

Exploring the Potentials of ChatGPT for Instructional Assessment: Lecturers' Attitude and Perception

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Abstract: Lecturers play a crucial role in the educational process, offering unique insights and perspectives within the classroom. The issue of credibility in educational assessment often rests on the shoulders of lecturers, who are responsible for evaluating students' progress. The present study aimed to investigate lecturers' attitudes and perceptions regarding the potential of ChatGPT for instructional assessment. A correlational research design was adopted, and purposive sampling was used to select 102 lecturers from Nigerian universities who had utilised ChatGPT for instructional assessment. Data was collected through an online structured questionnaire. The normality and homogeneity of variance assumptions were met, as evidenced by kurtosis and skewness values falling within acceptable thresholds. The lecturers employed the instructional assessment questionnaire utilising ChatGPT to gather and analyse the data, employing t-tests and ANOVA. The findings revealed a statistically significant difference between perception ($F(3, 98) = 7.168, p = 0.001 < 0.05$) and lecturers' years of experience in using ChatGPT for instructional assessment. The study indicated that lecturers held

low attitudes and had poor perception levels when it came to exploring the potential of ChatGPT. However, it is recommended that training be provided to enhance lecturers' attitudes and perception levels to fully exploit the potential of ChatGPT for instructional assessment.

Keywords: Attitude, perception, ChatGPT, artificial intelligence, instructional assessment.

1. Introduction

The primary objective of higher education is to equip students with the necessary knowledge and skills needed to contribute to the progress of the nation effectively. Higher education institutions offer a diverse range of academic programs and courses to enable students to specialise in their chosen fields and develop expertise. Furthermore, higher education fosters the development of critical thinking, problem-solving, and communication skills, which are integral components of the training students receive and are essential for them to become active participants in the labour force and society (Opesemowo et al., 2024; Thornhill-Miller et al., 2023). This training requires regular assessment and evaluation through examinations to ascertain the level of competency of students (Idris et al., 2022). Assessments play a pivotal role in determining students' understanding and proficiency in the subject matter, representing a fundamental aspect of education. Thorough and comprehensive assessment procedures are essential in evaluating the depth and breadth of student learning. Educational assessment serves to measure academic performance and provides educators with insights into teaching methods and curricula, facilitating personalised adjustments to enhance the educational experience. In the realm of education, assessment encompasses a range of tools, techniques, or procedures used to measure and evaluate learning outcomes, performance, or progress in academic, professional, clinical, or other contexts (Filsecker & Kerres, 2012). In this age of technological advancement, instructional assessment can be streamlined and made more efficient.

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With the advent of Artificial Intelligence (AI) and other irreversible technological tools, the field of education is experiencing rapid changes in terms of instruction and evaluation. In recent years, AI has undergone significant development, leading to its application in various disciplines, including healthcare (Xu et al., 2021) and education (Opesemowo & Ndlovu, 2024; Zawacki-Richter et al., 2019). AI systems can be trained to mimic human cognitive processes and perform repetitive tasks using large datasets (Bengio et al., 2021). In the realm of education, AI applications have been employed to enhance administrative services and academic support (Zawacki-Richter et al., 2019). Notably, tools like ChatGPT have gained prominence as technology continues to reshape the educational landscape. Consequently, understanding teachers' perceptions of such tools is crucial for effectively integrating them into classroom assessments. Furthermore, technology has significantly influenced education by expanding learning opportunities, fostering collaboration among students, and enhancing personalised learning experiences (Qadir, 2023; Qadir et al., 2022).

In their research, Wu et al. (2023) revealed the capabilities of ChatGPT by leveraging the development of GPT-1 through GPT-4 models (Generative Pre-trained Transformer). They demonstrated that these models excel in various tasks involving language comprehension and generation, such as machine translation, summarisation, and question-answering. The researchers attributed this success to the unique transformer design and the extensive training data utilised. They also discovered that the model is capable of generating text that closely resembles human writing and is difficult to distinguish from content authored by humans.

ChatGPT, an AI-powered chatbot technology, utilises a substantial language model called GPT-3 to generate responses based on user input. It became available in November 2022 (Casheekar et al., 2024). A noteworthy development in AI, ChatGPT combines natural language processing and reasoning, making it a type of AI that employs deep learning (machine learning) to process and generate natural language text (Susnjak, 2022). This technology can engage in complex discussions, provide information on various subjects, and deliver precise answers to intricate problems that require advanced information analysis, synthesis, and application. While educators employ various methods and tools to assess students' academic readiness, learning progress, skill acquisition, and educational needs (Ikwelle & Adinna, 2022), the potential use of ChatGPT by students for essay creation and its associated risks of increased plagiarism have received considerable attention. However, the prospective use of ChatGPT by higher education instructors remains relatively unexplored (Qadir, 2023; Qadir et al., 2022). It is important to note that the forms of assessment teachers choose will impact both the content and the manner in which students learn.

Attitude and perception are two psychological constructs that play a pivotal role in shaping individuals' behaviour and cognitive processes in various contexts (Bechler et al., 2021). In the realm of education, exploring the potential of leveraging ChatGPT for instructional assessment raises noteworthy concerns regarding lecturers' attitudes and perceptions in this domain. One significant concern pertains to the variable levels of lecturers' awareness regarding the capabilities and ramifications associated with incorporating AI-powered tools like ChatGPT into assessment practices (Gambetti & Han, 2023). This lack of understanding can potentially give rise to resistance or scepticism towards the utilisation of such technology in the classroom setting. Lecturers may question the validity and reliability of AI-generated assessments, as well as the potential impact on their instructional roles. Moreover, apprehensions regarding student privacy and data security further complicate the adoption of ChatGPT for instructional assessment. By duly addressing these issues, the successful integration of AI technologies within educational settings can be ensured.

The increasing prevalence of AI tools, such as ChatGPT, has triggered the need to reconsider traditional assessment methodologies, as these tools may render traditional examinations and assignments obsolete, owing to their capacity to readily generate AI-generated answers (Firat, 2023).

1.1 Research questions

The following research questions were formulated to guide the study:

- RQ1: What are the attitude levels of lecturers regarding using ChatGPT for instructional assessment?
- RQ2: What is the lecturers' perception of using ChatGPT for instructional assessment?

1.2 Hypothesis

The following hypotheses guided the study:

- **H1:** There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and sex variables.
- **H2:** There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and discipline variables.
- **H3:** There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and status variables.
- **H4:** There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and years of experience variables.
- **H5:** There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and institution variables.

2. Materials and Methods

The study utilised a correlational research design, enabling researchers to establish the relationship between variables of interest through quantitative data analysis. Quantitative research aims to test hypotheses, generate accurate and credible data, and make informed decisions by generalising findings, predicting outcomes, and making informed choices (Frierson-Campbell & Froehlich, 2022). The study included lecturers from various disciplines, genders, statuses, and years of experience in Nigerian universities. Nigeria was selected as the research location due to its data accessibility and connections with local universities, as well as its diverse population and unique culture. A non-probability sampling method was employed, using convenient sampling techniques to select participants. A total of one hundred and thirteen (113) lecturers completed the online structured questionnaire. However, the question "Have you ever used ChatGPT for any purpose?" was included in the questionnaire to extract the sample. Only eleven (9.73%) respondents answered no and were subsequently excluded from the analysis. The remaining one hundred and two (90.26%) lecturers constituted the final sample for the study. The breakdown of lecturer characteristics is provided in Table 3.

2.1 Instrumentation

The research instrument, Lecturers' Use of ChatGPT for Instructional Assessment Questionnaire (LUCIAQ), was developed and sent to the lecturers using Google Forms, an online survey. The online survey was left open for four weeks; the responses were extracted and processed using the SPSS 29 version. LUCIAQ contained three sections. Section A included the demographic characteristics of lecturers, such as sex, discipline, status, and years of experience. Section B, labelled awareness of ChatGPT features for instructional assessment, contained eleven items, while section C, which focused on the perception of ChatGPT, had seven items. In total, the instrument had eighteen items. The instrument was a self-developed questionnaire, and items were generated from existing literature. There was a literature search on what constituted instructional assessment in higher learning institutions; then, items were developed in line with these to reflect lecturers' attitudes and perceptions. The items generated were given to other lecturers in assessment-related disciplines (e.g. measurement and evaluation, psychology, etc.). This led to the refinement of some items while some were deleted. We conducted a preliminary assessment before the distribution to ensure that the items

in the online questionnaire were suitable. This involved a pilot testing (Cronbach's Alpha = 0.72) phase to gauge the questions' effectiveness and relevance.

The response pattern of Section B was scored 1 = No and 2 = Yes. In addition, Section C was a Likert scale type with response patterns ranging from undecided = 1, strongly disagree = 2, disagree = 3, agree = 4, to strongly agree = 5 for positively worded items. At the same time, it was inversely scored for negative items. Section B had no negative item, while Section C contained only one negative item, PER_2 (I feel ChatGPT will not truly reflect one's academic ability.) The instrument was a self-developed questionnaire containing eighteen items.

The instrument was subjected to scrutiny by three experts. Three experts scrutinised the instrument to ensure that the items measured what they were supposed to measure. This yielded a content validity ratio of 0.82, while a report of pilot testing of the LUCIAQ. revealed a coefficient of 0.76 Cronbach's Alpha, which was acceptable. The gathered data were sorted and cleaned before analysis. Eleven of the participants were removed from the analysis because they had not used ChatGPT for any purpose, and only one hundred and two of the responses were considered appropriate for the study since the lecturers had used ChatGPT in one way or another. The independent sample t-test and Analysis of Variance (ANOVA) were applied to analyse the data using Statistical Packages for Social Sciences (SPSS) version 29. The t-test and ANOVA were used for the analysis because the variables in the dataset were continuous. However, choosing between the independent sample t-test and ANOVA was based on the study's number of groups being compared. The former is suitable for comparing two separate groups (sex), whereas the latter is appropriate for comparing three or more groups, i.e., discipline, status, years of experience, and institution (Jupiter, 2017; Kim & Park, 2019), making them valuable tools in statistical analysis for different research scenarios which are applicable in this study.

2.3 Ethical considerations

The university lecturers were given a brief explanation of the purpose of the questionnaire. They were told that the information they provided would be used solely for research purposes and would help ensure unbiased results. The lecturers were also assured that their responses would be kept confidential and used exclusively for research. They were encouraged to be honest and open in their answers to ensure the accuracy of the findings. Furthermore, they were guaranteed that their responses would remain anonymous, without any connection to their personal identities, throughout the study.

3. Presentation of Results

A preliminary investigation was conducted to verify some underlying assumptions before conducting the primary analysis for the study. The responses of the lecturers were tested based on the assumptions of normality and homogeneity of variance. These assumptions were established to determine if the data set followed a normal distribution. Once the major assumptions were met, the subsequent analysis phase could begin. ANOVA was used to analyse the lecturers' use of ChatGPT for instructional assessment.

3.1 Answering research question one

What are the attitude levels of lecturers regarding using ChatGPT for the instructional assessment?

Items measuring lecturers' attitudes toward using ChatGPT for instructional assessment were computed to answer this research question. The total responses of each lecturer were grouped into three categories using the 33rd, 66th, and 100th percentiles, representing low, moderate, and high levels of attitude, respectively, as well as the mean and standard deviation. The years of experience were considered a continuous variable. They were categorised using the 25th, 50th, 75th, and 100th percentiles as low (0-5 years), moderate (>5 - 9 years), high (>9 - 13 years), and very high (>13 - 30

years) years of experience. The results reveal lecturers' attitudes toward using ChatGPT for instructional assessment. In terms of the sex of the participants, 43 (42.2%), 28 (27.5%), and 31 (30.4%) had low, moderate, and high levels of attitude, respectively. Similarly, lecturers' discipline, status, years of experience, and institution showed the same level of attitude toward the use of ChatGPT, with 43 (42.2%), 28 (27.5%), and 31 (30.4%) having a low, moderate, and high level of attitude, respectively. However, there was variation in the mean and standard deviation among the lecturers. The lecturers' sex, discipline status, years of experience, and the institution had a mean = 1.38; SD = 0.49, mean = 2.45; SD = 0.57, mean = 3.08; SD = 1.23, mean = 0.58; SD = 1.16, mean = 2.04; SD = 0.58, respectively.

3.2 Answering research question two

What is the lecturers' perception of using ChatGPT for instructional assessment?

The perception levels of the lecturers, regardless of their sex, discipline, status, years of experience, and institution, showed a poor level of perception for 53 (52.0%) of them, an average level of perception for 15 (14.7%), and a good level of perception for 34 (33.3%). This indicates that most of the lecturers had a poor perception when it came to exploring the potential of ChatGPT for instructional assessment. However, there were variations in the mean and standard deviation among the lecturers in terms of sex (mean = 1.38; SD = 0.49), discipline (mean= 2.45; SD = 0.57), status (mean = 3.08; SD = 1.23), years of experience (mean = 2.39; SD = 2.04), and institution (mean= 1.16; SD = 0.58). This further implies that lecturers with higher status had a better mean compared to other variables such as discipline, years of experience, sex, and institution.

3.3 Descriptive analysis of demographic variables

Descriptive statistics were conducted for all the demographic variables relating to lecturers' attitudes and perceptions. Further analysis was conducted to determine the significance of the differences. An independent sample t-test was performed for some variables, while a one-way analysis of variance (ANOVA) was used for others, such as discipline, status, years of experience, and institution. The results of the descriptive statistics revealed that male lecturers displayed higher levels of attitude (mean= 2.10, SD = 0.84) compared to their female counterparts (mean= 1.54, SD = 0.76), while female lecturers reported a greater perception of their roles (mean= 1.92, SD = 0.84) compared to male faculty (mean= 1.75, SD = 0.95). Variability existed across academic disciplines, but Humanities consistently showed similar mean values for attitude and perception. In terms of lecturers' status, Senior Lecturers exhibited the highest attitude (mean= 2.17, SD = 0.71), while Professors demonstrated the most divergent levels of perception (mean= 3.00, SD = 0.00). Lecturers with >5-9 years of experience tended to have higher attitude levels, while those with 0-5 years of experience had elevated perceptions of their roles. Lastly, private institutions reported higher attitude scores than their federal and state counterparts. These findings provided insights into the relationships between various demographic and professional factors and lecturers' attitudes and perceptions.

3.4 Testing hypothesis one

There is no significant difference between lecturers' perceptions when exploring the potential of ChatGPT for instructional assessment and gender variables.

Table 1: *Independent sample t-test of lecturers' attitude and perception*

	Gender	N	Mean	Std. Deviation	Df	T	Sig.
Attitude	Male	63	2.10	0.84	100	3.39	0.49
	Female	39	1.54	0.76			
Perception	Male	63	1.75	0.95	100	-0.95	0.01
	Female	39	1.92	0.84			

Table 1 presents the independent sample t-test of both the attitude and perception of lecturers in exploring the potential of ChatGPT for instructional and gender variable assessment. Attitude demonstrated no statistically significant difference ($t = 3.39, df = 100, p > 0.05$) between lecturers' attitudes toward using ChatGPT for instructional assessment and gender variables. As a result, the null hypothesis was accepted. On the contrary, there was a statistically significant difference ($t = -0.95, df = 100, p > 0.05$) between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and gender variables. Therefore, the null hypothesis was rejected.

3.5 Testing hypothesis two

There is no significant difference between lecturers' perceptions when exploring the potential of ChatGPT for instructional assessment and discipline variables.

Table 2: One-way ANOVA of both Attitude and perception of lecturers on discipline variables

		Sum of Squares	df	Mean Square	F	Sig.
Attitude	Between Groups	5.91	2	2.95	4.39	0.02
	Within Groups	66.68	99	0.67		
	Total	72.59	101			
Perception	Between Groups	3.64	2	1.82	2.26	0.11
	Within Groups	79.82	99	0.81		
	Total	83.46	101			

Table 2 presents the results of a one-way ANOVA that examined the impact of discipline variables on the attitudes and perceptions of lecturers. The findings indicated a significant difference in attitudes among the groups ($F(2, 99) = 4.39, p = 0.02 < 0.05$), suggesting that discipline variables had a notable influence on attitude scores. To further investigate this difference, a post hoc test using Tukey's Honestly Significant Difference (HSD) test was conducted. In terms of perception, no significant difference was found between the groups ($F(2, 99) = 2.26, p = 0.11 > 0.05$), indicating that discipline variables had a less pronounced impact on perception. These results offer valuable insights into how lecturers' attitudes and perceptions are affected by discipline variables. The Tukey HSD analysis revealed significant mean differences in attitude based on the discipline of lecturers. Specifically, a significant difference was found in attitudes between lecturers in the "Arts" and "Sciences" disciplines ($MD = -1.080; p = 0.034$). Therefore, the null hypothesis was rejected.

3.6 Testing hypothesis three

There is no significant difference between lecturers' perceptions when exploring the potential of ChatGPT for instructional assessment and status variables.

Table 3: One-way ANOVA of Attitude and perception of lecturers on status variables

		Sum of Squares	df	Mean Square	F	Sig.
Attitude	Between Groups	9.705	5	1.941	2.96	0.06
	Within Groups	62.883	96	.655		
	Total	72.588	101			
Perception	Between Groups	23.701	5	4.740	7.62	0.01
	Within Groups	59.760	96	.623		
	Total	83.461	101			

Table 3 indicates the one-way ANOVA of lecturers' attitudes and perceptions in exploring the potential of ChatGPT for instructional assessment and status variables. It also implies that there was no statistically significant difference between the attitude of lecturers toward the use of ChatGPT for instructional assessment ($F(5, 96) = 2.96, p = 0.06 > 0.05$) and the status variables. In terms of lecturers' perception of the use of ChatGPT for instructional assessment and status variables, Table 3 validates a statistically significant difference ($F(5, 96) = 7.62, p = 0.01 < 0.05$). As a result, a post hoc test was

performed to determine statistically significant differences between variables. The Tukey HSD analysis found significant mean differences (MD) in perception based on lecturers' rank. It spotted substantial differences between "Assistant Lecturer" and "Lecturer I" (MD = 1.067; p = .006), "Assistant Lecturer" and "Senior Lecturer" (MD = 1.000; p = .029), "Assistant Lecturer" and "Reader/ Associate Professor" (MD = 1.667; p = .001), "Lecturer II" and "Reader/ Associate Professor" (MD = 1.160; p = .001), "Lecturer I" and "Professor" (MD = -1.400; p = .045), "Reader/ Associate Professor" and "Professor" (MD = -2.000; p = .002). In conclusion, the null hypothesis was rejected.

3.7 Testing hypothesis four

There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and years of experience variables.

Table 4: One-way ANOVA of attitudes and perceptions of lecturers on years of experience variables

		Sum of Squares	Df	Mean Square	F	Sig.
Attitude	Between Groups	9.847	3	3.282	5.127	0.002
	Within Groups	62.741	98	.640		
	Total	72.588	101			
Perception	Between Groups	15.018	3	5.006	7.168	0.001
	Within Groups	68.443	98	.698		
	Total	83.461	101			

Table 4 presents the one-way ANOVA results for both the attitude and perception of lecturers regarding the potential of ChatGPT for instructional assessment, as well as the years of experience variable. The table reveals that there was a statistically significant difference in the attitude ($F(3, 98) = 5.127, p = 0.002 < 0.05$) and perception ($F(3, 98) = 7.168, p = 0.001 < 0.05$) of lecturers based on their years of experience with the use of ChatGPT for instructional assessment. Considering the significant difference, a post hoc test using Tukey's HSD test was conducted. The analysis revealed significant mean differences in both "attitude" and "perception" based on "years of experience." Specifically, significant differences were found in "attitude" between lecturers with "0 - 5 years" and ">5- 9 years" (MD = -.724; p = .008), as well as between ">5- 9 years" and ">9 - 13 years" (MD = .724; p = .008). In terms of "perception," significant differences were identified between lecturers with "0 - 5 years" and ">5- 9 years" (MD = .778; p = .006), between "0 - 5 years" and ">13 - 30 years" (MD = .813; p = .003), and between ">5- 9 years" and "High" (MD = -0.716; p = .023). These findings shed light on the subtle relationship between the two variables and highlight the impact of "years of experience" on the dependent variables.

3.8 Hypothesis five

There is no significant difference between lecturers' perceptions in exploring the potential of ChatGPT for instructional assessment and institution variables.

Table 5: One-way ANOVA of both Attitude and perception of lecturers on institution variables

		Sum of Squares	Df	Mean Square	F	Sig.
Attitude	Between Groups	2.140	2	1.070	1.504	0.227
	Within Groups	70.448	99	.712		
	Total	72.588	101			
Perception	Between Groups	2.915	2	1.458	1.792	0.172
	Within Groups	80.546	99	.814		
	Total	83.461	101			

Table 5 presents the results of the one-way ANOVA analysis conducted to assess the attitude and perception of lecturers towards the potential of ChatGPT for instructional assessment, as well as institution variables. The table indicates that there was no statistically significant difference observed

in the attitude of lecturers ($F(2, 99) = 1.504, p = 0.227 > 0.05$) and institution variables. Similarly, no statistically significant difference was found in the perception of lecturers towards the potential of ChatGPT for instructional assessment ($F(2, 99) = 1.792, p = 0.172 > 0.05$) and institution variables. As a result, the null hypothesis was accepted.

4. Discussion of Findings

While the notion of artificial intelligence (AI) has been in existence for several decades, recent advances in computing power and data accessibility have greatly expedited its development and deployment. AI is now utilised across various industries, including healthcare, finance, transportation, entertainment, and education. The increased use of AI tools, such as ChatGPT, in educational settings raises important considerations for assessment methods. Consequently, the involvement of teachers is crucial in effectively integrating AI tools into classroom assessments. Understanding teachers' attitudes and perceptions towards these tools is imperative for their acceptance and successful implementation. However, there is currently a lack of research specifically investigating the dimensions of the potential of ChatGPT. This study contributes to the existing literature by examining lecturers' attitudes and perceptions of ChatGPT and its influence on their demographic profiles. The scarcity of related peer-reviewed research on the use of ChatGPT in education can be attributed to its novelty.

Research questions one and two aimed to determine the levels of attitude and perception among lecturers with regard to using ChatGPT for instructional assessment. The findings of this study indicate generally low levels of attitude and poor levels of perception when it comes to using ChatGPT for instructional assessment. In a study conducted by Iqbal et al. (2022), which explored teachers' attitudes towards using ChatGPT, it was revealed that teachers have shown limited adoption of ChatGPT in their classrooms. The study also reported predominantly negative perceptions among teachers. Nonetheless, despite this negative attitude, some participants mentioned that they found ChatGPT beneficial in providing automated feedback to students and allowing teachers to focus on other tasks. Additionally, the study identified ChatGPT's potential to enhance student engagement and motivation. These findings are supported by an exploratory survey on the use of ChatGPT in education and healthcare conducted by Hosseini et al. (2023), which revealed that only 40% of the sample had experimented with using ChatGPT. Moreover, a larger proportion of trainees had tried ChatGPT compared to lecturers. Furthermore, Halaweh (2023) observed that ChatGPT continues to evolve as an AI tool, and many lecturers and students may be unaware of its existence or have only heard of it without actively trying or exploring

its capabilities. In a similar vein, the present findings align with the results of Cox et al. (2019), which disclosed that 22% of the participants in their study possessed knowledge of AI and acknowledged utilising this technology in their professional responsibilities. Furthermore, Holder et al. (2018) corroborated that the public's comprehension of AI is generally "widespread" but lacks depth. The study indicated that three-quarters of the respondents either possessed a basic understanding of AI, possessed minimal knowledge regarding the subject, or self-identified as experts. However, only one out of every seven respondents believed that they had direct exposure to AI, and a mere 2% perceived AI as presently influencing society, indicating that individuals often fail to recognise encounters with AI and comprehend the extent of its applications in daily life. Nevertheless, the reasons underlying the lack of awareness and perception of ChatGPT may be ascribed to the Nigerian society, which often exhibits a conservative disposition resistant to change. Consequently, individuals may exhibit general scepticism towards novel inventions, preferring familiarity and tradition. While trust in emerging technologies is pivotal for acceptance, negative experiences or instances in which new inventions have failed or caused harm can contribute to a negative perception and scepticism towards future innovations such as ChatGPT. The focus on ChatGPT has primarily revolved around the tool's potential risks and negative aspects, thereby amplifying public scepticism and engendering

a biased perception. Notably, ChatGPT's capability to provide specific answers to users' inquiries, thus enabling the completion of written assignments and examinations on behalf of students, has raised concerns regarding AI-assisted academic dishonesty. Consequently, educational institutions have taken measures to restrict student access to ChatGPT on campus (Voanews, 2022).

The analysis of the research hypothesis yielded insignificant statistical differences between lecturers' attitudes towards employing ChatGPT for instructional assessment and the variable of sex. Conversely, notable statistical differences emerged in relation to lecturers' perceptions of using ChatGPT for instructional assessment when considering the variable of sex, with a tendency towards favouring the female group. These results may suggest that the respondents' awareness of ChatGPT pertains more to its functions or purposes beyond instructional assessment in an academic context. Conversely, Vogels' (2023) investigation on the correlation between awareness of ChatGPT, sex, and age revealed that men and individuals under 30 had a higher likelihood of having knowledge regarding ChatGPT compared to women and those 30 and older. Consequently, this study diverges from the findings of Vogels' study.

An insignificant difference was observed in lecturers' perceptions of using ChatGPT for instructional assessment and discipline variables. However, a statistically significant difference was found in lecturers' attitudes towards using ChatGPT for instructional assessment and the discipline variables. When comparing the disciplines of Arts and Sciences, substantial differences emerged. The disparities can be attributed to the nature of the disciplines. The subjective nature of assessing students in Arts-oriented fields is a prominent factor that may impede the adoption of ChatGPT for instructional assessment in those domains. The evaluation of Arts disciplines often involves subjective elements such as interpretation, creativity, and personal expression, which pose challenges for an automated tool like ChatGPT. While ChatGPT may be useful for providing general feedback or generating ideas, it may not fully capture the intricacies and subjectivity involved in assessing students' artistic or creative abilities. Consequently, in Arts-oriented disciplines where subjectivity assumes a crucial role in assessment, there may be limited motivation to rely solely on automated tools like ChatGPT. Conversely, Science-oriented disciplines may find ChatGPT valuable for instructional evaluation due to the objective nature of the subjects. The assessment of students in the Sciences is frequently based on empirical evidence and quantifiable data, which can be easily analysed using ChatGPT. Therefore, while ChatGPT may be beneficial for certain disciplines, its suitability may vary depending on the assessment requirements.

Lecturers' perceptions of ChatGPT for instructional assessment and status variables exhibited a statistically significant disparity. This research finding suggests that the disparities in faculty status and their perceptions may be ascribed to the inclination of lower-ranked lecturers to readily embrace novel technologies and methodologies in their teaching and research endeavours. This enthusiasm to explore the potential merits of AI in their work includes enhancing student engagement, enabling personalised learning experiences, and generating novel insights from data analysis. Lower-ranking lecturers may also possess greater motivation to adopt AI to address specific institutional or regional challenges, such as bridging gaps in educational access, enhancing instructional quality, or fostering research that resonates with local communities. While the degree of AI adoption varies among faculty cadres, lower-ranking lecturers may demonstrate greater receptiveness to AI adoption due to resource constraints, opportunities for professional growth, adaptability to evolving educational landscapes, peer influence, and region-specific challenges and needs.

The study findings additionally unveiled a statistically significant contrast in the years of lecturers' experience and their attitudes and perceptions concerning the use of ChatGPT for instructional assessment. Furthermore, the results indicated that there was no statistically significant differentiation based on institutional variables in the attitudes of lecturers. Similarly, no significant divergence was observed in lecturers' perceptions regarding the use of ChatGPT for instructional

assessment. A study conducted on Americans revealed that while a majority of American adults were familiar with ChatGPT, only a small fraction had actually utilised it. The utilisation and awareness of ChatGPT substantially varied across demographic groups. The study findings demonstrated that approximately 58% of the adult population in the United States had knowledge of ChatGPT, but a mere 14% had engaged with it, highlighting notable demographic discrepancies. Furthermore, the study demonstrated that approximately 80% of individuals with postgraduate qualifications were aware of ChatGPT, compared to 71% with a bachelor's degree and 59% with some college education, while only 41% of those with a high school education or less exhibited familiarity with AI (Vogels, 2023).

An inference drawn from the results of the attitude and perception regarding the usage of ChatGPT for instructional assessment, as well as its interaction with the demographic profiles of lecturers, solidifies the findings of Choi et al. (2023). According to their research, teachers are more inclined to adopt Educational AI Tools (EAITs) when they perceive them as user-friendly and advantageous. This implies that a significant number of lecturers may lack prior experience with ChatGPT and have encountered difficulties in engaging with it. Even for those who have utilised the tool, it is probable that they have not fully explored its features and capabilities. Based on the obtained results, it is reasonable to assert that lecturers could further exploit and derive greater benefits from the functionalities provided by ChatGPT.

5. Conclusions and recommendations

The study concluded that there is a low level of attitude and poor perception in exploring the potential of ChatGPT for instructional assessment among lecturers in Nigerian universities, considering their varying demographic profiles. This research has limitations that should be considered in future studies on related topics. Firstly, the present study did not assess lecturers' knowledge and skills about AI, specifically ChatGPT. All participants were recruited from Nigeria; therefore, there is a need to explore the level of attitude and perception of other users from different countries with diverse regional and cultural contexts. Therefore, the study recommends that lecturers explore ChatGPT's capability to perform high-level cognitive tasks such as assessment. Lecturers should leverage the strengths of ChatGPT instead of continuously criticising it. Training sessions can be organised to explore ChatGPT's different capabilities and functions.

6. Declarations

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