EXPLORING THE IMPACT OF CHATGPT ON ACADEMIC ASSISTANCE: PERCEPTION AND BENEFITS AMONG UNDERGRADUATE STUDENTS

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ABSTRACT

ChatGPT is an AI tool that is in the form of generative AI. It is a tool that allows the user to receive humanlike, videos, text and images which is generated by Artificial intelligence. It is found on the playstore as well as on the user's website, with the help for this AI tool the user can ask the question to ChatGPT and clear their doubts. The full form of "GPT" is "Generative Pre-Trained Transformer", it means that how it takes the processes request and responses to the request.

This study mainly focuses on the usage of ChatGPT by the undergraduate students to identify the challenges and ascertain its benefits. This research aims on the extensive usage of ChatGPT in the academics activities by the university students. The information/findings were collected through secondary and primary data, revealing that ChatGPT is widely used for assessment in assignments, writing assistance and doubt clarification and also for preparation in exams. The benefits of ChatGPT usage for the students were time saving, easy access to information and personalized learning. However, some challenges were also noted including

inaccuracy of information, technical issues and over reliance on AI for academic activities. The educators and policy makers can better support the students in terms using AI as a beneficial platform for their learning capabilities and enhance learning outcomes and maintain integrity.

Keywords: ChatGPT, Artificial Intelligence, teaching learning outcome, generative AI

INTRODUCTION

The education system of Indian has evolved over the past years, it has significant phases: where the evolution in teaching and the learning process can be observed, from the Gurukulas era to, the modern education system and the technology current era. Each of the phases has brought changes how the students learn and the teachers teach. From personalized learning from Gurukulas to modern education to technology era making it more accessible and interactive for the students to learn.

In the recent years, AI or Artificial Intelligence has evolved into a transformative force across various places, reshaping industries and our daily lives. Artificial Intelligence is a field of study where computers science enables machines to mimics the human behaviors. It mainly focuses on making the machines smart and capable of performing the human intelligence. Artificial intelligence machines help human beings to think, learn and plan things.

The origin of Artificial Intelligence can be rooted back to the past. It has been described in Greek mythology about the concept of AI. Warren McCulloch and Walter Pits introduced the first model of AI was introduced in the year 1943. A research paper relating to AI was published by Alan Turing after the seven years which was tilted as "computer machinery and intelligence". John McCarthy, the father of Artificial Intelligence, used the term Artificial intelligence for the first time in 1956. [TURING50]. In 1972, a fill scale intelligent humanoid robot was created in Japan. In 1980, AI came with the expert evolution of expert systems which was a computer program that is designed to solve the complex problems. With the rise of artificial intelligence in the business field, since 2006, the top companies like Facebook, Netflix and twitter have started applying Artificial intelligence in their applications.

LITERATURE REVIEW

The paper titled "Generative Artificial Intelligence: Implications and Considerations for Higher Education Practice by Farrelly, T., & Baker, N. (2023), studied how ChatGPT contributed in lesson plan making, critical analysis and thinking. This study also stresses that it can provide various study materials, gives instant feedback and is easily available 24/7 and can help the teachers in preparing the materials. However,

AI tools should be used with proper caution keeping in view their limitations and potential biases[1].

The paper titled "Education in the Era of Generative Artificial Intelligence (AI) by Baidoo-Anu, D., & Ansah, L. (2023), studied the existing research work to emphasise on the potentials benefits of using ChatGPT in promotion of teaching and learning and drawbacks of usage of ChatGPT in academics. The study put forward various recommendations on how ChatGPT can be useful in educational field[2].

The Paper "ChatGPT for education and research: A review of benefits and risks in the Journal, Combodian Journal of Educational Research (2023)" by Sarin Sok and Kimkong Heng. The authors in their research   explores the benefits and risk associated with using of ChatGPT in the field of education and research[3].

The Paper "Benefits of AI (ChatGPT) in education and learning: Is ChatGPT helpful?" by Josephine Oranga mainly explores the integration of AI in the educational sectors through the use of ChatGPT and other AI tools. Josephine Oranga in this paper stresses that AI will help from preliminary education to higher education. AI will provide personalised learning, 24/7 instant feedback which will assist them in exploring varied areas. He also stresses that AI can only be used as a tool and not the replacement of humans[4].

The paper "Impact of ChatGPT on education: Challenges and Opportunities" by Soraia Queida. The author stresses in this paper that how AI is becoming popular in many sectors especially in the field education. This paper explores the usage of ChatGPT by students and how it can change the administrative activities. And also various recommendations are provided to ensure that ChatGPT is used wisely and without outranging the quality of the education[5].

OBJECTIVES OF THE STUDY

- To analyse the use of ChatGPT among the university undergraduate students.
- To study the satisfaction level of students regarding ChatGPT
- To study the challenges faced while using ChatGPT.

RESEARCH METHODOLOGY

1. Research Design: Descriptive research design.
2. Type of Data: The study is based on both primary and secondary data. Primary data has been collected from the undergraduate students of The Assam Royal Global University. 300 samples has been collected using Google form. The researcher has collected secondary data from the scholarly articles and journal.
3. Sampling technique: Judgmental sampling

4. Sample Size: 300
5. Population of the study: The undergraduate students the Assam Royal Global University

DISCUSSION/ANALYSIS

The survey data analysed has revealed the following:

Demographics:

Table 1 and *Table 2* represents the demographic status of the study.

The demographic profile of the respondents showed that out of the total respondents, 57% of the respondents are male and 43% of the respondents are female.

Out of the total respondents, 45% of the respondents are in the age-group of 20-22 years.

Responses	No. of Students	Percentage
Male	171	57%
Female	29	43%
Total	300	100%

Table 1 : Gender of the respondents.

Responses	No. of Students	Percentage
18-20	115	38.3%
20-22	135	45%
22-24	50	16.7%
Total	300	100%

Table 2 : Age group of the respondents.

Analysis of Objective.

Objective 1:

Table 3 and *Table 4* analysed the Objective 1. Majority of the respondents use ChatGPT occasionally (51.7%), while 32% of the respondents use it rarely.39.3% of the respondents use ChatGPT for clarifying the concepts, while a moderate percentage of users use it for writing assistance.

How often do you use ChatGPT for academic purpose?						
Gender	**Age**	**Daily**	**Never**	**Occasionally**	**Rarely**	**Grand Total**
Female	18-20	6	3	30	14	53
	20-22	2		31	28	61

How often do you use ChatGPT for academic purpose?						
Gender	**Age**	**Daily**	**Never**	**Occasionally**	**Rarely**	**Grand Total**
	22-24		1	10	4	15
Female Total		**8**	**4**	**71**	**46**	**129**
Male	18-20	15	4	27	16	62
	20-22	7	3	40	24	74
	22-24	4	4	17	10	35
Male Total		**26**	**11**	**84**	**50**	**171**
Grand Total		**34**	**15**	**155**	**96**	**300**

Table 3 : ChatGPT for academic purpose

Which academic task do you primarily use ChatGPT for?					
Gender	**Age**	**Clarifying concepts**	**Generating ideas**	**Writing assistance**	**Grand Total**
Female	18-20	18	13	22	53
	20-22	25	7	29	61
	22-24	10	1	4	15
Female Total		**53**	**21**	**55**	**129**
Male	18-20	23	15	24	62
	20-22	28	20	26	74
	22-24	14	14	7	35
Male Total		**65**	**49**	**57**	**171**
Grand Total		**118**	**70**	**112**	**300**

Table 4 : Primary Use of ChatGPT

Objective 2:

Table 5 shows the satisfaction level among the students regarding the responses provided by ChatGPT.42.3% respondents are neutral regarding the satisfaction with usage of ChatGPT.34% respondents are moderately satisfied whereas 8.3% respondents are highly satisfied with the usage of ChatGPT

Responses	No. of Students	Percentage
1(Highly Dissatisfied)	14	4.7%
2(Moderately Dissatisfied)	32	10.7%
3(Neutral)	127	42.3%
4(Moderatley Satisfied)	102	34%
5(Highly Satisfied)	25	8.3%
TOTAL	300	100%

Table 5 : Satisfaction level regarding usage of ChatGPT

Objective 3

Table 6 and *Table 7* shows the challenges encountered by the students while using ChatGPT. The results indicated that 63.3% respondents stated that they have faced issues while using ChatGPT. Out of the total respondents, 33.7% respondents faced challenge regarding the accuracy of information provided by ChatGPT; followed by 30% respondents who stated that they find it difficult to understand complex queries.

RESPONSES	NO. OF STUDENTS	PERCENTAGE
Yes	190	63.3%
No	110	36.7%
Total	300	100%

Table 6 : Challenges in using ChatGPT

Responses	No. of students	Percentage
Accuracy of information	101	33.7%
Understanding complex queries	90	30%
Technical issues	66	22%
Adaption to academic standards	43	14.3%
Total	300	100%

Table 7 : Types of Challenges in using ChatGPT

CONCLUSION

To conclude, the study provides an inclusive analysis on the use of ChatGPT by the undergraduate students. The study highlighted both the advantage and challenges related to the incorporation of ChatGPT in the academic life of the students. The findings indicate that the ChatGPT is being used by maximum of the students for the purpose of writing assistance and doubt clarification as it provides immediate access to information and supports personalized learning. The students grasp these benefits, to understand difficult and complex topics and managing the academic workload more efficiently. However, usage ChatGPT is not free from defects and disadvantages. The challenges associated with the usage of ChatGPT can be addressed when it is used

in consultation with teachers and mentors who can guide regarding the validity and authenticity of the information generated through ChatGPT.

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