

Perceived Usefulness and Ease of Use of GPT Technology in Enhancing Staff and Students Creativity in Management and Social Science

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Abstract:

The reality of education today includes addressing the digital transformation affecting universities and other educational institutions. This study investigates the relationship between generative pre-trained transformer (GPT) technology and the perceived enhancement of creativity among students and academic staff in the management and social science disciplines. Methodologically, the study adopted a survey research method with the aim of analyzing data collected from a statistically sampled 90 respondents from all departments within the Faculty of Management and Social Sciences. The responses collected were analyzed using partial least squares structural equation modeling. The results revealed a significant association between perceived usefulness, perceived ease of usage of GPT technology, and creativity. The study concluded that though the use of GPT technology enhances learning in that it helps to improve creativity in students and lecturers, its weak influence shows that it doesn't have the monopoly of enhancing creativity in lecturers and students without other measures put in place to enhance creativity.

Keywords: ChatGpt, TAM, Perceived Usefulness, Perceived Ease of Use.

1. Introduction

The reality of education today includes addressing the digital transformation affecting universities and other educational institutions (Anderson, Belavy, Perle, et al., 2023). The development of artificial intelligence (AI) has led to digital disruption in the education system because of the rapid advances it necessitates for education (García-Peñalvo, 2023). Along these lines, UNESCO (2019) differentiates three dimensions of linking AI and education: (i) learning to use AI tools in the classroom; (ii) learning to know AI and its technical possibilities; and (iii) raising public awareness of the impact of AI on people's lives. By the first quarter of 2023, ChatGPT was one of the most often used tools provided by AI. ChatGPT, a groundbreaking chatbot, was recently launched and is already making waves (Sundar, 2023). In order to interact with the user in a natural way, this AI-driven bot uses artificial intelligence. It was trained on extensive data, which allows it to converse just like a human would, giving the impression that you are talking to a real person rather than a machine (Cousins, 2023). ChatGPT is an open-source natural language processing model developed by OpenAI (Vallance, 2022). It is intended to produce human-like, realistic dialogue in response to user input. ChatGPT employs advanced dialogue management techniques along with a transformer network that is built on GPT-3, the biggest unsupervised language model yet developed. Compared to conventional rule-based or keyword-matching chatbots, this enables them to produce more complicated and natural-sounding dialogues. ChatGPT is also able to maintain context across multiple messages and remember facts from previous conversations, making it suitable for a wide range of applications such as customer service bots, virtual assistants, and more (Hughes, 2022). Accuracy, reaction time, and quality of user engagement are ChatGPT's primary performance indicators. The model is renowned for its quick reaction rates, which allow it to remain relevant and coherent across extended conversations. Though usually high, accuracy might fluctuate depending on the intricacy of the query and the constraints included in the training set. User interaction with ChatGPT is generally positive, marked by an intuitive and engaging conversational style model (Olaniyi & Omubo, 2023; Abdullah, Madain, & Jararweh, 2022). However, the model can sometimes generate responses based on incorrect or outdated information (known

as "hallucinations"), highlighting the need for ongoing improvements in data quality and model refinement (Omogoroye Olaniyi, Adebisi, Oladoyinbo, T. O., & Olaniyi 2023). While the AI-driven chatbot can generate sophisticated conversations in response to user input, it also has the ability to complete a variety of tasks, such as writing essays or completing tests. There's a chance that students may use the chatbot to replicate answers or get assistance with homework, which might result in cheating. There is also a concern that the use of ChatGPT could have a negative impact on students' learning experiences (Zhai, 2022).

1.1. Research Objectives

The pivotal target of this research is to determine the overall influence of GPT technology on creativity in management and social science. Specifically, this research aims to:

1. To evaluate the connection between the perceived usefulness of GPT technology and creativity.
2. To investigate the connection between the perceived ease of use of GPT technology and creativity.

1.2. Research Hypotheses

The broad hypothesis of this research is stated as:

1. $H_0: \beta_1 = \beta_2 = 0$ (There is no connection between perceived usefulness and perceived ease of use of GPT technology and creativity.)

Specifically, the hypotheses are stated as:

1. $H_0: \beta_1 = 0$ (There is no connection between the perceived usefulness of GPT technology and creativity).
2. $H_0: \beta_2 = 0$ (There is no connection between perceived ease of use of GPT technology and creativity).

1.3. Significance and Relevance of the Research

1. Understanding the potential of GPT technology for enhancing creativity in academic settings.
2. Informing the integration of technology into teaching and research practices.
3. Contributing to the literature on the intersection of technology and creativity in education.

2. Literature Review

2.1. A Brief Overview of ChatGPT

One kind of huge language model that has completely changed the field of ordinary language processing is GPT Chatbot technology. With the help of a plethora of textual data from the internet, the research group OpenAI in San Francisco developed GPT models that can generate write-ups that take the place of a human being when prompted. The number of ChatGPT users has remarkably increased by over one million in just a week after its launch on November 30, 2022 (Mollman, 2022). ChatGPT is a large language model (LLM) with the capacity to produce suitable responses to context and engage in natural-sounding conversation (Deng & Lin, 2022).

In educational settings, 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, 2023). This also has the ability to understand and have an appropriate response to complex prompts, which makes teaching and learning more effective. It can write music, write essays for students, create and debug computer code, and even provide exam answers based on the situation in which it is employed (Jürgen Rudolph, Samson Tan, and Shannon Tan, 2023; H. Holden Thorp, 2023).

2.2. Use of ChatGPT in Education

The incorporation of artificial intelligence (AI) into education has heralded a transformative era in the way students learn and faculties teach. ChatGPT, which is driven by the combination of language processing and machine learning, is an innovative technology that has made its way into education institutions (Rasul *et al.*, 2023). Obaid, Ali, and Yaseen (2023) have highlighted the numerous advantages of using ChatGPT in

learning, including improving accessibility by providing students and faculty with 24/7 information accessibility and assistance, promoting the learning experience by offering personalized support, and improving language skills by offering grammar suggestions and vocabulary enhancements.

Additionally, it assists students in their preparation of assignments and exams, conducting research activities, and writing academic articles without being easily identified by plagiarism detection programs, which may raise ethical concerns (Obaid, Ali, & Yaseen, 2023). In a dynamic learning environment, ChatGPT is seen as an inventive, transformational, and versatile artificial intelligence that can be used as a flexible resource by instructors and students. Students benefit from ChatGPT's ability to provide instant clarification on complex concepts, assistance with assignments, and access to a wealth of information, enhancing their academic journey (Nautiyal, 2023).

2.3. Conceptual Clarification of Perceived Ease of Use

Perceived Ease of Use, or perceived ease of use, refers to the extent to which users perceive that a technology or system can be used easily without requiring extraordinary effort or skills (Handayani & Sudiana, 2017). Within the framework of this study on ChatGPT usage, this variable pertains to how much users believe engaging with the platform is easy and rapid. Users are more likely to accept and utilize ChatGPT if they perceive it to be easier to use.

2.4. Theoretical Framework

This research is primarily anchored on the model of technological acceptance. TAM is an influential framework that can be applied to predict when and how people will use a new technology (Davis, 1989). As to the paradigm, perceived usefulness (PUS) and perceived ease of use (PEOU) are the two primary elements that impact people's reactions to utilizing informative technology. PEOU is a person's assessment of how simple or hard it is to utilize a piece of technology, based on the mental resources needed. PUS can be interpreted as one's belief that a certain system will improve their productivity when doing a specific activity (Iqbal *et al.*, 2022).

2.5. Empirical Studies and Evidence

Several studies have explored the perceptions and attitudes towards the use of Generative Pre-trained Transformer technology, particularly ChatGPT, in learning contexts, focusing on its potential to enhance creativity among students and staff in management and social science disciplines.

Iqbal, Ahmed, and Azhar (2022) investigated teachers' attitudes towards using ChatGPT in education. They found that while faculty members showed concerns about probable risks such as cheating and plagiarism, they also acknowledged the benefits of ChatGPT in simplifying lesson assessment and planning. However, the study highlighted the need for more education and information for faculty to make informed decisions about ChatGPT usage.

Dahri *et al.* (2024) conducted a mixed-methods study to explore the acceptance of ChatGPT as a tool for metacognitive self-regulated learning (MSRL) among academics. High acceptance levels were discovered, which were impacted by elements including positive attitude, metacognitive self-regulated learning, enjoyment, trust, perceived AI utility, and social influence. The study highlighted ChatGPT's capacity to improve MSRL and its positive reception among academics.

In their investigation of university students' acceptance of ChatGPT, Romero Rodríguez *et al.* (2023) found that a variety of factors, including price value, habit, hedonic incentive, performance expectancy, experience, and enabling conditions, affected students' behavioral intention to use ChatGPT. According to the study, students had favorable opinions about ChatGPT, particularly regarding its usefulness for complex thinking.

Elkhodr, Gide, Wu, and Darwish (2023) explored ICT students' perceptions towards ChatGPT, finding a positive perception of its usefulness and enjoyable learning experience among students. According to the study, students who used ChatGPT performed better in terms of functionality, user flow, and material understanding compared to traditional search engines.

Faruk, Rohan, Ninrutsirikun, and Pal (2023) adopted a psycho-technical approach to examine university students' acceptance and usage of ChatGPT, highlighting the influence of factors such as perceived usefulness, ease of use, perceived humanness, novelty value, and psychological gratifications. The study suggested that perceived usefulness significantly predicted ChatGPT usage, emphasizing its contextual and psychological influences.

Huallpa (2023) investigated the ethical considerations of using ChatGPT in university education, revealing moderately positive social attitudes towards its integration. Participants emphasized the significance of clear institutional rules for privacy and data security, emphasizing the challenges of integrating ChatGPT into higher education environments.

The proliferation of artificial intelligence (AI) tools, including ChatGPT, has significantly impacted various professional landscapes, prompting a multifaceted evaluation of user perceptions and emerging trends (Marquis, Oladoyinbo, Olabanji, Olaniyi, & Ajayi, 2024). In a study encompassing 1623 professionals across diverse industries, it was discovered that AI tools greatly enhance efficiency in jobs such as data analytics and the making of decisions. However, they also present issues with regard to job displacement, moral ramifications, and maintaining social balance, which emphasizes the necessity of skill development and workforce adaptability.

In academia, particularly in academic writing, AI technology like ChatGPT has emerged as an innovative solution capable of enhancing efficiency and quality (Shofiah & Putera, 2024). Lecturers perceive AI tools positively, welcoming them as supplementary tools to back up learning and investigation processes. Still, concerns about potential excessive dependence on AI and the influence it has on students' critical and creative thinking potentials were noted.

Insights into student perceptions of AI tools, including ChatGPT, were investigated at the University of Limerick, Republic of Ireland (Irfan, Murray, & Ali, 2023). The study revealed a mix of hope and fear among students regarding the use of AI tools in their educational journey and critical thinking. While AI tools offer advantages in education, including enhancing critical thinking, concerns about their limitations and impact on learning were evident.

Similarly, in Ghanaian higher education, there is a growing interest in understanding students' perceptions and intentions to use ChatGPT (Bonsu & Baffour-Koduah, 2023). While there was no statistical connection between perception and intent to use ChatGPT, students generally held positive perceptions towards its adoption in education, advocating for its integration.

3. Method

3.1. Research Design

A survey study approach was used to collect data from students and academic staff in the faculty of management and social sciences. The survey research design involves gathering data from a sample of people or groups via surveys or questionnaires that are predetermined in terms of their content.

3.2. Target Population

The study's intended audience was the students and staff of Thomas Adewumi University. The collection of people or entities from which the researcher plans to select a sample for the study is referred to in research as the target population. It is a representation of a more substantial group of people or things that have particular traits or qualities that the research study is interested in.

3.3. Study Sample

The study's sample entails the students and academic staff of the university's faculty of management and social sciences. The sample is the chosen subgroup of the target population, and it serves as the source of data required to draw conclusions about the characteristics, behaviors, or opinions of the larger population.

3.4. Sampling Technique Adopted and Sample Size Determination Method

A statistical (also known as probability) sampling method was used for this study. With this approach, the sample size can be ascertained in the presence of probability. Specifically, the study employed Taro Yamane's sample magnitude ascertainment formula to estimate the minimum number of respondents that are needed to partake in providing responses to the items in the questionnaire. The formula is stated as:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = sample magnitude, N = population magnitude, and e = margin of error, in this case, 5% or 0.05

The population of academic staff in Thomas Adewumi's faculty of management and social science is 22, while that of the students is 104. The sum of these two values equals 126, which is the population size of N . Therefore, substituting the values obtained into the earlier stated formula gives a sample size (n) of 96, as shown below:

$$n = \frac{126}{1 + 126(0.05)^2}$$
$$n = 96$$

3.5. Types and Sources of Data

Data from both primary and secondary sources was used. Primary data was gathered from the sample respondents through an electronic questionnaire created with Google Forms and distributed via the WhatsApp platform. Secondary data was collected from the published related journal articles.

3.6. Mode of Data Collection and Validation

Data was collected through an electronically administered questionnaire shared with the participants via WhatsApp. Data validation was ensured by enabling the "required" button for each question in the Google Form.

3.7. Methods of Data Presentation and Analysis

The data was presented in tabular form using Microsoft Excel worksheets. To analyze the data, both descriptive and inferential statistics were employed. Descriptive analysis was employed to summarize and describe the data, while inferential analysis was utilized to draw conclusions and make inferences about the population. Partial least squares structural equation modeling (PLS-SEM) was used to examine the gathered data. The use of PLS-SEM was because it could accurately estimate the parameters within a minimum sample size (Thoa & Nhi, 2020). SEM involves two stages, which are the measurement model and the structural model.

The purpose of the measurement model is to ascertain its fitness using certain criteria. The structural model examines the relationships between the constructs and their effects. The study made use of three latent variables and nine indicators. The exogenous variables are perceived usefulness (PUF) and perceived ease of use (PEOU), while the endogenous variable is creativity (CRTY). The construct PUF has five indicators, which are timeliness (PUF1), reliability (PUF2), accessibility (PUF3), efficiency (PUF4), and effectiveness (PUF5); PEOU has four indicators, which are flexibility (PEOU1), understandability (PEOU2), ease of learning (PEOU3), and convenience (PEOU4); and CRTY has three indicators, which are knowledge (CRTY1), skills (CRTY2), and intelligence (CRTY3).

3.8. Model Specification

In order to estimate or analyze the perceived usefulness and ease of use of GPT technology in enhancing students and staff creativity in management and social science, the estimation model is a multiple regression model, which is specified as follows:

$$CRTY = f(PUF, PEOU) \dots\dots\dots (3.1)$$

Where:

CRTY=creativity

f=function of

PUF = perceived usefulness of GPT technology

PEOU = perceived ease of use of GPT technology

Therefore, the econometric linear functional specification of the modified function is stated as:

$$CRTY = \beta_0 + \beta_1PUF + \beta_2PEOU + U$$

Where:

β_0 is the coefficient of the constant.

β_1 and β_2 are the coefficients of regression for each independent or explanatory variable.

U is an unspecified independent variable in the established model. In other words, it is the error term, which means the term or variable used to represent all other independent variables that have an effect on the dependent variables but are not specifically mentioned and captured in the model.

4. Results

4.1. Introduction

This section presents the respondents demographic information and the results of the analysis of the objectives. Survey forms were administered to 96 respondents, and 90 responses were submitted. This shows a return or response rate of 94%.

4.2. Socio-demographics of the Respondents

Table 1 gives an insight into the socio-demographic information of the respondents. It shows that 46.7% (42) of the respondents are male, while 53.3% (48) are female. Furthermore, the age distributions of the respondents' shows that 92.2% (83) of the respondents are between the ages of 10 and 40, while 7.8% (7) are between the ages of 40 and 70. Also, the designation category reveals that 24.4% (22) are lecturers and 75.6% (68) are students. This indicates that a higher percentage of the respondents are female, between the ages of 10 and 40, and are students.

Table 1: Socio-demographics of the respondents

Categories	Frequency	Percentage
Gender		
Male	42	46.7
Female	48	53.3
Total	90	100
Age		
10 – 40	83	92.2
40 – 70	7	7.8
Total	90	100
Designation		
Lecturer	22	24.4
Students	68	75.6
Total	90	100

4.3. Test for Multicollinearity

The test for multicollinearity is to ascertain the absence of a high correlation among the exogenous variables used for the study. This was achieved through the use of the Variance Inflation Factor (VIF). Values less than 3.0 for VIF are an indication of the absence of multicollinearity (Shagari, Abdullah, & Saat, 2017). The values for VIF as presented in Table 2 are between 1.610 and 2.898. This indicates an absence of multicollinearity among the exogenous variables.

Table 2: Test for multicollinearity

Variables	Variance Inflation Factor
PEOU1	1.610
PEOU2	2.008
PEOU3	2.336
PEOU4	1.903
PUF1	2.005
PUF2	2.407
PUF3	2.898
PUF4	2.740
PUF5	2.525

4.4. Results of Objectives

Structural Equation Modeling, which was employed in two stages, was used to analyze the collected data. The measurement model was the first stage, followed by the structural model.

4.5. The Measurement Model

The measurement model was done to examine the relationship between the latent variables and their respective indicators. The analysis of the model produced five results, which are the goodness of fit indices, factor loadings, Cronbach's alpha, composite reliability, construct validity, and discriminant validity. The goodness of fit indices are used to ascertain the fitness of the model for the study, and the ensuing results showed that SRMR ($0.045 < 0.08$), Chi-square ($4.398 < 5$), and NFI ($0.928 > 0.90$) are within the recommended values. Furthermore, the factor loadings show the degree of correlation between the latent variables and their respective constructs, that is, how much each indicator contributes to their respective construct. The values of the factor loadings should be greater than 0.7 to be acceptable (Hair, Hollingsworth, Randolph, & Chong, 2017). The results, which are presented in Table 3, showed that all the values are acceptable, with values ranging from 0.772 to 0.939.

Also, Table 4 shows the results for Cronbach's alpha, composite reliability, and construct validity. Both Cronbach's alpha and composite reliability were used to determine the internal consistency of the questionnaire and constructs, and the values were much greater than 0.8 and 0.7, respectively. The convergent validity, which is to ensure that the indicators converge to measure their respective constructs, was tested through the Average Variance Extracted (AVE) and must have values that are above 0.5 to be accepted (Hair *et al.*, 2017). The discriminant validity was established as the square root of the AVE of each construct is greater than its correlation with other constructs (Fornell and Larcker, 1981; Hair *et al.*, 2017). The results in Table 5 show that the values are acceptable. Figure 1 depicts the diagram for the structural equation modeling.

Table 3: Factor loading for the hidden variables and their gauges

Factors (Hidden Variables)	Loadings
CRTY1 <- CRTY	0.929
CRTY2 <- CRTY	0.939
CRTY3 <- CRTY	0.916
PEOU1 <- PEOU	0.772
PEOU2 <- PEOU	0.844
PEOU3 <- PEOU	0.876

PEOU4 <- PEOU	0.815
PUF1 <- PUF	0.804
PUF2 <- PUF	0.854
PUF3 <- PUF	0.880
PUF4 <- PUF	0.866
PUF5 <- PUF	0.857

Note: The factor loadings are computed for all the indicators of the constructs

Table 4: Construct reliability and convergent validity values

Variables	Cronbach Alpha	Composite Reliability	Average Variance Extracted (AVE)
Creativity	0.919	0.920	0.861
Perceived Ease of Use	0.846	0.851	0.685
Perceived Usefulness	0.906	0.907	0.727

Note: The reliability and validity tests are computed for the latent variables

Table 5: Discriminant validity

	CRTY	PEOU	PUF
CRTY	0.928		
PEOU	0.381	0.828	
PUF	0.372	0.447	0.853

Note: The discriminant validity tests are computed for the latent variables

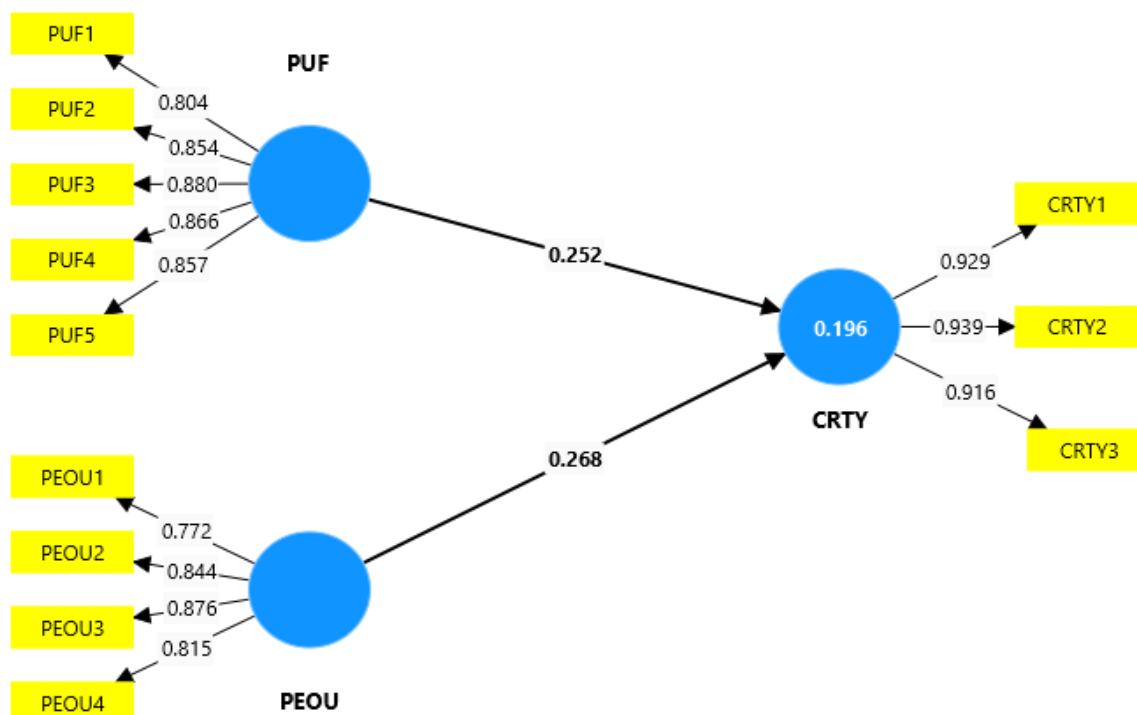


Fig 1: The Structural Equation Modeling for the Study

4.6. The Structural Model

The analysis of the structural model produced four results which are the R-square, F-square, and the path coefficients. The result of the R-square is 0.196. According to Hair *et al.*, (2017), R- square values from 0.25 and below are considered weak. This indicates that GPT technology has a weak effect and it is responsible

for only 19.6% variations in the creativity of students and lecturers. In addition, the result of the F-square revealed that PEOU has a value of 0.071 and PUF has a value of 0.063. Hair *et al.*, (2017) asserted that F values that are below 0.15 are weak, 0.15 to 0.35 are moderate while values above 0.35 are strong. This showed that both PEOU and PUF have weak effects on creativity.

4.7. To evaluate the connection between perceived usefulness of GPT technology and creativity.

The results of the connection between perceived usefulness of GPT technology and creativity is presented in Table 6. The paths coefficients results revealed that Timeliness (PUF1), Reliability (PUF2), Accessibility (PUF3), Efficiency (PUF4) and Effectiveness (PUF5) were significant and positively related with IQ. Also, result revealed that PUF impacted CRTY positively and significantly.

Table 6: Perceived usefulness of GPT technology and creativity

Relationships	Path Coefficients	t-values	p-values
PUF1 → PUF	0.227	4.719	0.000
PUF2 → PUF	0.248	8.089	0.000
PUF3 → PUF	0.235	6.939	0.000
PUF4 → PUF	0.233	2.936	0.000
PUF5 → PUF	0.229	5.613	0.000
PUF → CRTY	0.252	7.565	0.000

Note: *** Significant at statistical level $p < 0.05$ and $t > 1.96$

Note: The structural model is computed for the relationships between the latent variables and their constructs and between the endogenous and exogenous variables.

4.8. To investigate the connection between perceived ease of use of GPT technology and creativity

The results of the connection between perceived ease of use of GPT technology and creativity are presented in Table 7. The path coefficient results revealed that flexibility (PEOU1), understandability (PEOU2), ease of learning (PEOU3), and convenience (PEOU4) were significant and positively related to CRTY. Also, the results revealed that PEOU has a significant and positive relationship with CRTY.

Table 7: Perceived ease of use of GPT technology and creativity

Relationships	Path Coefficients	t-values	p-values
PEOU1 → PEOU	0.283	9.314	0.000
PEOU2 → PEOU	0.309	5.101	0.000
PEOU3 → PEOU	0.326	9.832	0.000
PEOU4 → PEOU	0.288	3.387	0.000
PEOU → CRTY	0.268	6.852	0.000

5. Discussion

5.1. Summary

The study examined the relationship between perceived usefulness, ease of use of GPT technology, and creativity among students and lecturers. The indicators adapted for the study included flexibility, understandability, ease of learning, efficiency, effectiveness, timeliness, reliability, accessibility, knowledge, intelligence, and skills. The R-square of the study is 19%, which suggests that there are other factors, which represent 81%, that are needed or already being used to make students and lecturers creative and help them with their academic tasks. Also, the F-square values (0.071 and 0.063) showed that the individual effects of PUF and PEOU on creativity are weak. The weak influence indicates that the GPT technology is useful and easy to use, which does not automatically translate to a lecturer or a student being creative and innovative with their academic tasks. The reason could be that the use of GPT needs to be combined with other things that are necessary to make students and lecturers creative. The result is consistent with the work of Irfan *et al.* (2023) and Marguis *et al.* (2024).

More results show that there exist positive and significant relationships between PUF and its indicators (timeliness, reliability, accessibility, efficiency, and effectiveness). This suggests they are the factors that

enhance the usefulness of GPT technology. This means that a GPT technology that would be perceived as useful should reduce the time needed to achieve a task, be reliable to provide the expected solutions, be accessible, enhance the achievements of more tasks within a short time frame, and be able to produce the desired result. Also, a positive and significant relationship exists between PUF and CRTY, which means the null hypothesis is rejected. This indicates that both students and lecturers find GPT technology useful as it is beneficial to them, helping them to improve their creativity, enhance their performance, achieve more, and generate innovative solutions. The results corroborate the studies of Faruk *et al.* (2023) and Iqbal *et al.* (2022).

Furthermore, results showed there are positive and significant relationships between PEOU and its indicators (flexibility, understandability, ease of learning, and convenience). This shows that the ability to use GPT technology easily depends on how understandable it is, the ease of learning how to use it, the convenience of using it, and the various usages to which it can be put. The result of this work is consistent with the result of Irfan *et al.* (2023), but disagrees with the result of Bonsu *et al.* (2023). This means the indicators determine how well GPT can be used with less effort from the users. Results also showed that PEOU has a positive and significant relationship with creativity. This suggests that students and lecturers use GPT technology without stress or because it doesn't require much effort to be used and get the desired results. This result is in agreement with the findings of Elkhodr *et al.* (2023).

5.2. Implications for Practice

The continuous advancement of technology has brought about consistent change in various processes. In this study, the outcome showed that perceived usefulness and perceived ease of usage of GPT technology are significantly related to creativity. That is why the two major constructs of the Technology Acceptance Model (TAM) influence the creativity of students and lecturers. This has important implications for both students and lecturers. The prominence gained by AI tools in recent times, of which GPT technology is a part, has made it a force to be reckoned with in academia. GPT has been discovered to provide content to help students in their learning processes, while lecturers too have found it an easy tool to use to accelerate their academic tasks. This means that the use of GPT technology has been helpful to students in various ways, such as helping them generate new ideas, assisting with their assignments, and enhancing their creativity. Likewise, GPT has been found to be a reliable tool for lecturers, as shown by the significant relationship between the variables. This implies that lecturers use the tool for developing their lecture notes, which helps them save time and improve the performance of their academic tasks.

5.3. Conclusion and Recommendations

Following the results of the analysis, the study concluded that though the use of GPT technology enhances learning in that it helps to improve creativity in students and lecturers, its weak influence shows that it doesn't have the monopoly of enhancing creativity in lecturers and students without other measures put in place to enhance creativity. The study therefore recommends that students and lecturers should be encouraged to explore various topics by using GPT technology to enable them to discover new ideas and perspectives while also ensuring that it is combined with effective classroom teaching and brainstorming.

Author Contributions: Conceptualization, OYETOLA OYELAKUN and OLAMIDE OLUSEYANU; methodology, OLAMIDE OLUSEYANU; validation, OLAMIDE OLUSEYANU and OYETOLA OYELAKUN; investigation, OLAMIDE OLUSEYANU; writing—original draft preparation, OYETOLA OYELAKUN; writing—review and editing, OLAMIDE OLUSEYANU; visualization, OYETOLA OYELAKUN; supervision, OLAMIDE OLUSEYANU; project administration, OLAMIDE OLUSEYANU. All authors have read and agreed to the published version of the manuscript.

Funding: No funding was received to assist with the preparation of this manuscript.

Data Availability Statement: The data used is available at any time upon reasonable request from the authors of this research work.

Acknowledgments: We extend our heartfelt thanks to all the lecturers and students in Thomas Adewumi University's Faculty of Management and Social Sciences for taking their time to provide reasonable

responses to our survey form, thereby making data available to us. The priceless participation of the university's faculty and students greatly enhanced our ability to collect the needed data for analysis.

Competing Interests: The authors have no financial or proprietary interests in any material discussed in this article.

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