

Exploring Indian Students' Perception, Behavioral Intentions, and Motivation for Learning with ChatGPT

*Sukhmeet Kaur*¹

*Babita Yadav*²

*Divya Goel*³

*Saloni Devi*⁴

*Sharmila Devi Ramachandaran*⁵

*Anuj Kumar*⁶

Abstract

Purpose : The paper aimed to develop an understanding of ChatGPT's increasing popularity among higher education students for exploring, tailoring, and enriching coursework content. The study determined to explore the factors that affected technology acceptance and usage of ChatGPT.

Methodology : The paper identified three predictor variables, namely perceived usefulness (PU), ease of usefulness, and behavioral intentions (BIs) of using the ChatGPT technology as the dependent variable. Further, the perception of the students that motivated them to learn was considered as the independent variable. The study executed 300 structured questionnaires online among management students and functioned as a mixed-method research analysis on SPSS and MAXQDA.

Findings : The paper conceded that PU, perceived ease of usefulness, and BI significantly correlated with motivations for learning. The qualitative analysis noticed that the students made their coursework, assignments, and projects easier and more convenient with accurate answers with the support of ChatGPT.

Practical Implications : The study is limited to the variables considered for empirical study. We advocated that ChatGPT does not completely replace natural learning techniques such as social interaction, observations, and guidance throughout the journey of education and development. The study produced ethical considerations and inventive viewpoints for future research in educational settings.

Originality : Unlike previous research on ChatGPT and education, the present work combined to assess the technical acceptance model with students' BI and learning motivations for new technology.

Keywords : behavioral intentions, ChatGPT, higher education, perceived ease of use, perceived usefulness, student learning motivation

JEL Classification Codes : I20, I21, I23, O33

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¹ *Research Fellow*, INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan. (Email : sukhmeetkaur9686@gmail.com) ; ORCID iD : <https://orcid.org/0000-0002-3363-6844>

² *Assistant Professor*, Department of Business Management, Doctor Harisingh Gour Central University, Sagar - 470 003, Madhya Pradesh. (Email : babitas.yadav@rediffmail.com) ; ORCID iD : <https://orcid.org/0000-0002-3506-7550>

³ *Assistant Professor Senior Grade*, Jaypee Business School, Jaypee Institute of Information Technology, A-10, Sector-62, Noida - 201 309, Uttar Pradesh. (Email : divyagoel.jmi@gmail.com) ; ORCID iD : <https://orcid.org/0000-0001-5189-6802>

⁴ *Senior Assistant Professor*, The Business School, University of Jammu, Jammu - 180 006, Jammu & Kashmir. (Email : saloneepadyar@gmail.com) ; ORCID iD : <https://orcid.org/0000-0001-8459-822X>

⁵ *Senior Lecturer*, Faculty of Business and Communication, INTI International University, Persiaran Perdana BBN Putra Nilai, 71800 Nilai, Negeri Sembilan. (Email : sharmila.devi@newinti.edu.my) ; ORCID iD : <https://orcid.org/0000-0002-4569-8321>

⁶ *Head of Research*, Rushford Business School, Maihofstrasse 76, 6006, Lucerne, Switzerland & *Research Fellow*, INTI International University, Malaysia. (Email : profanuj15@gmail.com) ; ORCID iD : <https://orcid.org/0000-0002-1205-2794>

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Generative AI signifies an artificial intelligence model that can generate innovative data based on existing cultivated data. These models can generate outcomes in diverse areas, such as music, images, data, and text (Rudolph et al., 2023; Zhou et al., 2023). ChatGPT is an AI model developed by OpenAI on November 30, 2022, with wide-ranging applications (Aaradhi & Chakraborty, 2024; Biswas, 2023a; McGee, 2023). It stimulates deep learning to generate dissertations, stories, rhymes, and code with no additional training. The model is highly sophisticated and multipurpose in handling various tasks, including customizing answers as per need of length, language, style, analysis, format, and translation. Ekin (2023) advocated that quick responses allow students to answer their academic queries on time. It helps them to learn uninterruptedly. In the same line, Chiu et al. (2024) stated that AI-based chatbots may enhance the student's motivation to learn new skills. The paper intended to establish and test a technology acceptance model (TAM) based hypothesis for understanding the acceptance, use, perception, and learning motivation of using ChatGPT among higher education management students. The paper attempted to explore how students perceived the use of ChatGPT, its usefulness, behavioral intentions (BI), and motivation to learn and implement ChatGPT in their daily academic activities. The research objectives of the present paper are as follows:

- How do university students perceive ChatGPT, and what factors influence their acceptance and usage of this technology?
- What is the role of their perception of learning and adopting ChatGPT among students, particularly in supporting learning motivation in the future?

India's National Education Policy 2020 primarily focused on instigating technology applications in education to promote digital literacy and improve the quality of higher education through transforming teaching and learning processes. Thus, it can be inferred that the present research topic supports the goals of NEP 2020 by exploring how Indian higher education students perceive intent behaviorally and find motivation for learning with ChatGPT. The factors identified through this research will help the developers to make ChatGPT more tailored for Indian students and enhance educational outcomes by offering more innovative learning solutions. The paper anticipated whether technology is likely to be embraced by its intended users (students) and motivated to learn it.

Literature Review

OpenAI was established by Elon Musk, Sam Altman, and colleagues in 2015 for developing artificial general intelligence (AGI). Open AI launched several models of AI research such as GPT-2 and GPT-3, and continued with the creation of ChatGPT. The foremost characteristic of GPT models is their ability to pre-condition large sentences and paragraphs of text data to re-adjust specific downstream tasks (Ray, 2023). The model is so powerfully pre-trained that it does not require any additional annotations for web pages, books, and unorganized comments (Ibrahim, 2023). ChatGPT is a generative pre-trained transformer based on a natural language model. ChatGPT development is rooted in a Natural language Processing algorithm (NLP) that autonomously comprehends and generates natural language. NLP is a division of AI that emphasizes allowing computers to recognize, interpret, and operate natural consumer language such as spoken or written language.

AI-ChatGPT in Education

AI-based technologies are being used in the education industry to improve learning and personalized teachings (Gill et al., 2023; Kanwal et al., 2023; Lee & Hwang, 2022; Zhai, 2022). AI technologies have escalated students' edification experiences and connected traditional classroom lectures and learning materials for personal growth at the university level (Bower, 2017). Another significant advantage of ChatGPT in higher education is the ability to

enhance personalized learning experiences (Qadir, 2023). ChatGPT carried learners personalized feedback, material support, and resources for contemplation of the learning process (Baskara, 2023). Furthermore, ChatGPT instigated students to seek information, ask for more clarifications, and collect feedback through a natural language process (Muñoz et al., 2023). This technology has acclimatized students' learning preferences, knowledge, examples, and explanations (Zhai, 2023). Therefore, this cooperative nature of ChatGPT stimulates student motivation, enthusiasm, and deeper content engagement (Qadir, 2023). Firat (2023), on the other hand, suggested that ChatGPT is an influential tool for autodidactic learners, open education, and increasing engagement through personalized feedback.

Technology Acceptance Model (TAM) in Education

Davis (1989) created TAM to anticipate how people would utilize and adopt the internet or information technology. TAM has been extensively confirmed by various computer behaviors, management, and social science scholars. According to the model, perceived usefulness (PU) and perceived ease of use (PEOU) are two main parameters to scrutinize the behavioral pattern of the computer end users. Davis (1989) defined PU as the independent probability of using a particular computer-based application in user work or life performance. The second factor, PEOU, refers to the degree to which the potential individual expects easiness in using a specific computer application. Two independent variables, PU and PEOU, set an end-user's views on a computer or technology expertise and, therefore, foresee users' attitudes toward it, which in turn forecasts its acceptance.

PU is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 320). In his words, “useful” refers to “capable of being used advantageously” (p. 320). Therefore, PU in using ChatGPT refers to use to the acquisition of knowledge, theoretical content, and personalized notes to improve academic performance. PEOU signifies “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989, p. 320). He highlights the term “ease” as “freedom from difficulty or great effort” (p. 320). Thus, the ease of using ChatGPT determines the self-determination of the students using it for learning new avenues for development. Many past studies have tried to acclimatize the TAM by adding new factors, for example, social influence, perceived risk, experience, choice (Dash & Chakraborty, 2021), BI (Siregar et al., 2023; Venkatesh et al., 2003), and personality traits (de Winter et al., 2024). BI is defined as “the degree to which a person has formulated conscious plans to perform or not perform some specified future behavior” (Warshaw & Davis, 1984, p. 214). Therefore, the interactive purposes of using ChatGPT by the students reflect their internal beliefs about the system. The variable BI precedes the behavioral expectation. TAM suggests that users' BI to exercise any technology or connected structure is based on two opinions: (a) PU and (b) PEOU. Table 1 summarizes the literature review stating the negative and positive use of ChatGPT.

Table 1. Literature Review

Authors	Country	Research Design/Sample	Constructs	Acceptance (N-Negative P-Positive)
Iqbal et al. (2022)	Pakistan Faculty Members	Qualitative (20)	Attitude toward using ChatGPT	N-Cheating, making lazy, not adding value P-Automated feedback, engagement, motivation
Shaengchart (2023)	Thailand	Quantitative (385)	Security, perceived ease of use, privacy, perceived usefulness, and utilization	N-Lack of trust and understanding P-Easy, improved learning and skills

Yilmaz et al. (2023)	Kazakhstan Science and Mathematics Education Program	Quantitative (239)	Student's perception of using Chat GPT	N-Social influencer P-Positive perception, higher motivation
Javaid et al. (2023)		Discussion Paper	Need and opportunities of ChatGPT in education	N-Ethical issues, inaccuracy, less jobs P-Virtual assessment, On-time training, hands-on services
AlDreabi et al. (2023)	Jordan	Survey (576)	Perceived ease of using ChatGPT	N-Ethical, limited content P-Enhanced self-education, Easy to use
Lai et al. (2023)	Hong-Kong Undergraduate Students	Survey Method (473)	Intrinsic motivation, intention to use, and perceived usefulness	N-Privacy concerns, Security Risks P-Learn new skills, Convenience
Jishnu et al. (2023)	India Ph.D. and M.Phil. Students	Quantitative (443)	Motivation to use ChatGPT	N-Plagiarism, Limited content P-Content creation, study notes, convenience
Siregar et al. (2023)	Indonesia	Quantitative approach (500)	Learning motivation	N-Lazy P-Positive learning
Bonsu & Baffour- Koduah (2023)	Ghanaian Higher Education	Mixed-Method (100)	Perceptions and intentions to use ChatGPT	N-Social media is a better source of knowledge P-Accuracy, convenience
Kanwal et al. (2023)	Pakistan Higher Education	Cross-sectional Teacher (600)	Integration and attitude of ChatGPT	N-Inaccuracy, less creativity P-Individualized assistance, greater lesson, academic rigor
Caratiquit & Caratiquit (2023)	Philippines, High School Students	Mixed-method (176)	Student motivation performances using ChatGPT	N-Inaccuracy, Privacy issues P-Learning motivation
Mohammed et al. (2023)	India-Arab Postgraduates	Quantitative Research (38)	Potential benefits writing skills using ChatGPT	N-Overreliance, Less human interactions P-Writing assignments, translating texts
Sallam et al. (2023)	Jordan Healthcare	Quantitative (458)	Attitude, social influence, and anxiety using ChatGPT	N- Social withdrawal, decreased productivity P-Communication skills, easy access

Research Methodology

🔗 **Research Design :** The exploratory and descriptive research design was undertaken to gain familiarity and descriptive insights into the research objectives.

🔗 **Data Collection :** The study used primary survey data as well as secondary reputed articles to address the research questions. For the early stage, we collected quantitative data through survey analysis. For each statement in the survey, the students were questioned to weigh their consensus with a construct on a Likert scale. The study ranges from 1 to 5, where 1 denotes “*strongly agree*” to 5 as “*strongly disagree*.” The 38-item questionnaire items were meticulously prepared using the standard set of items validated in the education sector.

✍ **Sampling Techniques :** This study selected simple random sampling to take advantage of equal opportunity to participate. Random sampling provides helpful statistics for answering the hypotheses (Creswell, 2009).

✍ **Sampling Framework & Sample Size :** The survey comprised of management students from universities in four different locations: Delhi, Bhopal, Gujrat, and Jammu & Kashmir. Furthermore, the questionnaire was circulated among the 300 management students from four different universities to ensure representative and accurate data.

✍ **Time Duration of the Study :** The questionnaire was available online for a duration of two months, from December 2023 to January 2024, for an adequate response rate.

✍ **Measurement Scales :** The questionnaire entailed four sections: Five demographic questions on age group, gender, education, specialization of subject, and university course enrolled. The second section covers five closed-ended questions to know the basic level of consideration of ChatGPT from students' view. For instance, "Have you heard and used ChatGPT technology?" "How easy it was?" "Source of heard," and "Influence of peers in using it." The third section asked for two open-ended questions to provide flexibility for the students to respond. For illustration, "Have you used ChatGPT before? If yes, for what purposes? If No, state the reason Why." This allowed the students to answer their opinions and motivation to use. The last section comprised of 26 closed-ended questions on five constructs, namely: perceived usefulness, three items; perceived ease of use, three items; behavioral intention to use, three items; perception toward using ChatGPT (P-ChatGPT), seven items; and student learning motivation (MOT), ten items.

✍ **Software Used :** The study used a mixed-method research approach. The study combines both the elements of qualitative and quantitative research techniques. This method allows researchers to explore various perspectives and panoramic views on research questions (Shorten & Smith, 2017). The authors utilized IBM - SPSS Statistics (Version 27) to conduct statistical quantitative analysis. For qualitative research, MAXQDA 2022 (VERBI Software, 2022) was used.

✍ **Reliability Values of Scales :** The survey instrument's reliability was tested using Cronbach's alpha values. The score values of the research instrument should be greater than 0.7 for impartial results.

✍ **Ethics Consent to Participate :** This study considered ethical approval as a key principle. Informed and voluntary consent was obtained from all the participating respondents. To safeguard their privacy and freedom to participate, data protection measures were implemented. No participant was involuntarily engaged in or participated in any form.

The research hypotheses are:

✍ **H₀₁ :** There is no statistical significance of PU on the perception of using ChatGPT among university students.

✍ **H₁ :** There is a statistical significance of PU on the perception of using ChatGPT among university students.

✍ **H₀₂ :** There is no statistical significance of PEOU on the perception of using ChatGPT among university students.

✍ **H₂ :** There is a statistical significance of PEOU on the perception of using ChatGPT among university students.

✍ **H₀₃ :** There is no statistical significance of behavioral intention on the perception of using ChatGPT among university students.

✍ **H₃ :** There is a statistical significance of behavioral intention on the perception of using ChatGPT among university students.

↪ H_{04} : There is no statistical significance of perception of using ChatGPT on student learning motivation among university students.

↪ H_4 : There is a statistical significance of perception of using ChatGPT on student learning motivation among university students.

Analysis and Results

Section I

The descriptive study was conducted using IBM SPSS Statistics (Version 27) to calculate the percentage analysis, counts, and hypotheses testing. The survey data collected through Google Forms filtered missing values, verified, categorized, and imported to the software before analysis. The final sample reached was 236. Table 2 comprised of 54% male and 46% female students. Out of the total sample, 81% were from the public, and 19% belonged to the private university. A total of 78% of the students were enrolled in postgraduate courses (MBA), and only 22% were undertaking BBA. However, there were some variations in terms of specialization. A very low percentage of students had taken information technology (0.5%) and logistics (0.5%). The analysis displays a higher specialization percentage in finance (34%), marketing (26%), and human resources (22%), followed by others (17%). The participating age group of the students was between 18–20 (11%) and more than 20 (89%) years.

Section II

On the question, “Have you heard of ChatGPT Technology?” A total of 96% of the students in all universities claimed “Yes,” whereas only 4% stated that they had not heard of ChatGPT technology before. On the opinion “From which source have you heard about ChatGPT?,” friends (42%) played a major role in “word of mouth.” On the other side, social media, with 38% is a noteworthy podium of communication about ChatGPT. Interestingly, the percentage is very low in universities (9%), where students study and cultivate their academic skills. When it

Table 2. Sample Statistics

Demographic	Group	N (236)	Percentage
Gender	Female	108	46
	Male	128	54
University	Public	190	81
	Private	46	19
Course	Undergraduate	52	22
	Postgraduate	184	78
Specialization	Human Resources	52	22
	Marketing	61	26
	Finance	80	34
	Information Technology	1	0.50
	Logistics/Supply Chain Management	2	0.50
	Others	40	17
Age	Between 18–20 years	26	11
	More than 20 years	210	89

comes to using ChatGPT technology, 34% of the total students claimed it was used “occasionally,” whereas the “frequently” and “very frequently” percentages are not of much difference. Only 8% of the participants never used ChatGPT technology. The fourth open-ended question asked was, “How easy is it for you to use ChatGPT?” The percentage analysis showed that 49% of the participants found it difficult and 26% more difficult to use. Surprisingly, only 2% found it easy. Lastly, on the decision to use ChatGPT, 33% of the students were slightly influenced by their peer students or instructors. Most of the decision to use ChatGPT is independent, i.e., 26% of the total was not at all influenced by classmates or instructors.

Section III

Open-ended comments on the purpose of using ChatGPT and how they have used for learning authors used MAXQDA Software. It is a software package envisioned to analyze qualitative and mixed data (Kuckartz & Rädiker, 2019). To perform the analysis, all comments were converted into 236 standardized transcripts, i.e., delimited text files (txt.). The software can analyze a wide range of data from audio, video, text, social media data, and spreadsheets. The study executes the following steps further: (a) Import transcripts under the new project ; (b) Highlight the code function to mark category names ; (c) Reassess color codes ; (d) Activate all documents for analysis ; (e) Visualization of data. To explore the hidden pattern and visualization of the data, the author performed code frequency and word cloud. Codes make “groups to form categories and investigate their relationship with each other” (Rädiker & Kuckartz, 2020, p. 38). The study implemented a Code Technique to identify recurrent patterns. The focus code method is designed to identify “multiple layers of meaning and to delineate variations.” The study extricates category names for further qualitative data. The categorization of code is used for “classification, reduction, abstraction, and attribution that can be used for describing patterns” (Kelle & Kluge, 2010, p. 60). To exhibit the purpose of using the ChatGPT and to identify the hidden motivations, the study executed the Theme Categories technique. This works on communal patterns of thinking. On the question, “Purpose of Using ChatGPT,” Table 3 elucidates the frequency of categories that motivate students to use ChatGPT.

A *Word Cloud* is a candid method to visualize the most common words or patterns displayed. The font size of a

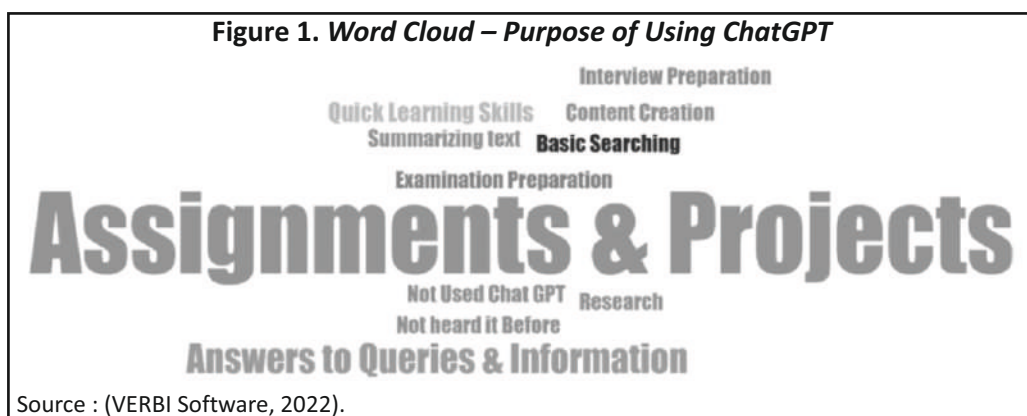
Table 3. Purpose of Using ChatGPT

Categories (Motivation to use)	Frequency	Percentage
New Alternative to Google	2	0.85
I have not heard of it before	17	7.20
Interview preparation	7	2.97
Examination preparation	8	3.39
Basic searching	17	7.20
Not used Chat GPT	13	5.51
Answers to queries & information	51	21.61
Quick learning skills	24	10.17
Assignments & projects	96	40.68
Summarizing text	3	1.27
Research	8	3.39
Content Creation	5	2.12

Source : (VERBI Software, 2022).

word depicted in a word cloud is decided by its frequency. To break down the frequency of the word cloud, the stop list function was executed (elimination of “the,” “a,” “an,” and “of”).

➤ **Purpose of Using ChatGPT :** On this question, students answered very vibrantly and vividly. The MAXQDA outcome highlighted 12 key themes based on the frequency of shared words or texts received. The highest frequency code is “Assignments & Projects” (40%), and the last word used is “Alternative to Google” (0.8%) search engine exhibited in Table 3. The word cloud is displayed in Figure 1. The font size of “Assignments & Project” is large, followed by “Answers to Queries & Information.”



Under Assignments & Projects, students agreed to use ChatGPT for making academic notes, presentation making, class projects, and completing last-minute assignments. In Queries & Information, students asked Chat GPT to prepare speech lines, exercise to lose weight, finance tools, the latest smartphone, and even prepare a diet chart. The third most used text was “Quick Learning Skills,” with a 10% contribution to the total percentage. Students claimed that they used ChatGPT to learn speech skills, summarizing skills, and vocabulary skills.

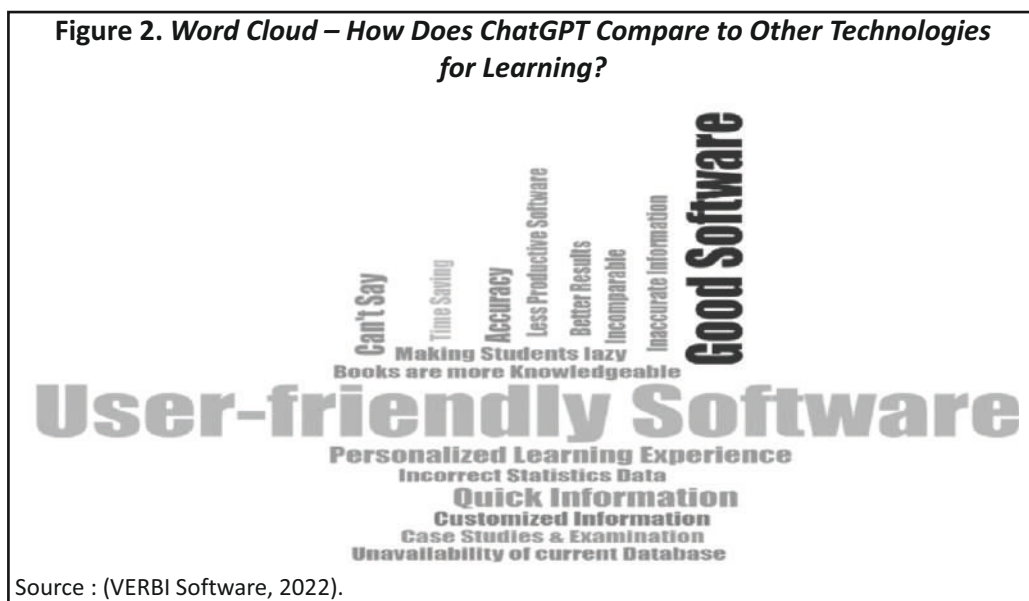
➤ **ChatGPT Compared to Other Technologies for Learning Interestingly :** The analysis derived 18 distinctive themes, which confirmed that students perceived learning motivation in divergent ways. The comparability theme in Table 4 displayed that user-friendly software is 32%, indicating the feature of the ChatGPT. The students found ChatGPT easier, 24*7 available, convenient, saves time, is free of cost, and requires no effort. A total of 24% of the students inputted the word “Good Software” solely. The theme's frequency is depicted in the learning word cloud in Figure 2.

Table 4. How Does ChatGPT Compare to Other Technologies for Learning?

Categories (Comparability with others)	Frequency	Percentage
Making students lazy	3	1.27
Better results	3	1.27
Books are more knowledgeable	4	1.69
Unavailability of current database	7	2.97
Unavailability of diagrams	1	0.42
Inaccurate information	4	1.69
Incorrect statistics data	4	1.69
Personalized learning experience	26	11.02

Incomparable	3	1.27
Cannot say	27	11.44
Time-saving	7	2.97
Less productive software	5	2.12
Accuracy	23	9.75
User-friendly software	76	32.20
Good software	57	24.15
Quick information	33	13.98
Case studies & examination	3	1.27
Customized Information	15	6.36

Source : (VERBI Software, 2022).



Section IV

Before testing the hypothesis, the research questionnaire confirmed the sample competency using the Kaiser–Meyer–Olkin (KMO) and Barlett's Test of Sphericity. Table 5 displays a value of 0.924, which is an excellent criterion for factor analysis and indicates the proportion of discrepancies in the variables (Kaiser, 1974). Barlett's test p -value > 0.05 shows that the correlation between the variables is zero. The p -value less than 0.05 (Bartlett, 1951) suggested that the correlation matrix is not distinctive.

To measure the internal consistency of a research instrument, we carried out Cronbach's alpha method. If the alpha level is less than 0.70, the instrument is less reliable for inferential testing. Table 6 shows that the Cronbach's

Table 5. Sample Adequacy – Validity Analysis

KMO-Sample Adequacy		0.924
Bartlett's Test of Sphericity	Approx. Chi-Square	4058.317
	<i>df</i>	325
	Sig.	<0.001

Table 6. Reliability Analysis

	Cronbach's Alpha	Standardized Items	No. of Items	Interpretation
Perceived Usefulness (<i>PU</i>)	0.827	0.832	3	Good
Perceived Ease of Use (<i>PEOU</i>)	0.773	0.774	3	Acceptable
Behavioral Intention (<i>BI</i>)	0.893	0.894	3	Good
Perceptions (<i>P-CHATGPT</i>)	0.747	0.768	7	Acceptable
Motivations for Learning (<i>MOT</i>)	0.944	0.944	10	Excellent

Table 7. Correlation Analysis

		Perceived Usefulness (<i>PU</i>)	Perceived Ease of Use (<i>PEOU</i>)	Behavioral Intentions to use ChatGPT (<i>BI</i>)	Perception Using ChatGPT (<i>P-CHATGPT</i>)	Students' Learning Motivation (<i>MOT</i>)
Perceived Usefulness (<i>PU</i>)	Pearson Correlation	1	0.602**	0.552**	0.385**	0.533**
Perceived Ease of Use (<i>PEOU</i>)	Pearson Correlation	0.602**	1	0.506**	0.363**	0.474**
Behavioral Intentions to use Chat GPT (<i>BI</i>)	Pearson Correlation	0.552**	0.506**	1	0.398**	0.434**
Perception using Chat GPT (<i>P-CHATGPT</i>)	Pearson Correlation	0.385**	0.363**	0.398**	1	0.347**
Students Learning Motivation (<i>MOT</i>)	Pearson Correlation	0.533**	0.474**	0.434**	0.347**	1

Note. **Values are significant at the (2-tailed) 0.01 level.

coefficient score for each value is more than 0.70, which shows greater internal consistency (Cronbach, 1951). For interpretation, George and Mallery (2003, p. 231) provided a rule of thumb for values “> 0.9 is Excellent, > 0.8 is Good, > 0.7 is Acceptable, > 0.6 is Questionable, > 0.5 is Poor, and < 0.5 is Unacceptable.”

The correlation analysis measures the magnitude and path of the two variables. The association between the two variables becomes positive and strong when the value goes toward +1, where 0 denotes a weaker association (Cohen et al., 2003). Table 7 shows the coefficient of correlation, significance test of 0.01 (2-2-tailed) for identified independent variables contributing to motivation for learning (*MOT*) are *PU*, *PEOU*, *BI* to use ChatGPT (*BI*), and perceptions using (*P-CHATGPT*).

Multiple regression analysis was executed to determine the substantial impact of independent variables on the predicted variables. The result describes the value of *R* as 656, *R*² as 0.430, and the adjusted *R* square as 0.420, which implies that the independent variables can project 42% of the variance in student learning motivations.

Table 8. Coefficients – Equation

Model	Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.
	<i>B</i>	Std. Error	Beta		
1 (Constant)	0.820	0.101		8.149	0.001
<i>PU</i>	0.458	0.048	0.533	9.644	0.001
<i>PEOU</i>	0.247	0.070	0.239	3.541	0.001
<i>BI</i>	0.204	0.072	0.198	2.849	0.005
<i>P-CHATGPT</i>	0.124	0.054	0.152	2.287	0.023

Note. Adjusted *R*² = 0.420 (*n* = 237), *F* = 93.00, Sig. = 0.000.

Additionally, the F -value of the analysis is 43.586 (sig. < 0.001), indicating that the regression model is significantly fit. The multiple linear regression equation in the present study, as shown in Table 8, could be determined as follows :

$$Y = \beta_1 PU_1 + \beta_2 PEOU_2 + \beta_3 BI_3 + \beta_4 P-CHATGPT_4 \dots\dots\dots(1)$$

The student learning motivation (MOT) can be achieved by PU (0.048, $p = 0.001$), PEOU (0.070, $p = 0.001$), BI (0.072, $p = 0.005$), and P-CHATGPT (0.054, $p = 0.023$). Table 8 depicts the constant as 0.820 with a positive and significant value. All hypotheses, H_{01} , H_{02} , H_{03} , and H_{04} , cannot be accepted.

Discussion and Conclusion

The results of this study aligned with Mallow (2023), indicating four benefits for the students: (a) 24*7 availability, (b) Quick and accurate answers, (c) personalized recommendations for learning, and (d) advanced study skills. The outcome of qualitative results confirms that management students used ChatGPT to learn quick skills and crack daily queries. AI-based education tools like chatbots, intelligent tutoring, adaptive learning, and interactive online courses can enhance students' performance and motivation (Ahmad, 2020; Ausat et al., 2023; Srinivasa et al., 2022). The extremely interactive software like ChatGPT encourages students to learn self-reliantly. The study establishes that students consider ChatGPT as a “Good Software.” On the other hand, it will not completely replace teachers or instructors. The participants of the present study specified that using such software makes them “Lazy” and “Books are more Knowledgeable.” Captivatingly, the word cloud on the purpose of using ChatGPT illustrates that 5% had not used it and 7% never heard of it.

ChatGPT is designed to assist students in learning skills in writing skills such as grammar, spelling errors, and punctuation (Božić & Poola, 2023). Language learning skills like virtual tutors and chatbots help in practicing the language and sharing instant feedback (Božić & Poola, 2023). However, this learning could be inaccurate and limited. This over-reliance attitude lessens creative and critical thinking skills. The ChatGPT software is susceptible to many disadvantages as well. The findings of Iqbal et al. (2022) revealed that teachers are concerned about lacking value in the learning process and promoting laziness. In the queue of drawbacks, many scholars exhibited the question of plagiarism (Božić & Poola, 2023; Mohammed et al., 2023; Perkins, 2023; Tlili et al., 2023), limited accuracy (Biswas, 2023b; Božić & Poola, 2023; Lund & Wang, 2023; Sinha et al., 2023), ethical and privacy issues (Božić & Poola, 2023; Zhai, 2022), cheating (Tlili et al., 2023), and loss of human interaction (Zhai, 2022).

To sum up, generative AI empowers users to enhance cognitive processes, facilitate experiential learning, and embrace impactful learning experiences (Sadeghinejad & Najmaei, 2023). In the light of the education setting, it helps business students with entrepreneurial skills and knowledge they require in the unpredictable world of the market (Sadeghinejad & Najmaei, 2023). A study conducted by Nichter (2021) indicated that the positive impact of mobile learning experience on student engagement is facilitated by self-regulation motivation. The ChatGPT software can act as a wide educational resource to learn and upgrade (Caratiquit & Caratiquit, 2023; Javaid et al., 2023). ChatGPT does not completely replace natural learning techniques such as social interaction, observations, and guidance throughout the journey of education and development. However, it provides a platform for connectedness to motivate and engage in learning activities.

Conversely, some researchers claimed that it makes students over-dependent on technology (Božić & Poola, 2023). This over-reliance attitude minimizes students' free thinking and creativity skills, which are significant for both personal and academic platforms (Fuchs, 2023). This easy accessibility of information, which is fabricated and limited with some degree of inaccuracy, leads to “infodemics among the young generation” with less life learning skills but more imprecision skills.

Managerial and Theoretical Implications

The present empirical research offers contributions for both theoretical and managerial implications. It serves to corroborate the imperative correlation among the studied variables—PU, PEOU, BI, and perception within the TAM theory and learning motivations among university students. However, the potential practitioners of the TAM model theory assert that the limitation of using it in terms of measuring the BI of any individual is highly subjective. The BIs are affected by previous technology experience, preparedness to use new technology, personality traits, and the value generated by IT functions and inspired by colleagues. The study provides empirical evidence that confirms the existing TAM model on technology acceptance and learning motivation reasons, for instance, user-friendly software to adopt. The study highlights the positive as well as negative influence of the usage of ChatGPT on academic assessment. The ChatGPT could make students lazy, encourage cheating, and lessen the reasoning approach. The findings stress upon the importance of ChatGPT in education and motivation settings. The key takeout is that management students willingly considered using ChatGPT for their readymade assignments and projects. However, they are unsuccessful in anticipating ethical issues like plagiarism and cheating and struggle with their self-learning, critical thinking skills, writing skills, and actively engaging themselves in group discussions and productive discourse. This research urges two proposals for higher education institutes' (HEI) policymakers and educators in the education industry; first, to ensure the potential use of ChatGPT in classrooms that benefit students' professional development. Second, support the ethical use of ChatGPT by making mandatory AI percentage submission reports with each task.

Limitations of the Study and Scope for Further Research

No research study is entirely unrestricted from limitations. The study is limited to higher education settings. The variables included are restricted to TAM model-based theory, accordingly, other variables could be considered to analyze a bigger representation. The role of ChatGPT is broadly used in the research area; if any student is using AI or ChatGPT, then they should be honest and attribute their work ethically. The study is also limited to only 236 respondents to be selected for conclusion. However, with a large sample size, the results can be more comprehensive.

Further research on ethical and privacy issues of using ChatGPT could be planned among different industries like research consultancies, language training institutes, and biotechnology firms. In addition, the use of AI presented an opportunity for educators to grade and create classroom content, activities, and assessments (Cooper, 2023; Kumar et al., 2023). There is potential for more research to be executed, including educators, policymakers, and students with diverse backgrounds in science, IT, pharma, and engineering. Universities should create ethical frameworks and standards to address the ethical and privacy concerns related to NLP models like ChatGPT.

Authors' Contribution

Dr. Sukhmeet Kaur comprehended the original draft, did the qualitative coding and interpretation, coding analysis on MAXQDA 21.0, and formal analysis to commence the empirical study. Dr. Babita Yadav generated the conceptualization of the idea, designed the questionnaire instrument, circulation of the questionnaire, and data collection. Dr. Divya Goel extracted reputed articles and executed the quantitative analysis on SPSS 27.0. Dr. Saloni Devi developed research methodology, research design, and verification of data curation. Dr. Sharmila Devi Ramachandaran oversaw the formal analysis, selected and reviewed the publications, and supervised Prof. Anuj Kumar's developed theory.

Conflict of Interest

The authors declare and agree with the contents of this manuscript and there is no association with any monetary or non-monetary interest in the subject matter to report.

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About the Authors

Dr. Sukhmeet Kaur holds the position of Research Fellow at INTI International University, Malaysia. Her core areas of research expertise include emotional intelligence, employee engagement, and human resources management. She holds six years of teaching experience in human resource management and organizational behavior.

Dr. Babita Yadav is presently working as an Assistant Professor in the Department of Business Management under the School of Commerce and Management at Doctor Harisingh Gour Central University, Sagar (Madhya Pradesh). She has around 35 research articles in her 18 years of academic experience.

Dr. Divya Goel is associated with Jaypee Business School, Jaypee Institute of Information Technology, Noida, as a faculty in HRM/OB. She is an experienced faculty with 20+ years of rich experience in teaching, research, and administration.

Dr. Saloni Devi is presently working as an Assistant Professor at The Business School, University of Jammu, Jammu (India). She has published many research papers in highly reputed and indexed journals/books. She has also presented research papers at many international conferences.

Dr. Sharmila Devi Ramachandaran holds the position of Senior Lecturer at INTI International University. Her passion for Human Resource Management (HRM) has also driven her to explore various facets of this discipline, including green HRM, women empowerment, women's leadership, spiritual intelligence, leadership development, and talent management.

Dr. Anuj Kumar works as Head of Research and Associate Professor at Rushford Business School, Switzerland. He is a Research Fellow at INTI International University, Malaysia. His significant thrust areas are marketing, international business, and general management. He has published over 80 publications in reputed SCOPUS/Web of Science/SCI/ABDC/UGC - CARE listed journals.