Unveiling Media Students Interaction with ChatGPT in Delhi NCR

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Abstract - This study on the interaction of media students with ChatGPT is conducted with the help of a questionnaire filled by 316 respondents who are in the age group of 18-24 years. Uses and Gratifications theory forms the theoretical basis of the research, it provides an understanding of satisfaction level of media students by examining the difference between gratifications sought and gratifications obtained. It is highlighted that use of ChatGPT is very popular among media students of Delhi NCR, however on the same hand, majority of students believe that ChatGPT possess limited knowledge on current issues and that the platform has provided them with inaccurate responses at one instance or the other.

Keywords - Open AI, ChatGPT, Uses and Gratifications Theory, Sam Altman, Media Students

1. INTRODUCTION

Open AI, a non – profit company came up with its unique natural language processing platform called ChatGPT on November 30, 2022 (Albayati, 2024; Brockman & Sutskever, 2015). This platform is capable of creating human-like text answers based on the input provided (Sobaih et al., 2024). Its applications range from assisting in information retrieval to aiding content creation, language translation and saving time (Nazir & Wang, 2023). ChatGPT stands for Generative Pre-trained Transformer, is competent to read and write text (Cebrián Cifuentes et al., 2024). There are globally around 180.5 million unique visitors to this site (BS Web Team, 2023). The latest version of ChatGPT, GPT 4o demonstrates a plethora of new possibilities. GPT4o possess boosted speed and competences across text, voice and vision (Gusain, 2024).

The term Artificial Intelligence (AI) is not new, Bush (1945) foresees a possible future world in which man-made machines will start to think. Statistical techniques for creating true AI have been debated since the 1940s, when Canadian psychologist Donald Hebb devised Hebbian Learning, a theory of learning that mimics the neuronal process in the human brain (Hebb, 1949). Alan Turing proposed question "Can machine think?" brought to light the concept of Artificial Intelligence (Turing, 1950). John McCarthy coined the term "Artificial Intelligence", which is widely accepted to have originated during the 1956 Dartmouth Conference (McCarthy et al., 1995).

The use of AI in higher education is becoming an integral part of learning and utilized for improving educational outcomes (Sallam et al., 2024). Various researchers have studied the efficiency of AI in different educational settings (Holmes & Tuomi, 2022; Harry & Sayudin, 2023; Luckin & Holmes, 2016). It is very important to understand the opinions and usage patterns of students as the use of AI is becoming

extremely popular in education (Silvano & Gui, 2024).

"While AI-based tools could present promising possibilities to reform the teaching and learning processes, these tools are also faced with skepticism and are a subject of ongoing debate due to multiple concerns including ethical issues, factual issues, risk of misinformation spread, copyright issues, among other valid concerns" (Abdaljaleel et al., 2024).

Theoretical framework: Uses and Gratification: Kasirye (2022) pinpoints that the term uses and gratifications was formulated in the 1940s, as researchers were understanding the reasons behind using different types of media and investigate why individuals choose to consume various types of media. The theory is credited to Elihu Katz, Jay G. Blumler and Michael Gurevitch as they released "The Uses of Mass Communication; Current Perspectives on Gratifications Research," in 1974 which provided an understanding of the theory (Iswahyuni, et al., 2017). Till the 1970s, U&G investigation focused on gratifications desired, omitting results or gratifications gained. During the 1970s, U&G researchers closely analysed audience motives and created further typologies of how individuals utilised the media to satisfy social and psychological requirements (Ruggiero, 2000).

'Uses' implies that audiences are engaged and willing to consume media. The term 'gratification' refers to the pleasures and satisfaction that viewers receive after being exposed to media. The ever-growing popularity of latest media platforms shows that people want customised media and material to meet their own demands. Media is ever evolving and whenever there is an emergence of newer form of media uses and gratifications theory became equally applicable for understanding why the audience is using the media for various purposes. The theory examines the motivations behind media usage and the factors that impact those motivations (Hossain, 2019). Uses and gratifications can emerge through users' interactions with novel technology, potentially impacted by users' needs and desires and the technology's affordances or actionable properties. This is particularly noteworthy in emerging technologies, such as generative conversational AI, as it represents a broad range of opportunities for use (Skjuve et al., 2024).

Students who aspire to become media professionals, understand the need for multi-tasking including work like content writing, reporting, editing, photography, videography, design and graphics and much more. The manner in which media students comprehend and communicate information has changed with modern times. Generative AI like ChatGPT can prove to be of immense help to media students for fulfilling their requirements. Such a transformative potential in media education becomes attractive point of attention for media students, media professionals and researchers. The aim of this research is to determine the specific contexts in which ChatGPT is utilised, such as educational assistance, content development or information retrieval, while also analysing level of awareness, knowledge and depth regarding its features. While the introduction throws light on the meanings of artificial intelligence, the review of literature provides an understanding of similar researches conducted in the past. The calculations of the responses are done with the help of statistical tools. T-test is utilized to identify the satisfaction level of respondents with their use of ChatGPT.

2. REVIEW OF LITERATURE

George Pallivathukal et al. (2024) employed a cross-sectional survey design to study the university students of Malaysia and identified that a noticeable proportion of participants carried suboptimal knowledge but favourable opinion of the concept and practical application of ChatGPT.

ChatGPT is often seen as a transformational tool for increasing student self-efficacy and drive to study. Firat (2023) indicate that students like ChatGPT's features and find them engaging, inspiring and beneficial, both for studying and working. They find it easy to use and love the human-like interface that offers well-constructed responses and clear explanations. Srinivasan et al. (2023) highlight that students most commonly use ChatGPT for educational content creation, knowledge seeking, newness and convenience. Limna et al. (2023) raised some concerns about the usage of ChatGPT in educational settings. Nashwan et al. (2023) revealed that time-saving features, electronic words of referral, academia self-regard, academia self-worth and perceived stress had a favourable influence on the usage of ChatGPT. On the other hand, influence from peers and academic honesty had a detrimental impact on consumption. Sun et al. (2022) identified that general public appeared to be broadly aware of the usage of AI in journalism and media outlets with the most popular topic being the discussion of specific news articles that employ AI. Goni & Tabassum (2020) underlined that these students are mentally prepared to understand and embrace AI as an emerging innovation with limitless personal as well as professional benefits.

3. METHODOLOGY

A survey was conducted to study the uses of ChatGPT and to understand the gratifications from ChatGPT use by media students of Delhi NCR. A total of 316 responses from media students of 18-24 years were analysed in the study. Convenience Sampling is employed and students of 25 universities/colleges participated in this study.

4. RESULTS & ANALYSIS

Out of the total responses it has been identified that maximum proportion is of females which is 56.3% (178) while on the other hand, the remaining proportion i.e. 43.7% (138) are male respondents. 81% of these respondents are pursuing graduation and the remaining 19% are pursuing post-graduation in different media colleges and universities.

On attempting to understand the familiarity of the students with ChatGPT, it has been identified that 40.8% highlighted that they are very familiar, 30% indicated they are moderately familiar and 23.4% pointed out that they are extremely familiar with ChatGPT. It is also identified that the maximum respondents i.e. 38.2% highlighted that they use ChatGPT once a week. The motivations that stimulate the respondents to employ ChatGPT include maximum no. of respondents (84.1%) who highlighted that it is saves a lot of time. 55% reported that the platform helps and assists them in their complex tasks and 48.1% indicated productivity. The benefits that the respondents enjoy while utilization of ChatGPT for education and learning include availability of the platform 24x7 as highlighted by 83.8% media students, while 76.8% reported that it gives the facility of instantaneous access to information. Detailing on the challenges encountered while employing ChatGPT, it has been identified that significant majority of respondents i.e. 54.7% highlighted limited up to date knowledge of the platform and 45.8% indicated that that it struggles to grasp complex queries.

A. Figures and Tables

TABLE I. T-TEST FOR GRATIFICATIONS SOUGHT AND OBTAINED

	GS Mean	GS SD	GO Mean	GO SD	diff	t value	Sig	S/U/E
Information	1.86	0.787	2.04	0.817	-0.18	-3.579	0.000	E
Education	2.08	0.811	2.17	0.851	-0.09	-1.654	0.099	S
Learning New Things	2.10	0.908	2.58	1.086	-0.48	-7.705	0.000	E
Enhancing Writing Skills	2.03	1.012	2.25	1.053	-0.22	-3.916	0.000	E
Completing College Assignments	1.91	0.910	2.05	1.008	-0.13	-2.661	0.008	E
Research Papers/Dissertation	2.26	1.022	2.39	1.088	-0.12	-2.247	0.025	E
Generating Summaries	1.97	0.922	2.17	0.994	-0.20	-3.439	0.001	E
Scripting/ Content Creation	2.35	1.093	2.59	1.188	-0.24	-3.565	0.000	E
Ideas and Suggestions	1.97	0.924	2.22	0.965	-0.24	-3.932	0.000	E

In order to understand the satisfaction level of media students from the use of ChatGPT two similar sets of questions were formulated in the questionnaire. The first set of questions asked respondents to mark their expectations from ChatGPT for various uses on a 5-point likert scale ranging from strongly agree to disagree. These set of questions were formulated as gratifications sought by the media students. A similar set of questions were reframed to understand the respondent's agreement level on how ChatGPT has actually helped them.

The Cronbach's alpha for these set of questions is 0.86 which shows that there is high internal consistency within the above variables. It is identified that in case of education significance value is more than 0.05 and we can say that the media students are satisfied with the use of ChatGPT when it comes to using the platform for education purpose. However, in the case of information, learning, completing college assignments, research paper/dissertations, generating summaries, scripting/content creation, ideas and suggestions the p values is less than 0.05 and it can be said that media student who are using ChatGPT are not only satisfied for the above mentioned reason but there is an expectation exceed as well. Overall, we can see that use of ChatGPT has not only met the expectation level of media students but ChatGPT also outperformed itself.

5. FUTURE SCOPE OF THE STUDY

Overall, it is pointed out that ChatGPT needs more accuracy and the timely update of ChatGPT is crucial. The lack of up-to-date information and the need to adding human touch is also essential. Proper utilization of AI should be done to prevent downfall of human intelligence. AI should be absorbed as a skill and ChatGPT should be utilized while keeping ethics in mind. ChatGPT has not only fulfilled the expectations of media students of Delhi NCR but has also outperformed itself. The platform has proved be a boon and a bane both at the same time, therefore it should be employed without infringing any ethical boundaries and being overly depending on the platform.

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