to make independent professional decisions are central, an over-reliance on ChatGPT might impede the development of key professional skills. For this reason, ChatGPT should be considered a supplementary instructional tool and not a replacement for active learning, supervision, collaboration, and reflective practice. For ChatGPT to be used effectively, there must be intentional pedagogical design, guidance from educators, and clearly defined boundaries to make sure that its use supports rather than undermines meaningful learning and professional development in Guidance and Counselling.

Recommendations

In view of the findings and the educational implications of the study, the following are recommended:

1. Universities should develop clear institutional guidelines for the responsible and pedagogically appropriate use of ChatGPT to ensure it supports learning without encouraging over-
2. reliance.
3. Lecturers in Guidance and Counselling programmes should use ChatGPT as a supplementary tool in their teaching, mainly to increase student engagement and to help with initial understanding, while at the same time focusing on experiential and supervised learning for the development of skills.
4. Students should be given training workshops on how to use ChatGPT in a critical and ethical manner, with a focus on fostering independent thinking, reflection, and professional judgment.

References

- Agi, C. W. (2024). Guidance and counselling. Department of Guidance and Counselling. Rivers State University official publications. <https://www.rsu.edu.ng/departments-of-guidance-and-counselling/>
- Abdullahi, H. O., Iliyasu, Z., Iliyasu, B. Z., et al. (2024). Correlates of medical and allied health students' engagement with generative AI in Nigeria. *Medical Science Educator*, 35, 269–280. <https://doi.org/10.1007/s40670-024-02181-y>
- Chile, O., Brown, R. I., & Jaja, J. L. E. (2025). Influence of guidance and counseling in the development of the community. *International Journal of Innovative Psychology & Social Development*, 13(1), 16-20. <https://www.seahipublications.org/wp-content/uploads/2024/12/IJIPSD-M-2-2025.pdf>
- Chukwu, E. O., Azubuike, O. J., & Chukwu, C. O. (2025). Generative AI as a curriculum enhancement tool: Nigerian teacher educators' perception of scalability and risk. *UAR Journal of Arts, Humanities & Social Sciences*, 1(6). <https://doi.org/10.5281/zenodo.16785609>
- Chukwuere, J. E. (2024). The use of ChatGPT in higher education: The advantages and disadvantages.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). Thousand Oaks, CA: Sage Publications.
- Dake, D. K., & Gbagbo, F. Y. (2025). ChatGPT's benefits, acceptance, and ethical challenges for teaching and learning in key African countries: A systematic review of literature from 2022 to 2024. *Discover Education*, 5, Article 62. <https://doi.org/10.1007/s44217-025-01074-5>
- Ernest-Ehibudu, I. R. (2023). Educational psychology, guidance and counselling at the University of Port Harcourt. University of Port Harcourt staff profiles
- Esere, M. O. (2020). Guidance and counselling in Nigerian schools: Issues and challenges. *Nigerian Journal of Guidance and Counselling*, 25(1), 1-12.
- Facione, P. A. (1990). *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA: California Academic Press.
- Fredricks, J. A. (2024). Getting students engaged in learning. *The State Education Standard*, 23(3), 6–12.
- Fredricks, J. A. (2024). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109.
- Ganiyu, B. (2021). College of education science students' engagement in emergency remote teaching during the COVID-19 pandemic in Nigeria. *Journal of Education and Practice*, 12(18), 1-10. <https://files.eric.ed.gov/fulltext/EJ1326824.pdf>

- Ikpesu, O. C. (2021). Collaborative learning model and business education students' active engagement in Rivers State universities. *Rivers State University Journal of Education*, 14(2), 45-58. <https://rsujoe.com.ng/index.php/joe/article/view/183>
- Kaliu, A. (2013). ChatGPT as a learning tool for medical students: Results from a randomized controlled trial. *Medical Education Online*. Advance online publication.
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., ... & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274.
- Khalil, M., & Er, E. (2024). ChatGPT in higher education: A meta-analysis of opportunities and challenges for knowledge acquisition. *Educational Technology Research and Development*, 72(2), 603–626.
- Obilor, C. (2018). *Research methodology in education: Principles and practice*. Port Harcourt: University of Port Harcourt Press.
- Obiwuru, O. M. (2024). Impacts of AI-chatbots usage on the knowledge construction and critical reasoning of university students: A mixed methods approach in a Nigerian university [Master's thesis, Malmö University]. DIVA Portal.
- Ogunbadejo, S. I., Agbanu, V., & Nwammuo, A. N. (2025). ChatGPT in university pedagogy: Lecturers' adoption, pedagogical value, and implications for students' critical thinking in Southeast Nigeria. *International Journal of Research and Innovation in Social Science*, 10(1), 71-80.
- Okonkwo, C. (2024). AI as scaffold in postgraduate thesis writing: Experiences from Nigeria. *Education and Information Technologies*, 28(6), 7213–7235.
- Okorodudu, P. (2020). Pedagogical challenges in Nigerian universities: Implications for postgraduate education. *Nigerian Journal of Education*, 16(2), 34–50.
- Olanrewaju, M. A., & Ojo, K. R. (2025). AI-ChatGPT, students' engagement and problem-solving ability in undergraduate physics: An experimental study. *European Journal of Education Studies*, 13(2), 1–18.
- OpenAI. (2023). *ChatGPT: Opportunities and risks in higher education*. OpenAI Research Brief.
- Oyor, O. (2025). Influence of postgraduate students' use of ChatGPT and Gemini on library use in university libraries in Benue State.
- Shittu, T. A., Mohammed, I. A., & Bello, A. (2025). Higher education students' ChatGPT use behaviour: Structural equation modelling of contributing factors through a modified UTAUT model. *Contemporary Educational Technology*, 17(4), ep592.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3–10.
- Tarisayi, K. S. (2024). ChatGPT use in universities in South Africa through a socio-technical lens. *Cogent Education*, 11(1), Article 2295654.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Harvard University Press.