

Artificial Intelligence Tools Out-Turn in Higher Learning Education and Students' Academic Performance

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Abstract: This study aims to describe the effects of ChatGPT on students learning and students' academic performance in higher learning institutions using Mzumbe University Main Campus as case. The nature of this study is descriptive with mixed approach. Research data were obtained using self-administered questionnaires and interviews. The sample size was 98 students obtained through stratified simple randomly and purposive sampling techniques. Data processing, extracting of themes and analysis were done using descriptive statistics and thematic analysis. The findings from most of respondents (81.1%) revealed that most students advocate the use of ChatGPT since it enhancing their capacity in constructing learning material and their overall academic performance. Results further indicate that, students were much motivated to use ChatGPT due to time efficiency, peer and personal unwillingness, minimum versus maximum rewards where students managed to get higher marks especially in take home and unsupervised assignment and personal unwillingness to study scholar material such as journal, article and learning material provided by instructors. However, apart from the advantage of using ChatGPT also revealed that too much dependence on AI tools including ChatGPT destroy some students studying aspirations and commitment, brainstorming and critical thinking. The study concludes that's there is no way that students, leaners and instructors can avoid the use of AI tools including ChatGPT in the current era and therefore recommends that, instead burning students from using AI tools, it is right time now to introduce proper and ethical way on how to use this tools to sharpen knowledge and improve performance.

Keywords: *Academic Performance, Artificial Intelligence (AI), ChatGPT, Learning, Higher Education Institutions.*

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I. INTRODUCTION

Human beings, gifted with outstanding cognitive abilities, have continually extended their boundaries of innovation and knowledge. This desire for progress has transformed societies through continuous technological transformations and led to the invention of artificial intelligence (AI) a field of computer science focused on creating systems capable of tasks that typically require human intelligence, such as learning, reasoning, and decision making (Russell & Norvig, 2021; Strohmeier, 2022). In 2015, Elon Musk and another group of engineers introduce Artificial Intelligence organization and started as a non-profit artificial intelligence research organization with the mission to develop artificial general intelligence that benefits humanity (Yosifova, 2023). Furthermore; In November 2022, artificial intelligence, a leading technology company unveiled ChatGPT, one of the most advanced iterations of its AI-driven large language model for text generation, within five days of its launch, the model attracted one million users and reached 100 million in just three months, marking an unprecedented rate of adoption in the technology sector (Raman et al., 2023). The advancement of technology and globalization of interconnectedness, artificial intelligence (AI) has substantially influenced many sectors, including education (Sok and Heng, 2023).

According to the Beijing Consensus on Artificial Intelligence and Education (2019) underscored the education institution to integrate and align together with advancement of technology in artificial intelligence tools and its outcome in workforce industries. The use of ChatGPT in education has a history but has rapidly gained popularity in the recent years 2022, where the early example of artificial intelligence tool ChatGPT in education can be date back to 1960s where Joseph Weizenbaum formulate ELIZA programme makes conversation with a person (Nurtayeva, 2023). Artificial Intelligence specifically ChatGPT, not only can assist in designing assessments, producing essays, and translating languages, but it also enables users to pose and answer a variety of questions, summarize texts, and interact with them like peers (Sok and Heng, 2023). Despite that, ChatGPT has an advantage in generating content but still there are potential impacts it may have on education in developing countries (Mhlanga, 2023).

Concerns have been raised among members of academic and researchers that, regarding its uses of this technological tool ChatGPT that leading to plagiarism and possible intellectual property conflict (Momodu, 2024); and there is still a danger for higher education depending much on this technological tool ChatGPT (Chukwuere, 2024). Stack (2023) argued that effort should be taken to encourage to revise undergraduate assessments and to encourage students engaging with traditional studying approach rather than copy and pest from ChatGPT. Moreover, has been noted that, even while this technological tool still continuing to be developed and advanced, still leading to some potential benefits and challenges, it is essential to do in-depth analysis of impact it will have in developing countries (Mhlanga, 2023). Particularly in Sub-Saharan Africa, the study pertaining to technological tool ChatGPT remains few on how this technology tool ChatGPT affect the learning context and students as well (Mwilongo et al., 2022).

In Tanzania; According to a survey published in the Citizens newspaper (2022) revealed that (62%) of Tanzanians oppose Artificial Intelligence (AI) on the grounds that it could significantly disrupt the next generation. Despite this, the government has made many efforts to introduce policies and guidelines such as the Tanzania national guideline for artificial intelligence in education (2025); Tanzania national digital strategy (2024/25-2029/30) that emphasize the integration of Artificial Intelligence (AI) in education to achieve positive outcomes and ethical use for students and instructors. The integration of Artificial Intelligence at higher learning be in early stage, but it could offer opportunity to enhancing Tanzania education outcome and institutions efficiency (Baynit et al., 2025). However, many higher learning institutions in Tanzania are still not prepared, facing many challenges and questions regarding policies and guidelines for which Artificial Intelligence tools will require guidelines due to the advancement of Artificial Intelligence every day (Matto and Ponera, 2025). Still little known in Tanzania about Artificial Intelligence (AI) tools specifically ChatGPT effects on higher learning education and students' academic performance, which will inturn to higher learning education institutions to have guidelines on Artificial Intelligence (AI) tools specifically ChatGPT regarding ethical and positive use for students and instructors to increase efficiency in learning.

II. LITERATURE REVIEW

This part provides the theoretical framework guide this study and empirical studies that related to this study on Artificial Intelligence (AI) tools out-turn in higher learning education and students' academic performance.

➤ *Theoretical Framework*

This study was guided by constructivism learning theory.

➤ *Constructivism Learning Theory*

Constructivism learning theory was originated by Psychologist Jean Piaget in year of 1976. Piaget noted that; learning exist in the mind, learner is necessary to involve physical action for learning, engaging the mind as physical part is a key to successful learning, it emphasizes that learners become better in gaining knowledge through active learning by interaction with their active learning, peers and external environmental factors (Khadija, 2020). Vygotsky's further in 1978 developed this theory as zone of proximal development perspectives, where he contributed significantly by saying that learning for learners becomes better and more effectively in the zone of proximal development (ZPD) where learners can learn and do better through guidance and support on the gap between what learners can do independently and what they can do with assistance. Building on that; constructivism learning theory and the way developed under the zone of proximal development perspectives, it directly fit and played a big role in guiding this study and provided a base in describing how Artificial Intelligence (AI) tools specifically ChatGPT in this era of technology stands as a learning tool that facilitates beyond what students cannot do independently in construction of learning materials to students and which in turns to affect their learning experience and academic performance as well.

➤ *Empirical Literature Review*

A recent studies revealed that almost 89% of American college students use ChatGPT in undertaken their assignments, while 53% of students use ChatGPT for drafting their papers in submission for course requirements, and ultimately showed that, 48% of students use ChatGPT during exams (Victor, 2024). Moreover, found that 69.9% of students indicated and advocated for use ChatGPT in education, 30% indicate non-acceptance of ChatGPT, promoting policy to be

in place for its acceptance and use in education, and 16% indicate ChatGPT destroying teacher-students relationship as the reasons for students decline uptake ChatGPT in education (Ampong et al, 2023). To add on that, results found that 81.5% students use ChatGPT and has potential increase students' performance while seemed that students in large still putting much their own efforts in undertaken assignments (Matto, 2023). Similar to Stuart et al., (2024) founded that 63% of students use AI tools for enhancing academic competence.

Studies revealed various factors triggers motivation among students in using ChatGPT for the purpose of academic improvement. Research found that students differ in the influence of use ChatGPT in their learning process, and the students use in learning process due to different factor which are, performance expectance, habit, and hedonic motivation toward intention on using ChatGPT (Artur, 2023). In another hand it has been found that factors encouraging students to use ChatGPT for their academic purposes were simplicity, and accessing content for personalized learning (Victor, 2024). Completion of classroom task in submission for coursework requirements (Firaina and Sulisworo, 2023).

The potential of artificial intelligence (AI) specifically ChatGPT on academic performance is crucial and emerging area of research in higher learning in this era of technology. The use of ChatGPT in higher learning and education as whole enhancing students in construction for learning material which is vital in improving academic performance (Komba, 2024). Further, the higher achievement in academic has been facilitated by use ChatGPT in using this for personalized learning which in turn to enhancing academic performance (Mhlanga, 2023). This academic performance achieved by providing opportunity for students in studying their course materials for leisure as they use ChatGPT (Wang, 2023). According to studies, ChatGPT can enhance academic achievement by providing personalized feedback and turning improving students' academic performance (Baynit et al., 2024). But also, seemed to be source of diminishing critical thinking and academic performance (Duong et al., 2024).

Building on that, geographically and methodologically on studies conducted in Tanzania still limited, to uncover ChatGPT's effect on students' academic performance and if

so as indicated in studies conducted by (Duong et al., 2024); (Matto, 2023); (Komba, 2024); (Baynit et al., 2025) still rise questions and ethical concerns on how and to what extent ChatGPT has effect on higher learning students' academic performance (Victor, 2024). Therefore; this study aimed to bring on board insight about the artificial intelligence tools out-turn in higher education: the effect of ChatGPT on higher learning students' academic performance at Mzumbe University Main Campus.

III. METHODOLOGY

This part outlines methods used to describe ChatGPT effect on students' academic performance at Mzumbe University Main Campus. To enhance understanding of the subject matter, mixed approach were used.

➤ Research Design

This study is descriptive in nature, researcher choose this design to bring on board in depth understanding regarding the problem where not much studies in Tanzanian context

revealed yet about the topic in a short duration of time.

➤ Population of the Study

Population in this study included undergraduate and postgraduate students pursuing non-degree, bachelor degree, and master's degree programs at Mzumbe University main campus totaling 9705.

➤ Sample Size and Sampling Techniques

Researchers extracted foundation from a previous study conducted by (Komba, 2024) at Mzumbe University who used a sample size of 15 respondents and therefore decided to use a sample size of 98 respondents to increase reliability and generalizability of the study findings as supported by (Bryman, 2016) that a larger sample size generally add more the reliability and generalizability of the study. Sampling techniques used in this study were stratified simple randomly sampling technique and purposive sampling technique. 98 students were selected from all strata i.e. non-degree, bachelor degree, and master's degree in the academic year of 2024/25 as indicated in the following Table 1.

Table 1: Sample size and Sampling Techniques

LEVELS OF EDUCATION	GROUP POPULATION	SAMPLE SIZE	SAMPLING TECHNIQUES
Non – Degree	496	5	Stratified simple random and Purposive sampling techniques.
Bachelor Degree	8823	89	Stratified simple random and Purposive sampling techniques.
Postgraduate Degree	400	4	Stratified simple random and Purposive sampling techniques.
Total	9719	98	

Source: Research data 2025

From the above table. Researcher obtained a sample size from each stratified sub-group by using William's formula of (2024) who provided in order to get a sample size under Stratified simple random sampling techniques.

$$nh = \frac{(Nh)}{N} * n$$

Where (nh) is stratified sub-group sample size. (Nh) is population of sub-group. (N) is entire population of the study. (*) is multiplication sign and, (n) is number of sample size calculated from the entire population of the study.

Therefore.

Stratified sub-group sample size (nh)

$$\frac{Nh (\text{Sub-group population})}{\text{Entire population of the study (N)}} * \text{Number of sample}$$

➤ Instruments

Documentary reviews, Self-administered questionnaires and interviews were used to collect data. Questionnaire was developed to contain both closed and open-ended questions where most of closed ended questions were based on Likert

scale. A goggle form questionnaires was prepared and distributed to specified respondents via online platform such as WhatsApp groups and email addresses.. Random table was used to select 90 respondents from the strata indicated in table 1. Interview was conducted for 8 participants whereby Respondents were selected 3 representatives from non-degree, 2 representatives from bachelor degree and 3 representatives from postgraduate where the researcher believed that they had required information and experience about usage and effect of ChatGPT on higher learning students' academic performance. Interviews were done in quite place and conversations were recorded. Streutbert and Carpenter (2003) argued that, the sample sizes of 5–50 participants could reach the saturation point of qualitative research which was also supported by Braun and Clarke (2019) who said that saturation can be achieved when no new themes or insights emerged from subsequent interviews. Based on these arguments, researchers were confident that 8 participants were enough to reach the saturation point.

➤ *Reliability and Validity of the Study*

To ensure validity and reliability, tools were pretested by collecting data among small group of students out of targeted sample size to measure ensure validity and reliability of each tool. In this lights, researcher collected data from 25 students from health systems management department. Also validity and reliability was ensured through the use of different data collection method such as questionnaires, interviews and documentary review to allow cross tabulation of the findings supported by empirical data.

➤ *Data Analysis Techniques*

This study employed descriptive data analysis technique by running SPSS version 20 for questionnaires processing, and thematic analysis technique to analyze key themes from interview conversations recorded in audio format.

➤ *Research Ethics*

For this study, ethical paramount were adhered to ensure confidentiality for participants and seeking their consent to participate and maintain their full autonomy. Participants were asked their willing to be recorded or not during interview process. Additionally official letter for permission was granted by Mzumbe University Main Campus to researchers for

conducting research and all works used in this study were acknowledged and cited.

IV. RESULTS AND DISCUSSION

This section presents and discussing findings of this study. For anonymity purpose and strengthening the discussion interview respondents were coded as indicated in the following table 2.

Table 2: Codes used to identify Interview Respondents

	Participants' Code	Sex (1 for Male and 2 for Female)	Program of Study
	M1	Male	Master program
	M2	Female	Master program
	M3	Male	Master program
	B1	Female	Bachelor degree program
	B2	Male	Bachelor degree program
	D1	Female	Diploma program
	C1	Male	Certificate program
	C2	Female	Certificate program

Source: Developed by Researchers

➤ *The Extent to Which Higher Learning Students Understand and Use ChatGPT*

Respondents were asked to indicate their views regarding their understanding and usage of ChatGPT in their academic endeavors. The results are as presented in the following Table 3 and 4 respectively.

Table 3: Awareness about ChatGPT at Mzumbe University

Awareness of ChatGPT	Frequency	Percent
Yes	88	97.8
No	02	2.2
Total	90	100

The findings in Table 3 show that majority of respondents 88 (97.8%) were aware regarding AI tools including ChatGPT and only 2 (2.2%) of respondents were not aware about AI tools including ChatGPT. This indicates that that majority of higher education students are aware and understand AI Tools including ChatGPT. This could also imply that respondents possess necessary information regarding positive and negative effects of ChatGPT on students' learning process and academic performance.

Table4. The Extent to Which Higher Learning Students use ChatGPT in their Academic Work

	Frequency	Percent
To a greater Extent (more than 50% of students)	55	61.1
To the Medium Extent (between 25 to 50% of students)	24	26.7
To a lower extent (below 25% of students)	11	12.2
Total	90	100

Results (Table 4) show that majority of respondents 55 (61.1%) indicated that higher learning institution students use ChatGPT to a greater extent. however 24 (26.7%) indicated that students uses ChatGPT to a medium extent and the remaining 11(12.2%) of respondents had a view that higher leaning institution students uses ChatGPT to a lower extent. Respondents further indicated that student uses ChatGPT in various academic works including continuous assessments such as individual assignments, group assignments and term papers and when instructors are not keen some of them uses ChatGPT even in tests and examinations. . This imply that ChatGPT usage is expanding among higher learning institutions and if not properly handled some students might even use it unethically and ruin their academic progression.

A finding from interviews also indicates usage of ChatGPT to a higher extent as explained by one among the respondents who said that:

"Most of students use ChatGPT to a greater extent; I personally use ChatGPT at an estimate of 60% in my academic activities and the remaining 40% that's where I involve my personal mind efforts and commitments" (C1:1).

These finding are consistent with those of Firaina and Sulisworo (2023); and, Ampong (2023) who highlighted that approximately 69.9% of students are users of ChatGPT in their various tasks and teachers have viewed that ChatGPT has been a great help every day in finding and adding knowledge in the learning process. According to Firaina, Sulisworo and Ampong (2023), ChatGPT holds promising potential for improving learning. Noting this magnitude of using ChatGPT, Batool et al. (2025) suggested that teachers should provide awareness to the students regarding ethical use of ChatGPT in

academic and integrating it in curriculum instead of burning students to use it. The findings from 11(12.2%) of respondents who indicated low extent usage of ChatGPT are in line with those of Matto (2023) who argued that although students use ChatGPT in their academic tasks, it has been observed that to a large extent student have been using their own efforts in conducting assessment and they don't rely heavily on the use of ChatGPT in accomplishing their assessments for course requirements. Comparing these results to the constructivism learning theory perspectives which emphasize learner-centric approaches requiring students to take ownership of their knowledge and experiences while encouraging exploration, experimentation, critical thinking, reflection and collaboration (Khadija,2020); it is vivid that using ChatGPT to a greater extent contradicts with this theory. It is only when students will be able to learn and use ChatGPT effectively through expanding the knowledge gained through ChatGPT by more exploration, experimentation, critical thinking, reflection and collaboration they can fit to this theory.

➤ *The Motive Behind ChatGPT Usage at Mzumbe University.*

Respondents were asked to indicate their views regarding students motivation to use AI tools especially ChatGPT in their academic works. The results are as presented in the following subsections:

• *Time Efficiency*

Empirical results from interviews indicated that time efficiency is one among of pushing courses influencing the students in using ChatGPT in their academic is time efficiency and shortcut, For instance two participants were remarked from interviews said that.

"It easy to finish tasks quickly through ChatGPT. If you ask a question in just few minutes you will have the answer on hand, that's why many students prefers to use it" (M2:1).

"ChatGPT is used because it makes school life easier, that is, it depends on what information to want if you write any question the ChatGPT brings you answers accordingly either in point forms or in a more detailed explanation" M1:2)

This imply that, students are motivated to use ChatGPT because it saves time for them and this is more effective for those who prefer to work in deadlines and for assignments with limited time where some instructors would want students to submit their assignments in short time periods. However with heightened time pressure exacerbated by an increased workload and demand for student excellence, still students are more likely to depend on ChatGPT to accomplish their tasks and meet deadlines (Cariño, 2024). In line to Aina, (2024); and Lee et al. (2025) argued that ChatGPT makes easier for students to do some of their assignments, organizing thought, clarifying concept and structuring essay. Similar to Largous (2023) found that students have positive attitudes on ChatGPT as learning tool due to its ability and quickly in providing personalized support which enhance their academic performance.

- *Minimum Efforts Versus Maximum Rewards*

Empirical evidence from interviews indicates that most of students are motivated to use ChatGPT since it does not need a lot efforts as compared to reading books and provided learning materials. Not only that, results shows that most students who use ChatGPT manages to score higher marks. Some of the respondent's views are as presented here under:

"students including myself use ChatGPT in order to boost academic performance as it brings onboard accurate and satisfactory answers, which directly leads scoring high marks" (B2:1).

"students including myself use ChatGPT to find answers for complicated questions since ChatGPT provide simplified answers which I myself can understand something which helps me gain more knowledge" (C2:1).

"ChatGPT has a variety of materials, even when you think that this is not 100% correct ChatGPT can give you different views, opinions and answers" (M1:1).

This imply that ChtGPT has simplified students work, boosting their performance and improve their understanding of what has been taught in classes or provided assignments. Those findings are in line with study done by Victor (2024); and Artur (2023) who argued that ChatGPT makes work easier

to access many contents, and far more expecting higher performance. Also findings are in consistent with those of Firaina and Suliswaro (2023) who revealed that the abundance and ease of getting academic contents easily without difficulty persuade students to use ChatGPT. Similarly, Muñoz et al. (2023) argued that ChatGPT provides valuable feedbacks to students which in turn triggers motivation in using ChatGPT for assessments creation.

- *Personal and Peers Influences*

Empirical evidence from interviews indicates that most students use ChatGPT due to personal and peer influences as explained here under:

"Some students including myself use ChatGPT because we find almost everyone using it either in groups or individually. During group works you may find some students sitting separately and making points through ChatGPT and then sending them to the group leader so that their points can be accommodated" (B1:2).

"Sometimes you may find yourself working in high pressure due to deadlines which require submissions in a very short time. In times like this you can easily be tempted to use ChatGPT even when you didn't want to us it in the first place (M3:1).

This indicates that peers and personal pressure influences students to use ChatGPT in fulfilling their academic work. On one side peers and individual pressure helps students to be aware on how to use ChatGPT and maximize its advantage while on another hand peers and individual pressures can make students misuse the ChatGPT and sometimes copy paste materials without digesting them. This is similar to Mollel (2025) argued that academic engagement and peers influence were motive for students using ChatGPT due to enhance their academic productivity. Similar to Nababan et al. (2025) revealed that external preasure and peers have significant for students in utilizing ChatGPT in academic task. While on others hand the findings conflicting to Samson et al. (2024) argued that academic stress and peers influence do not positively influence to use of ChatGPT in academic. Generally its has been revealed that, peer recommendations playing a role in shaping students' attitudes toward new

technology and social interaction played a significant role engaging in conversations and knowledge-sharing expressed increased comfort with ChatGPT (Jowarder, 2023; and Almulla, 2024).

- *The Effects of ChatGPT to the Students' Learning and Academic Performance*

Respondents were asked to indicate their views regarding how ChatGPT affects students' learning and academic performance. The positive and negative effects of using ChatGPT are as presented in the following table 5 and table 6 respectively;

Table 5: The Positive Effects of Using ChatGPT to the Students' Learning and Academic Performance

Positive effects	Strong agree		Agree		Neutral		Strong disagree		Disagree	
	F	%	F	%	F	%	F	%	F	%
ChatGPT helps in fast and easy understanding topics taught by instructors	3	3.3	38	42.2	18	20	17	18.9	14	15.6
ChatGPT helps in providing relevant example for more understanding	23	25.6	59	65.6	4	4.4	1	1.1	3	3.3
ChatGPT helps in searching for relevant literature regarding any subject matter	25	27.8	53	60	7	7.8	4	4.4	1	1.1
ChatGPT helps in improving learning	26	28.9	49	54.4	6	6.6	2	2.2	7	7.8

Table 6: The Negative Effects of Using ChatGPT to the Students' Learning and Academic Performance

Negative effect	Strong agree		Agree		Neutral		Strong disagree		Disagree	
	F	%	F	%	F	%	F	%	F	%
Destructing the power of team work and create social distance among students	16	17.8	44	48.9	11	12.2	3	3.3	16	17.8
Limiting brainstorming and creation of own ideas	37	41.1	43	47.8	3	3.3	0	0	7	7.8
Destruction of self-efforts and reading habits among students	33	36.7	41	45.6	6	6.7	2	2.2	8	8.9

➤ *The Positive Effects of using ChatGPT Towards Learning and Academic Performance*

Results in table 5, indicate that majority of the respondents agreed that AI tools specifically ChatGPT plays significant role improving learning and academic performance as pinpointed in the following subsections:

- *Fast Understanding Topics Taught by Instructors*

Results (Table 5) show that most of respondents 41 (45.5%) agreed that ChatGPT helps in fast and easy understanding of the topics taught in the classroom where as

18 (20%) of respondents neither agree or disagree to the statement that ChatGPT helps in fast and easy understanding of the topics taught in the classroom and the remaining 31 (34.5%) disagreed the statement that ChatGPT helps in fast and easy understanding of the topics taught in by instructors. This imply that, although most of students use ChatGPT and admits that it helps them in fast and easy understanding of the topics taught by instructors, some of them are still doubtful something which calls for proper training and guidelines regarding the use of AI tools including ChatGPT. This finding is in line to Anissa et al. (2024) argued that ChatGPT enhance

students engagement with materials easily and it offering personalized response which resulting academic outcomes, but users education and ethical consideration is important. Similar to Mollel (2025) suggested that while ChatGPT enhancing academic productivity, but the absence of framework posses challenges on ChatGPT usege. Addressing this challenges including policy and ethical integration can maximize AI's positive impacts (Mwalulesa, 2025).

- *Providing Relevant Example for More Understanding*

Results (Table 5) show that most of respondents 82 (91.2%) agreed that ChatGPT helps in providing relevant example for more understanding, whereas 4 (4.4%) of respondents neither agree nor disagree to the statement and the remaining 4 (4.4%) disagreed the statement that ChatGpt helps in providing relevant example for more understanding. This imply that, proper use of ChatGPT can help students get relevant examples which can helps them understands more what they have been taught by their instructors. This finding supported by Krupp et al. (2023); and Jo (2024) argued that ChatGPT has been a great help for students in how to create real-world examples of what they are studying, which in one way or another has contributed positively to faster learning and understanding. It was found that using examples is an effective way to help learners learn and understand theories in the classroom (Vasconcelor and Santos, 2023).

- *Searching for Relevant Literature*

Results (Table 5) show that most of respondents 79 (87.7%) agreed that helps in searching for relevant literature whereas 7 (7.8%) of respondents neither agree nor disagree to the statement that ChatGPT helps in searching for relevant literature and the remaining 5 (5.5%) disagreed the statement that ChatGPT helps in searching for relevant literature. This imply that, proper use of ChatGPT can help students to search for relevant literatures and improve their learning process as well as academic performance. This supported by Anissa et al. (2024) revealed that ChatGPT offering rapidly of information which resulted enhanced students performance through learning different concepts. According to Wang and Fan (2025) suggested that ChatGPT should be actively integrated in learning modes to enhance material acquisition in problem based learning. However still concerns rise among students regarding validity and reliability of materials generated on

ChatGPT and therefore there need to.provide awareness to students (Sila et al., 2023).

- *Improving Learning Standards*

This study consider learning standards as course/topic/module objectives and learning outcomes specified in each course/topic/module describing what students are expected to know and be able to do on the completion of that course/topic/module.

The findings in (Table 5) show that most of respondents 75 (83.4%) agreed that ChatGPT helps in improving learning standards whereas 6 (6.6%) of respondents neither agree or disagree to the statement that ChatGPT helps in improving learning standards and the remaining 9 (10%) of respndents disagreed the statement that ChatGPT helps in improving learning standards. This indicates that, AI tools including ChatGPT if used effectively, they are very helpful in achieving the the learning objectives and outcomes expected from each course/topic/module. This finding is inline to Largous and Isam, (2023) argued that students hold positive attitudes towards ChatGPT its ability to provide personalized support which subsequently enhances their academic performance. Similar to Mwalulesa (2025) revealed that AI improves learning processes, reduces administrative burdens, and accelerates research. On other hand, Radeva (2023) argued that, however, due to the influence of AI tools on students' everyday lives, banning ChatGPT might not be a practical solution. Instead, educators should consider integrating the tool into the education system by appropriately adjusting teaching methods and strengthening the examination standards and regulations.

Empirical results from interviews also brought on board some positive effects of AI tools including ChatGPT as presented in the next paragraphs:

“The use of AI tools including ChatGPT has boosted academic performance for many students including myself in different levels since it provide solutions for many challenging assignments provided by instructors”(D1:1).

“When joining the university many students including myself did not know how to use AI tools such as ChatGPT; but

after knowing the tools and using them, I can proudly say that they have boosted my academic performance” (M2:2).

➤ *The Negative Effects of using ChatGPT towards Learning and Academic Performance*

• *Destructing the Power of Team Work*

Results (Table 6) show that most of respondents 60 (66.7%) agreed that ChatGPT destructs the power of team work and create social distance among students, whereas 11(12.2%) of respondents neither agree nor disagreed to the statement that ChatGPT destructs the power of team work and create social distance among students, and the remaining 19 (21.1%) disagreed the statement that ChatGPT destructs the power of team work and create social distance among students. This imply that, without proper guidelines on how to use AI tools including ChatGPT, the power of team work can be destructed since students may not feel the importance of group discussions which are very helpful in the learning process. Similar to Aina and Joshua (2024) revealed that ChatGPT can make easier for students to do some of their assignments, however, socially the interaction and communication between students and even for lecturers will be reduced, because in the world of education what is needed is not only grades, but also the process of interpersonal that makes it clear that ChatGPT can be beneficial. Because people are important part of learning, it is suggested that artificial intelligence tools like ChatGPT be used along with more traditional ways of learning (Altarawneh, 2023). Similar to Klimova and Pikhart (2025) concluded that, over-reliance on AI may diminish interpersonal skills and emotional intelligence, leading to social isolation and anxiety.

• *Limiting Brainstorming and Development of Own Ideas*

Results (Table 6) show that most of respondents 80 (88.9%) agreed that ChatGPT limits brainstorming and development of own ideas, whereas 3(3.3%) of respondents neither agree nor disagreed to the statement that ChatGPT limits brainstorming and development of own ideas, and the remaining 7(7.8%) disagreed the statement that ChatGPT limits brainstorming and development of own ideas. This imply that, ineffective use of ChatGPT can limits brainstorming and development of own ideas among students. These results corresponds with those of Matto (2023) who

found that students had the ability to use their own efforts and manage to boost their academic performance without relying on ChatGPT. Similarly, Duong et al. (2024) argued that despite the advantages of using ChatGPT among students, it has also been found to contribute in deterioration of academic performance to some students calling for a need of utilizing and emphasizing continual usage of traditional learning methods to complement these contemporary tools.

• *Destruction of Self-Efforts in Writing Skills and Reading Habits Among Students*

Results (Table 6) show that most of respondents 74(82.3%) agreed that ChatGPT destructs self-efforts and reading habits among student, whereas 6(6.7%) of respondents neither agree nor disagreed to the statement that ChatGPT destructs self-efforts and reading habits among student, and the remaining 10(11.1%) disagreed the statement that ChatGPT destructs self-efforts and reading habits among student. This imply that, depending much on AI tools including ChatGPT limits individual efforts and discourage intensive reading habits among students which are helpful improving critical thinking, innovation and creativeness.

These results are in line with those of Jokinen *et al.*, (2021) indicating that the use of AI tools destroy students' thinking and problem solving skills. On the other hand, these results contradict with those of Batool *et al.*; (2025) who found that, ChatGPT do not hinder students' critical thinking but rather enhance their level of critical thinking and creativity. In this regard, this paper believes that, the findings of Batool *et al.*; (2025) can be true only when students are taught about ethical and effective use of AI tools and encouraged to think critically and be innovative while adhering to the laid rules and regulations. Similarly, Stack (2023) emphasized the traditional methods while suggesting for universities to create some challenging assessments that cannot be tackled using AI tools but rather require students' to be creative and effectively use their critical thinking skills.

“The use of AI tools especially ChatGPT has affected me negatively since there was a time when my work was tested and found that 80% of it was from AI and therefore I was penalized and given very low marks something which also faces some other students in different academic

process”(B2:1).

- *Academic Performance Comparison before and after Using AI Tools Including ChatGPT*

Respondents were also asked to indicate their views regarding whether the use of AI tools including ChatGPT have improved their academic performance or not. The results are as indicated in Table 7

Table 7: Respondents Views Regarding the Effects of Using ChatGPT in their Academic Performance

Respondents views regarding the effects of ChatGpt use in their academic performance	Frequency	Percent
Academic performance has been very much improved after using ChatGPT	21	23.3
Academic performance has been improved after using ChatGPT	52	57.8
Academic performance has Neither improved nor deteriorated after using ChatGPT	11	12.2
Academic performance has been Deteriorated after using ChatGPT	5	5.6
Academic performance has highly deteriorated after using ChatGPT	1	1.1
Total	90	100

The findings in Table 7 show that most of respondents 73(81.1%) had an opinion that the use of AI tools including ChatGPT has improved their academic performance, whereas 11(12.2%) of respondents neither agreed nor disagreed to the notion that the use of AI tools including ChatGPT has improved their academic performance, and the remaining 6(6.7%) regard the use of AI tools including ChatGPT has deteriorate their academic performance. This implies that when used effectively and ethically, AI tools including ChatGPT ChatGPT are important tools in improving students’ academic performance.

This finding in academic performance are in consistent to Liu et al., (2012); Komba (2024); Stuart (2024); and Baynit et al. (2025) argued that by integrating technology in learning contributed to enhancing effectively educational outcomes and influence digital learning towards impacts students’ study habit, improving students’ academic competency and performance. Additionally; Gonzalez et al (2025); Shazad et al. (2025); and Ashraf et al. (2025) revealed that, ChatGPT platform have been beneficial in improving students' academic performance where 89.5 % of the students reported significant improvements in their academic performance and positive correlation was observed between prior use of ChatGPT and GPA. Generally speaking; based on the findings of this study and other empirical literature, it is vivid that the use oa AI tools specifically ChatGPT have more positive effect on students’ academic performance than a negative effects.

V. CONCLUSION

This study reveals that students are motivated to use ChatGPT mainly for its time efficient, peer influence, low efforts with high rewards and personal pressure. The findings also show that, although ChatGPT has some benefits including fastening understanding of complex topics, access to relevant literature and examples, and overall support to both students and instructors, it also pose a challenge of producing graduates with weaker problem solving skills and critical thinking, erosion of research and academic writing standards, and diminishing self-directed learning habits among students. Based on these findings the study concludes that AI tools including ChatGPT, can be a catalyst for improved learning if integrated responsibly, but unchecked, unethical and ineffective reliance on AI tools including ChatGPT threatens the integrity and quality of higher education outcomes.

RECOMMENDATION

Based on the findings and the conclusion of this study, the following recommendations are forwarded to higher education stakeholders:

- *To the Higher Education Institutions Management Team and Policy Makers*

First, there is a need of developing clear usage policies and Guidelines for AI tools at the institutional and national level that defines clear and acceptable academic uses and set

clear boundaries to prevent academic dishonesty. Second, there is a need of integrating AI literacy into higher learning curriculum which may include training on ethical and effective use and critical thinking to help students balance AI tools assistance with independent efforts. Third, strengthening assessment methods by designing academic works and evaluations that require original and objective analysis, oral defense and practical problem-solving to discourage overdependence on AI generated materials

➤ *To the Academic Instructors*

First, there is a need of Blending AI with active learning by encouraging student to use AI tools including ChatGPT as a supplement for brainstorming, vivid examples, and literature searches while insisting them to show their own reasoning and evidences of independent study. Second, instructors should monitor students and provide them with necessary supports through regular feedback and mentorship on necessary issues like academic writing and reading, and critical thinking when using AI tools

➤ *To Higher Learning Institution Students*

First, to adopt balanced use of AI tools including ChatGPT as a learning aid rather than a replacement for personal efforts. Students are advised to Use AI tools including ChatGPT for exploring, clarifying and verifying concepts gained through independent readings and research. Second, building Core Skills by improving their problem solving, writing and analytical skills to ensure long term professional and academic competences.

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