



From Classrooms to Chatbots: Examining Private Secondary School Students' Perceptions of Cognitive, Affective, and Practical Dimensions of ChatGPT-Assisted English Language Learning in Pakistan

Abdul Moiz Khan¹, Shafiq Ahmad²

¹ Visiting Instructor of Functional English, National University of Computer and Emerging Sciences (FAST-NUCES), Islamabad, Pakistan.

Email: abdulmoizkhan934@gmail.com

² MPhil English Linguistics, Quaid-i-Azam University, Islamabad, Pakistan.

Email: shafiqofficial407@gmail.com

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Corresponding author:

Abdul Moiz Khan

Email:

abdulmoizkhan934@gmail.com

ABSTRACT

This study explored how secondary school students learning English perceive the integration of ChatGPT into their language education. Employing a qualitative research approach, the study aimed to fulfill its objectives and address the specified research questions. Data collection involved forty-eight secondary-level English students, equally divided by gender, from six elite private schools, chosen through purposive sampling for focus group discussions. The analysis of the gathered data was conducted using Connectivism Learning Theory and Self-determination Theory. The findings revealed that ChatGPT had a positive impact on enhancing the creativity, problem-solving, and critical thinking abilities of both male and female students, as well as boosting their motivation and engagement in learning English. Nonetheless, issues such as a decline in creativity and critical thinking, excessive dependence, and the adverse impact of ChatGPT on student-teacher interactions in the classroom were also highlighted. In general, this research study adds to the wider discussions about how AI-driven tools affect students' cognitive abilities and emotional aspects in the context of learning the English language.

Introduction

Recent advancements in novel technologies have significantly aided students in language acquisition by offering a variety of opportunities, platforms, and genuine, diverse resources. These tools enable learners to efficiently manage their language learning activities, thereby enhancing their language abilities (Taj et al., 2017; Loncar et al., 2021). Since its introduction, the AI-driven application ChatGPT has been employed for various purposes, including English language education across different levels. Moreover, it is commonly perceived that ChatGPT has impacted both male and female students' English skills and capabilities, such as problem-solving, creativity, motivation, engagement, and critical thinking. This influence is primarily because the application allows students to engage in meaningful, human-like conversations, which helps them acquire new knowledge and dispel doubts. Overall, it can be concluded that ChatGPT has significantly altered the educational experience for both male and female students who actively incorporate it into their studies. As noted by Zhang and Aslan (2021), AI has facilitated meaningful interactions within integrated, portable, and digital learning settings, offering personalized guidance and assessments, thus becoming a crucial tool in the academic field.

This qualitative research, therefore, explores the views of male and female secondary English language students in Pakistan regarding their creativity, problem-solving, and critical thinking abilities in English, in the context of ChatGPT's presence. It also examines how ChatGPT affects their engagement and motivation in learning English following its integration into English language education. The choice of secondary-level students is based on their characterization as "digital natives" (Prensky, 2001), due to their early familiarity with technology. Thus, it aided the researcher to clearly and comprehensively explore the objectives aimed in this research study.

Statement of the Problem

The introduction of AI-powered applications like ChatGPT has provided students with new opportunities to drive their own language learning and interact with technology. However, despite this, limited attention has been given to the impact of ChatGPT on the language learning abilities and skills of students. Also, in the context of Pakistan, there is a considerable lack of empirical studies investigating how male and female secondary school students perceive their creativity, problem-solving, and critical thinking abilities in English following the integration of ChatGPT. Additionally, there is also a scarcity of research on their views about how ChatGPT affects their motivation and engagement in learning English. Therefore, this research study aims to explore the perceptions of male and female secondary English language school students regarding the integration of ChatGPT, to examine its influence on their creativity, problem-solving, and critical thinking skills, along with their motivation and engagement towards learning English, in the technology-assisted learning environment.

Research Objectives

The research study aimed to achieve the following core objectives:

1. To investigate how male and female secondary school students perceive their critical thinking, creativity, and problem-solving skills in English following the incorporation of ChatGPT
2. To analyze the impact of ChatGPT on the motivation and engagement levels of male and female secondary school students in learning English

Research Questions

The research intended to answer the following questions:

1. What are the perceptions of male and female secondary English language students concerning their critical thinking, creativity and problem-solving abilities in English, with reference to networked, self-directed, collaborative learning, diversity and the role of technology?
2. How has ChatGPT influenced the motivation and engagement of male and female secondary English language students, in terms of their autonomy, competence and relatedness, in the English language learning?

Significance of the Study

The research study is of considerable importance as it examined how male and female secondary school students perceive their creativity, problem-solving, and critical thinking abilities in English, as well as the impact of ChatGPT on their motivation and engagement in learning English following its integration. This will, in turn, offer clear insights into the potential advantages and disadvantages of incorporating ChatGPT into English learning at the secondary level. Additionally, the study holds social significance. Upon completion of this research, stakeholders may recognize both the positive and negative impacts of ChatGPT in academia, particularly in English language learning. This understanding could help dispel misconceptions about its use in educational settings, leading to a shift in societal perceptions and broader acceptance of technology in education.

Delimitation of the Study

The research focused solely on examining how male and female secondary school students perceive their critical thinking, creativity, and problem-solving skills in English following the integration of ChatGPT in selected private schools. Additionally, it assessed the views of these students on how ChatGPT affects their motivation and engagement in learning English. The study was limited to data from private schools in Rawalpindi and Islamabad. Gender was included to ensure that both male and female students were represented. At no point did this research aim to compare the differences in perceptions between male and female students regarding the use of ChatGPT in English language education.

Literature Review

Definition of the Important Term

Perceptions

Within the framework of the research study, perceptions were defined as the beliefs, experiences, and opinions held by both male and female secondary school students of English regarding the incorporation of ChatGPT into English language education. This understanding aligns with the constructs outlined in the study's introduction. Furthermore, it should be noted that in this study, the term perception was not considered a psychological factor. Instead, it was used in a general research and descriptive context, without any clinical or psychometric psychological implications.

Review of the Past Research Studies

Initially, Yadav and Yadav (2024) conducted a study examining ChatGPT's effects on student education. This research aimed to explore how ChatGPT influenced student engagement and motivation. Data was gathered from 500 students via surveys, comprising 270 males and 230 females aged between 18 and 24. The subsequent analysis employed Sentiment Analysis and the Z test. Findings indicated that ChatGPT significantly boosted students' motivation and engagement in learning. The study concluded that ChatGPT had a positive effect on students. Additionally, it played an important role in understanding people's perceptions and aiding in decision-making.

Moreover, a study conducted by Mai (2026) examined the impact of ChatGPT on the argumentative writing skills of intermediate-level EFL students in the Vietnamese military boarding high school. The researcher of the study adopted a quasi-experimental design in order to achieve its objectives, involving 42 students of the age group of 16 to 17. These students were divided into two groups over the course of six weeks. It is to be noted that the control group in the study was given in-person instructions by the teachers, while the experimental group made use of ChatGPT in their writing task in a supervised computer lab. The performance of the students was evaluated on the basis of pre-test and post-test scores. The researcher also employed a semi-structured approach, and reflection journals to gather the qualitative data. The results of the study revealed that the experimental group was ahead of the control group in terms of the accuracy and fluency, while formulaic writing and lower level of engagement also emerged. On the other hand, the control group gradually improved the argumentation, originality and cognitive ownership, and were found quite confident. The study concluded that ChatGPT can improve writing at the surface level, it can impede cognitive abilities and deeper learning.

Zafar et al. (2025) conducted a survey-based study to investigate how ChatGPT influences secondary-school students' critical thinking skills. This study involved collecting data from 300 students at the secondary level using a questionnaire based on a 5-point Likert Scale to assess their experiences and perceptions. The research employed a quantitative descriptive survey design to fulfill its objectives. The collected data was then examined using descriptive and inferential statistics, supported by ANOVA and T-tests. The study conclusively revealed that ChatGPT affected students' critical thinking skills. Additionally, there was a notable difference in perceptions between students who frequently used ChatGPT and those who did not, concerning its effect on their critical thinking abilities. The research study also found a relationship between engagement with ChatGPT and the development of critical thinking skills. The researchers also identified the concerns regarding over-reliance and misinformation.

Sain et al. (2025) explored the possible advantages and disadvantages of using ChatGPT to improve writing skills in secondary education. The study concentrated on language acquisition, with a particular emphasis on writing skills within the secondary education framework. Data for this investigation were collected from academic databases and online media sources. The researchers utilized a literature review approach to carry out the study. It was revealed that ChatGPT aided students by helping them create effective outlines for their writing topics. Additionally, the application was found to be beneficial for students who struggled to start writing, as it reduced the time needed to begin. Furthermore, the study highlighted that ChatGPT offered translation services, which supported non-native speakers. On the contrary, the researchers also found certain limitations of using ChatGPT for enhancing writing in secondary education. A prominent issue identified was the complete dependence on the information provided by the ChatGPT. Also, the issues of privacy breach while integrating it in secondary education, and quality of work were also found in this research.

In alignment with this viewpoint, Swaraj and Chavan (2024) carried out another significant study. This research primarily examined how ChatGPT influences students' creativity and cognitive thinking skills. The study involved students to assess how ChatGPT affects their critical thinking, creativity, decision-making autonomy, and the degree to which they employed ChatGPT in

academic and professional settings. A total of 202 undergraduate students, chosen through convenient sampling, participated as respondents. Data was gathered from them via surveys, with an emphasis on both primary and secondary data sources. The researchers integrated this data with existing literature on artificial intelligence to draw conclusions. The research study found out that the use of ChatGPT had proven to be drastic for students, as it resulted in privacy concerns, hindering their creativity and independent thinking. However, the research also found different positive outcomes of the use of ChatGPT. It was observed that ChatGPT proved to be beneficial for students in terms of creating projects.

A study by Sahli and Bouchahdane (2025) investigated how chatbots contribute to fostering autonomous learning among EFL secondary school students. The research aimed to examine the impact of chatbots on the independent learning abilities of third-year EFL students within the Algerian educational setting. Data collection involved addressing four primary research questions, utilizing two semi-structured questionnaires distributed to 64 third-year EFL secondary school students and 33 teachers at the same educational level. The study's results highlighted the effectiveness of chatbots in promoting student autonomy in learning, while also revealing some differences and commonalities in the perspectives of teachers and students on this matter.

To sum up, the exploration of English language, education, and technology domains has been somewhat addressed, yet previous research has not fully encompassed the objectives of this study. Consequently, it was necessary to investigate how male and female secondary school students in Pakistan perceive their creativity, problem-solving, and critical thinking abilities in English. Additionally, the study also examined the impact of ChatGPT on their motivation and engagement in learning English following its integration.

Research Methodology

Given that the data collected for the research study was qualitative in nature, it was inevitable for the researcher to adopt a qualitative research methodology to achieve its objectives. It is pertinent to mention that a qualitative research methodology is a methodology in which the researcher of the study gains in-depth insights regarding a particular phenomenon instead of measuring the phenomenon through multiple numerical insights only. In this research study, this methodology was feasible, as the main aim of the researcher was to gather the perceptions of male and female secondary English language school students with reference to their creativity, problem-solving and critical thinking abilities in English, along with their motivation and engagement towards learning English, after the integration of ChatGPT into their English language learning. By doing so, the approach provided enriched insights regarding the outlined aspects.

Research Design

The given research study has adopted a descriptive-exploratory research design to explore the perceptions of male and female secondary English language school students regarding the influence of ChatGPT on their creativity, problem-solving, and critical thinking skills, along with their motivation and engagement towards learning English, after its integration. It is to be noted that the descriptive component of this research design enabled the researcher of the study to describe the perceptions of male and female students with reference to ChatGPT concerning the outlined aspects, while the exploratory component assisted the researcher in exploring their views and perceptions related to the technology-assisted language learning in a comprehensive manner. Thus, this research design provided a suitable framework to achieve the research objectives.

Methods of Data Collection

This heading deals with the description of the participants involved in the study. Also, it clearly elaborates on the sampling technique and strategies, along with the description of the tools and techniques used in the given study to collect the data.

Participants/Schools

For this research study, the data was collected from six top-tier private schools involving forty-eight male and female secondary (9th and 10th Standard) English language school students, with equal gender representation, who were fulfilling the criteria for participation in the research study. Also, in line with the ethical considerations, the names of the schools selected for this research study cannot be disclosed.

Sampling

The research study employed a purposive sampling method, a data collection approach where participants are chosen based on specific criteria. This method is characterized by its non-random nature. The criteria for selecting schools in the study included

factors such as location, type of school, socioeconomic status, and available infrastructure. Additionally, the selection criteria for students were based on gender and having at least six months of consistent exposure to ChatGPT (version 3.5) for learning English. Furthermore, the criteria for choosing ChatGPT focused on version 3.5, its popularity, accessibility, and its role as a general-purpose large language model.

Tools and Techniques for Data Collection

The research employed a primary tool for data collection, utilizing audio-recorded focus group discussions to obtain qualitative data from secondary-level English language students of both genders. Notably, six focus group discussions, each involving eight students chosen through purposive sampling from each school with equal representation of males and females, were conducted using open-ended questions. These discussions typically lasted between 20 and 30 minutes to elicit meaningful responses from participants. According to Krueger and Casey (2015), a focus group with six to ten members is generally sufficient, as it provides a variety of perspectives while maintaining effective discussion dynamics. Additionally, the focus group discussion guide was crafted to align with the theories adopted for this study. It was not already present, therefore, the researcher had to curate it in the light of the theoretical framework and their constructs, to get the responses which could be interpreted in an effective manner to answer the research questions of the given research study.

Conceptual Framework

The study utilized the connectivism learning theory to address the first research question by exploring the views of male and female secondary school students studying English on their abilities in creativity, problem-solving, and critical thinking. This was examined with a focus on networked, self-directed, and collaborative learning, as well as diversity and technology's role. It is important to highlight that the Connectivism learning theory integrates elements of Behaviorism, Cognitivism, and Constructivism, alongside technology. Its origins trace back to the foundational works of Siemens (2005) and Downes (2012). This theory strongly highlights learning within a digital context, where knowledge is typically spread across various network nodes. Furthermore, it underscores the significance of technology in contemporary classrooms and education. It says that decentralized learning is now more common, as knowledge is now distributed across different networks of nodes and connections, allowing students to extend their education through different mediums. Siemens (2005) argues that "learning is the process of connecting specialized nodes or information sources." This suggests that learning has shifted from being an individual activity to occurring through a series of interconnected processes beyond the individual, involving organizations, databases, or non-human devices. This highlights the critical role of technology-mediated learning. In this study, the following elements of the theory were considered.

Network Learning: In this approach, learners are encouraged to create personal learning networks, which can include people, resources, or various technological tools and applications. This approach aids in broadening their knowledge and comprehension.

Self-Directed Learning: This aspect of the connectivism learning theory emphasizes learner autonomy, allowing individuals to identify their own learning resources and manage their learning paths independently.

Collaborative Learning: According to the connectivism learning theory, collaborative learning involves the idea that individuals in a learning setting should jointly build knowledge by engaging in discussions and interacting with others, whether in digital or physical environments.

Diversity: This aspect of connectivism learning theory highlights that learning is enriched with a variety of ideas and perspectives when learners encounter different viewpoints and interpretations. This exposure aids them in forming a dynamic comprehension of any concept during their educational journey.

Role of Technology: Connectivism learning theory recognizes the significance of various technological tools in education, viewing them as active components within learning networks. In this research study, ChatGPT is utilized as the technological tool that learners use to access, share, and enhance knowledge.

Within this research study, the connectivism learning theory was utilized to explore how male and female secondary school students studying English interact with the technological tool ChatGPT to enhance skills such as creativity, problem-solving, and critical thinking in English. Creativity is typically evident in the students' capacity to incorporate new ideas and linguistic content by engaging with the digital inputs provided by ChatGPT. Additionally, this study illustrated problem-solving through the students' ability to address challenges encountered in their English language learning by consulting various information sources, facilitated by ChatGPT. Finally, in this context, critical thinking skills were defined by the ability of both the male and female students to

choose, assess, and contrast various AI-generated responses, focusing on their accuracy, relevance, and suitability for their English language learning tasks. Overall, the ideas of creativity, problem-solving, and critical thinking were developed and conceptualized based on the connectivism learning theory, as cognitive outputs driven by networks appeared in the digital learning environment.

Moreover, the study utilized self-determination theory to address the second research question by examining how male and female secondary school students perceive their motivation and engagement in learning English, particularly in relation to their experiences of autonomy, competence, and relatedness. Edward Deci and Richard Ryan introduced this theory in their 1985 publication, *Self-Determination and Intrinsic Motivation in Human Behavior*. The theory addresses human motivation and personality, emerging from several smaller theories linked to distinct concepts. At its core, the theory posits that individuals, particularly students, possess three psychological needs: autonomy, competence, and relatedness. These needs drive them to continually strive for growth and development. This research considered the following elements of the theory.

Autonomy: Within the framework of self-determination theory, autonomy signifies the necessity for individuals to have control over their own objectives and actions. This sense of direct control over their behavior fosters a feeling of self-determination.

Competence: Competence involves the perception of possessing the necessary skills and knowledge to acquire various abilities and perform a range of tasks.

Relatedness: Relatedness pertains to the sense of being connected with others within a particular learning context. In educational environments, it signifies the connection with teachers in the classroom through meaningful interactions.

In this research study, the self-determination theory was utilized to explore how the needs for autonomy, relatedness, and competence among male and female secondary school students learning English influenced their motivation and engagement in the language learning process. In this research study, motivation is defined as the students' willingness and internal drive to engage in English language learning tasks. This motivation arises when students perceive themselves as autonomous learners, possess the necessary skills and expertise to tackle English language tasks, and feel a sense of connection with others in their learning environment. Conversely, engagement in this study is understood through the lens of self-determination theory. It refers to the cognitive and emotional extent to which both male and female students immerse themselves in English language tasks. This engagement is further enhanced when students experience increased autonomy in their learning, build competence through consistent and successful interactions with ChatGPT, and feel socially connected with their peers and teachers in the English language learning setting.

Methods and Tools of Data Analysis

The qualitative data gathered from focus group discussions, which were guided by open-ended questions, were examined using thematic analysis. This method is a qualitative data analysis approach that seeks to uncover significant patterns, codes, and themes within the data. It is a data analysis technique in which the researcher of the study does not identify or extract the pre-existing themes, rather interprets and constructs meanings from the available data. This method of data analysis is feasible for both the large and small sets of data. During the analysis, the researcher reviewed all the data but selected only the most illustrative, representative, and pertinent responses from both male and female participants to ensure accuracy and validity. This decision was made to effectively highlight the themes and patterns identified in the data. Furthermore, the researcher ensured that the diverse perspectives of the participants were represented.

Ethical Considerations

The study meticulously adhered to all ethical research guidelines. To prevent any violation of privacy, participants' identities were kept confidential in accordance with these ethical standards. Data collection occurred only after obtaining informed consent from the participants and was conducted at times convenient for them.

Data Analysis

Thematic Analysis of the Focus Group Discussions

It is to be noted that from the thematic analysis of the data obtained after focus group discussions, the themes of creativity, problem-solving, critical thinking, motivation and engagement towards learning English, were identified. These themes have been discussed comprehensively in the pages to follow.

Theme of Critical Thinking Skills in English

Upon thorough examination of the focus group discussions, critical thinking emerged as the initial theme. Within the context of this research, it denotes students' capacity to think in different dimensions about a particular subject, especially with the inclusion of ChatGPT in their English language learning process. During the focus group discussions, numerous male participants expressed that the incorporation of ChatGPT has enabled them to think critically and evaluate topics from various angles. It can be observed when one male participant said,

When I have used ChatGPT, it has affected my ability to think critically, as it gives me new ideas and new criteria, and new things to work upon. I do research on those things, and I get more and more information regarding more things. So that's what we want. (Male 11, FGD, 2025)

According to the quoted statement, ChatGPT played a significant role in aiding students to engage in critical thinking by introducing them to fresh perspectives on a particular subject, which they could then explore further. It also offered detailed information to the learners. The student mentioned that he not only absorbs this information but also conducts additional research on it. This approach is closely related to the principles of self-directed learning and network learning within the framework of connectivism learning theory, which suggests that knowledge is acquired by linking knowledge nodes, connecting ideas, and examining various perspectives (Siemens, 2005; Downes, 2012). Consequently, ChatGPT served as a crucial node in his English language learning, facilitating his ability to manage his own learning by conducting pertinent research at his convenience.

Moving on, another male student also acknowledged that using ChatGPT has been beneficial for him in enhancing his critical thinking skills in English. He can be seen saying, "It helps analyse answers instead of copying it. For example, before answering, it tells that it has compared two or more different opinions before answering" (Male 24, FGD, 2025). This response illustrates that the student, by engaging with ChatGPT, has honed the skill to evaluate the responses provided by ChatGPT rather than merely replicating them. Additionally, ChatGPT offers him a variety of perspectives on a subject, which ultimately encourages him to think creatively. This approach is consistent with the concept of diversity, which underscores that learning transpires when the learner encounters a range of diverse perspectives within the educational setting (Siemens, 2005; Downes, 2012). Furthermore, another male participant in the focus group discussion supported this view, stating that ChatGPT also aids him in adopting a different way of thinking. It can be traced as, "it has helped me think in a different way" (Male 21, FGD, 2025). This view also relates with the diversity construct of the connectivism learning theory, as the student was not just receiving information, but was also able to think in different ways regarding that.

Conversely, despite the positive opinions expressed by some male participants, numerous male English students expressed concerns about their critical thinking abilities in English when using ChatGPT. One male student mentioned his disapproval, stating that ChatGPT has not enhanced his critical thinking skills. While it has provided him with comfort, it has diminished his capacity for independent thought. He further explained that when tasked with writing an essay, he simply instructs ChatGPT to do it for him. The student emphasizes that learners should engage in independent thinking rather than relying on ChatGPT. The participant's response is as follows,

I am not in favour of everything, because it has not helped me think critically. Though, it made me so comfortable that I cannot myself think what to do next. I just give the command to ChatGPT and then it gives me all the things. For example, if I have to write an essay, I do not work upon that essay. I just tell it to ChatGPT to write that essay. So I think that a person should think out of the box all by himself, not by using ChatGPT. This is my opinion. (Male 12, FGD, 2025)

In agreement with this viewpoint, another male participant expressed that critical thinking is an individual's personal skill, and one should not depend on chat boxes, as it is the learner who directs them. These tools provide answers, which can halt independent thought. Consequently, this practice reduces their capacity to consider innovative methods. The student's response is reflected as follows,

I am also not in the favour of this topic. Critical thinking is our own ability. We cannot rely on chat boxes. If we only rely on chat boxes, we are only giving them a command, but they are giving us the answer. So we are not thinking about anything. It numbs our ability to think about new approaches. We cannot even think outside the box. (Male 14, FGD, 2025)

The responses from the male students evidently question the aspect of self-directed learning within the framework of connectivism learning theory (Siemens, 2005; Downes, 2012). While self-directed learning emphasizes that learners acquire knowledge by linking network nodes through technology, the students' reactions were contrary to this. One male student mentioned that excessive

dependence on ChatGPT restricts autonomy and reduces a learner's capacity to learn independently. This indicates that although technology can aid learning, excessive reliance on it can undermine self-directed learning. It also highlights the negative implications of technology in learning as outlined by connectivism learning theory, suggesting that while technology facilitates learning, it also has adverse effects.

On the other hand, when the female participants were asked about their critical thinking skills in English, the positive aspects of ChatGPT were also seen there. This can be traced in the remarks when one female participant said, "ChatGPT has improved my ability to think critically. For example, our English teacher gave us an assignment like writing a paragraph on any topic. I read some key points given by ChatGPT and added some more points" (Female 3, FGD, 2025). The response makes it evident that she does not rely on ChatGPT to replicate content. Instead, she extracts key points and incorporates her own ideas to complete tasks such as writing assignments in English. This approach demonstrates her ability to synthesize, evaluate, and integrate various pieces of knowledge. Similarly, another female participant expressed that ChatGPT assisted her with an English assignment involving a passage from their English textbook, which required incorporating references from the Holy Quran. ChatGPT aided her by providing translations of relevant verses for her assignment. Her response is as follows,

Yes, ChatGPT helps enhance our critical thinking. For example, our teacher gave us a task to summarize a passage from our English book with some references we should add from the Holy Quran. So, ChatGPT gave me some translations of verses related to the passage. In this way, it helped boost my critical thinking ability. (Female 1, FGD, 2025)

To add more, when asked about the critical thinking skills in the presence of ChatGPT, another female participant gave remarks which are, "I write any topic, then ask ChatGPT to check the grammatical mistakes, then ask to help me explain why I should use this word instead of that" (Female 11, FGD, 2025). Her response indicates that she not only depends on the answers provided by ChatGPT but also scrutinizes the specific wording used by ChatGPT, rather than merely requesting corrections for grammatical errors. It should be observed that these reactions from the female students are in clear alignment with the principles of diversity and network learning as outlined in the connectivism learning theory. The respondents were not just dependent on the information from ChatGPT; instead, they were integrating various knowledge networks, questioning to build new insights and perspectives to deepen their understanding, thereby improving their critical thinking skills in English.

Theme of Problem-Solving Skills in English

Another theme that surfaced during the focus group discussions was problem-solving skills. This refers to a student's capability to tackle complex topics and concepts in English with the assistance of ChatGPT. Within the context of this study, most male English students perceived ChatGPT as a beneficial tool for improving their problem-solving abilities in English. For instance, one male student mentioned that since ChatGPT was incorporated into English language education, he has been able to address problems in English more effectively. He cited an example where, if a student is unsure about English verbs, they can consult ChatGPT, which will provide a clear explanation of the concept. This idea is supported by his response "ChatGPT has affected our ability to solve problems in English, as it solves, and answers smoothly. For example, if a person does not know what a verb is, so it explains it completely, so he can understand" (Male Student 19, FGD, 2025). Similarly, another student can be seen endorsing the same thing. For instance, he said, "It provides smart ways of solving our problems. For example, a person does not know what a noun is, but GPT will provide the whole summary" (Male Student 22, FGD, 2025). From the previous two responses, it can be seen that ChatGPT proved to be a useful tool for male students in terms of solving their problems related to English grammar.

In addition to this, another male participant said that ChatGPT helps him solve questions easily and in a simple manner, by just providing the main ideas of the question. This helps him solve his problems in English. It can be seen as, "It helps me solve questions more easily and simply by just sharing with me the main ideas of the questions" (Male Student 9, FGD, 2025). These responses illustrate the concepts of diversity and the impact of technology, as male students mentioned that ChatGPT provided them with various explanations for complex ideas and served as a learning companion. Additionally, ChatGPT assisted them in understanding English verbs and nouns, thereby bridging their knowledge gaps.

Moreover, another male secondary school student studying English expressed that ChatGPT aids him in tackling certain word problems in English. He also mentioned that when they present ChatGPT with any English-related question or image for explanation, it delivers pertinent answers and assists in identifying meanings, as well as providing some solutions to the questions and words. (Male Student 13, FGD, 2025). This idea aligns with the notion of network learning in the context of connectivism learning theory. It emphasizes the importance of linking various knowledge nodes to facilitate seamless learning. Additionally, male

students are observed utilizing ChatGPT as an external resource to bridge their knowledge gaps, particularly concerning English-related issues within the context of this study.

Conversely, some male students expressed the view that ChatGPT did not aid in improving their English problem-solving abilities. This indicates that while technology can affect certain skills, it may not have a uniform impact on all learners in the same educational setting. This is supported by a male participant's statement, "ChatGPT has not affected my ability to solve problems" (Male Student 3, FGD, 2025). It indicates that although most students recognized ChatGPT's contribution to improving their problem-solving abilities, one male student dismissed their opinions and disagreed with this notion. This perspective questions the technological framework's role in the context of connectivism learning theory for acquiring and constructing knowledge within the educational setting, as the student claimed not to be influenced by ChatGPT in addressing English-related problems.

On the other hand, similar to the majority of male students, female English students also expressed favorable views regarding ChatGPT's role in enhancing their problem-solving skills in English. It can also be seen when one female participant was noted to be saying,

It has helped me in my studies by helping me understand grammar when it becomes hard. Like, one time, I could not understand the meanings of my grammar work and ChatGPT helped me understand it, and helped me find ways to understand better. (Female Student 20, FGD, 2025)

Similarly, in the focus group discussions, another female participant also acknowledged that ChatGPT has improved her ability to solve problems in English. She said that ChatGPT helps her think about the problem and topic to understand it, thereby enhancing her problem-solving skills in English (Female Student 10, FGD, 2025). In both these perceptions of female students, it can be seen that the role of technology in learning has been clearly emphasized and endorsed, which also reflects the construct of the role of technology in the context of connectivism learning theory (Siemens, 2005; Downes, 2012).

Adding to the same perspective, another female student with reference to the problem-solving skills in English, said, "ChatGPT supports clarifying complex topics of English. For example, a student is unable to understand English grammar, so ChatGPT can help us understand it nicely" (Female Student 12, FGD, 2025). It is evident that ChatGPT serves as a valuable resource for deconstructing intricate English problems into understandable parts, aiding students in grasping grammar concepts with ease. This aligns with the function of technology, a key element of the connectivism learning theory, as demonstrated by a female student who acknowledges ChatGPT's assistance in comprehending challenging grammar topics.

Last but not least, another female participant expressed that ChatGPT enabled her to view complex English problems from various angles and assisted her in composing an essay when she faced confusion. Her response can be seen as, "ChatGPT helps me look at problems from different perspectives. For example, once I was confused about writing an essay, it provided me with step-by-step ideas" (Female Student 13, FGD, 2025). In the context of connectivism learning theory, this female respondent's perspective aligns with the concept of diversity. She highlighted ChatGPT not only as a tool for grasping any English concept but also as a means to explore various perspectives on a specific English problem.

Theme of Creativity in English

Another key element intended to be examined in this research study was creativity. At its core, creativity refers to a learner's capacity to generate ideas and content independently. It does not involve memorizing content for reproduction or rephrasing. In the context of this study, creativity is defined as the ability to independently create something in English with the help of ChatGPT. Furthermore, when male participants were questioned about ChatGPT's impact on their English creativity, one male participant remarked,

I am also in favour that ChatGPT influences our creativity in English, as if we ask for creative ideas from ChatGPT, we can easily use those ideas to write essays and paragraphs. So ChatGPT helps a lot to improve your creativity, as it opens another world of adjectives and many other ideas for us to use in our daily life. (Male 14, FGD, 2025)

Based on the male student's response mentioned earlier, it is evident that ChatGPT has been advantageous in boosting creativity in English. It offers learners fresh expressions, ideas, and even grammatical elements like adjectives, which students can then incorporate into essays or various paragraphs in a creative and imaginative way. The student's response aligns well with the connectivism learning theory, especially its concepts regarding the role of technology and diversity. This is because the student viewed ChatGPT as a tool that supplies him with creative expressions, which, according to the theory, corresponds to technology's

role in not only influencing learners but also enhancing their cognitive skills. Moreover, the student benefited from encountering a range of perspectives, aligning with the connectivism theory's assertion that knowledge is shaped through exposure to varied viewpoints (Siemens, 2005; Downes, 2012).

In a related context, another male participant expressed that ChatGPT aids him in boosting his creativity in English, as it allows him to craft his own stories or essays in the language. He mentioned that incorporating ChatGPT into English language education is straightforward and effective for him. Additionally, he specifically utilized ChatGPT for composing stories or essays (Male 15, FGD, 2025). Similarly, in relation to the connectivism learning theory, this male student's response illustrates self-directed learning. He managed to write independently, demonstrating autonomy and decentralization in his learning approach. This highlights the concept of a learner's capacity to direct their own educational journey, utilizing technology like ChatGPT to establish various connections to complete tasks. Furthermore, when another male participant was questioned about creativity in English with ChatGPT, he remarked, "ChatGPT helps me with giving new ideas and different ways to express myself, which helps me boost my creativity. It helps me in my various English tasks like paragraph writing" (Male 7, FGD, 2025). In his response, the student clearly mentions that ChatGPT served as a tool to generate various ideas and methods for self-expression. This highlights the concept of creativity within education, emphasizing the development of innovative and pertinent ideas related to a particular subject or context.

Finally, another male participant, discussing ChatGPT and creativity in English, noted that ChatGPT enhanced his creativity by helping him expand a story with dialogues it proposed. His unaltered responses can be identified as, "It boosted my creativity, when I expanded a story with dialogues, which ChatGPT suggested" (Male 24, FGD, 2025). On a similar note, another male participant was found saying, "It was very difficult to write complex sentences and paragraphs for me, but with ChatGPT, I found it very easy to create my own sentences and essays" (Male 20, FGD, 2025).

Thus, the responses previously discussed clearly align with the principles of diversity and the role of technology within the framework of connectivism learning theory (Siemens, 2005; Downes, 2012). This alignment is evident as the male participants recognized that ChatGPT aided them in crafting paragraphs or expanding stories in novel ways by exposing them to various perspectives and methods of expressing ideas and themselves. This exposure evidently stimulated their creativity in English through its use.

Conversely, aside from the positive views of male students regarding their creativity in English, some male participants voiced concerns about their creativity in English following the integration of ChatGPT. These concerns are reflected in the feedback from a few male English students. For instance, one male participant mentioned,

I think it has negatively impacted my creativity, because if a topic has been given to me to write, like for example, an essay on some topic, so I just don't think about it on my own mind. I just ask this from ChatGPT and it gives me like a whole 300 words essay. So in this way, it has affected my creativity negatively. (Male 11, FGD, 2025)

Considering the male student's feedback, it appears that ChatGPT might hinder creativity in English. Students often turn to ChatGPT for writing tasks, receiving quick responses. Consequently, they rely less on their own creative abilities. The student himself mentioned that he doesn't engage in independent thinking, as ChatGPT completes the work for him. Thus, he expressed the opinion that it has adversely affected his creativity.

Within the framework of connectivism learning theory, the concept of self-directed learning is overshadowed, as students increasingly rely on ChatGPT for their creative assignments. This reliance, in turn, reduces their creativity in English, contrasting with self-directed learning, which promotes the idea that learners, through technology, link various nodes and networks of knowledge to build their own understanding. However, students' feedback indicates they have abandoned this approach, becoming entirely reliant on ChatGPT. Likewise, another male participant noted that ChatGPT occasionally reiterates the same ideas, which restricts a learner's creativity in English (Male 23, FGD, 2025). Additionally, another male English student expressed concerns about his creativity when questioned on the same topic. His response was as follows,

Creativity has not been impacted by ChatGPT, as creativity is something that one does like doing art. For example, in English, creativity in English is by adding adjectives to make the text more appealing. So I think that it has not influenced, it has not impacted our English creativity. (Male 12, FGD, 2025)

The student's response highlights the belief that creativity is an inherent human trait, unaffected by ChatGPT. This stance dismisses the influence of technology within the framework of connectivism learning theory, which posits that technology typically enhances learners' educational experiences and refines their cognitive skills.

In addition to the varied opinions of male English students, it is important to note that female English students expressed similar sentiments. For example, one female student's response states,

ChatGPT has been very helpful in my creativity and made my understanding better. Like one time, when I was writing a poem for my friend, ChatGPT gave me positive feedback on what was right and what was wrong. (Female 20, FGD, 2025)

Her perspective indicates that ChatGPT has been advantageous in enhancing her English creativity. The female student specifically stated that ChatGPT assisted her in refining her poetry, thus boosting her poem-writing skills. According to connectivism learning theory, this aligns with the concepts of technology's role in enriching learning experiences and self-directed learning, as the female student actively sought feedback from ChatGPT to improve her poetry, which is considered a creative endeavor. Furthermore, another female participant expressed a belief that, "Yes, it has introduced me to new techniques I have not explored earlier. It helped me in learning different techniques, exploring new ideas, which I have not explored before" (Female 22, FGD, 2025). The response from the female students supports the notion that ChatGPT boosts learners' creativity in English by introducing them to innovative and unfamiliar techniques. This tool also provided them with access to fresh ideas, ultimately fostering their creative abilities in English. This aligns with the concepts of technology's role in enhancing cognitive skills and diversity, as the female participant acknowledged that ChatGPT exposed her to new perspectives and ideas, consistent with the connectivism learning theory.

Moreover, when questioned about ChatGPT's impact on creativity in English, another female student shared her viewpoint, which is as follows, "Yes, ChatGPT has influenced my creativity in English. For example, in our school assignment, I searched my own assignment in it, and I got to know about more things and words with their meanings" (Female 3, FGD, 2025). ChatGPT assists students in refining their language skills and offers them insights into various topics. This indicates a boost in English creativity, as it frequently involves the creation of new expressions and the exploration of the language. Additionally, the female student clearly acknowledges these aspects. Regarding the theoretical framework of connectivism, the response highlights the significance of technology and diversity. The student acknowledged that her exposure to new ideas and viewpoints was facilitated by ChatGPT's presence.

To add more, the response of another female for the same cause says, "ChatGPT boosts creativity in English by suggesting new ideas and vocabulary. It is beneficial as it offers feedback, personalized learning and creative support instantly" (Female 12, FGD, 2025). The female participant's response indicates that ChatGPT significantly aids her in self-directed learning by offering feedback for enhancement. Additionally, it exposes her to new ideas and English vocabulary. This is closely related to the concepts of technology's role, diversity, and self-directed learning, as outlined in connectivism learning theory, which supported her English learning process.

Finally, another female participant also said, "Well, before I was not able to write any topic in my own words, now I just take concepts and write all the topics in my own words" (Female 11, FGD, 2025). This indicates that ChatGPT contributed to her improved creativity in English, as she previously struggled to write independently. Additionally, this aligns with the connectivism learning theory and the principles of self-directed learning, the influence of technology, and network learning (Siemens, 2005; Downes, 2012). The reason is that she has become self-sufficient in her learning process, utilizing ChatGPT for inspiration, and can now compose her own work with the aid of technology.

Theme of Motivation towards Learning English

Another key element intended for examination in this research study was motivation. It surfaced as a significant theme during the focus group discussions, as the questions were specifically designed to draw out themes closely aligned with the research objectives and questions. Within the context of this study, motivation is defined as the enthusiasm or impetus that encourages an individual to engage actively in English-related learning tasks and activities. During the analysis of the focus group discussions, a male participant mentioned,

Yes, ChatGPT affected my motivation. For example, if I asked it to write any essay or any problem-solving text, so it has a text at the end that what can I do more for you. So, that has motivated me that I can learn more English and better than before. (Male 14, FGD, 2025)

Based on the response provided, it can be deduced that ChatGPT serves as an effective tool in enhancing students' motivation to learn English. This is evident from the male student's feedback, where he mentioned that ChatGPT delivers encouraging texts in response to his queries, which boosts his motivation to study. He appreciates the ability to explore further and learn English in a more thorough and improved way. This aligns with the self-determination theory, particularly its elements of competence and autonomy, as the student feels more capable of mastering English due to ChatGPT's positive reinforcement. He also highlighted the idea that, with ChatGPT's assistance, he can advance his learning independently, rather than being confined to the initial task.

Similarly, not only the given response validates this, but the response from another male student also stresses the same idea,

ChatGPT impacts motivation, such as it helps in learning and enhancing our writing skills. ChatGPT can also motivate a learner or a student by giving motivation on how to learn fast and it improves our vocabulary by understanding text and giving examples. It can increase our motivation by providing a sense of control and making us learn more enjoyably. (Male 15, FGD, 2025)

The response effectively demonstrates that ChatGPT contributes to boosting students' motivation in English, aiding them in both writing and learning the language. Additionally, the male student expressed the view that ChatGPT encourages students by showing them efficient learning methods and improving their vocabulary and comprehension through relevant examples. He also mentioned that ChatGPT enhances their motivation by allowing them to take charge of their learning, making it more enjoyable. Within the framework of self-determination theory, this response aligns with the concepts of autonomy and competence, as the student acknowledges that learners gain control over their learning and feel more capable, thereby improving their English writing and learning skills.

Adding to the same perspective, when another male participant was asked about the influence of ChatGPT on his motivation towards learning English, in a focus group discussion, he propagated the view that, "ChatGPT makes learning English more engaging because I can get instant feedback and explanations. For example, once I was not able to learn English well, So, ChatGPT helped me make it easier and made me engaged in it" (Male 7, FGD, 2025). Based on this response, it can be inferred that ChatGPT enhances students' motivation to learn English by offering feedback and clarifying complex concepts. This approach lowers learning obstacles and increases a learner's eagerness to study English. A male student expressed a similar sentiment, noting that ChatGPT aids in explanations, simplifies understanding, and thus encourages his active participation in learning. The concept of competence from self-determination theory is closely related to the male student's response, as he felt knowledgeable and proficient in English due to the immediate feedback and explanations provided by ChatGPT.

Moreover, a different male participant mentioned that ChatGPT assisted and inspired him to acquire the RP accent. This indicates that ChatGPT enhanced his enthusiasm for learning by providing him with a specific goal in mastering English. His reaction also implies that ChatGPT was a motivating factor in his learning journey. Additionally, his response reflects the concept of competence from the self-determination theory, as he felt capable of pursuing the RP accent with ChatGPT's support. The participant's exact words can be found as follows, "It has helped and motivated me to learn RP accent" (Male 9, FGD, 2025).

On the other hand, there were also some male students of English who demonstrated negative perceptions when asked about the influence of ChatGPT on their motivation towards learning English. One male participant said, "ChatGPT has not affected my interest in learning English that much" (Male 3, FGD, 2025). The male participant's response distinctly opposes the majority of male students' opinions regarding ChatGPT's impact on their motivation to learn English. He believes that ChatGPT has not significantly enhanced his interest in learning the language. Similarly, another male participant mentioned that, "Reduced motivation because it summarizes which made me lazy" (Male 23, FGD, 2025). Thus, it highlights the perspective that ChatGPT's immediate replies and solutions might lead students to become complacent and hesitant to engage actively in their learning journey. These quick responses pose a challenge to the concept of autonomy within the self-determination theory, as male students did not find ChatGPT particularly helpful in enhancing their self-regulation or motivating their learning behavior. This is because ChatGPT tends to condense ideas and concepts, which diminishes learners' interest in studying English, even though these concise summaries seem beneficial at the moment.

Conversely, the female participants also expressed favorable views regarding how ChatGPT influenced their motivation to learn English. This is further supported by a statement from one female participant, "It has motivated me more in learning English. At times, improving my vocabulary or learning new phrases... it has given me more control allowing me to decide till what point I can learn English and realize my limit" (Female 5, FGD, 2025).

The female participant's response indicates that the inclusion of ChatGPT has increased her motivation to learn English. She perceives herself as having gained mastery or competence, concepts from self-determination theory, because ChatGPT aids in

expanding her vocabulary and improving her linguistic skills. Furthermore, with ChatGPT's assistance, she now exercises clear control over her learning journey, aligning with the autonomy aspect of self-determination theory, as it demonstrates self-regulation in her educational pursuits.

Furthermore, another female participant also portrayed the positive perception with reference to the impact of ChatGPT on her motivation towards learning English. Her response appears as, "It has motivated to learn English more and more. It sometimes improve my vocabulary and skills... ChatGPT gives me more control" (Female 7, FGD, 2025). From this response, it is evident that ChatGPT effectively encourages female English students to engage in learning the language. It not only enhances their skills and vocabulary but also aids them in independently managing their learning journey. This aligns closely with the concepts of competence and autonomy as outlined in self-determination theory. This theory emphasizes an individual's ability to take charge of their learning process and direct their own actions, coupled with the belief that they possess the necessary skills and knowledge to reach their objectives. This is mirrored in the female participant's feedback, as she mentioned gaining more control and experiencing improvements in her vocabulary and skills with ChatGPT's assistance, which ultimately boosted her motivation.

Moreover, another female participant also endorsed the role of ChatGPT in affecting her motivation towards learning English. She said that ChatGPT has affected her motivation and interest in learning English, because it helps her learn English in a way that builds her motivation and interest in learning more about English (Female 3, FGD, 2025). In relation to self-determination theory, it aligns with competence, as ChatGPT assisted her in managing her English language studies, providing her with a sense of mastery that further fueled her motivation to deepen her understanding of English. Additionally, another female secondary-level English student mentioned that ChatGPT influences motivation and interest in learning English. It accelerates, simplifies, and enhances the interactivity of the learning process. She also expressed that ChatGPT offers greater control over learning English, as it enables learners to study at any time and in their own space. Her response states, "ChatGPT affects your motivation and interest in learning English by making learning faster, easier and more interactive... ChatGPT gives you more control by allowing you to learn anytime, at your own pace" (Female 12, FGD, 2025). In this instance, the female student's response highlights aspects of autonomy, as she perceives herself as capable of guiding her own learning by choosing her own pace and timing. It also reflects competence, as the learning process becomes quicker, more straightforward, and interactive, providing her with a sense of control to reach her intended objectives, in line with the self-determination theory (Deci & Ryan, 1985).

On the contrary, similar to a few male students, there was a female participant who expressed some negative views about her motivation following the incorporation of ChatGPT into the English language journey. The reaction of this female student can be described as, "No, ChatGPT has not affected my motivation and interest in learning English" (Female 18, FGD, 2025). This view challenges the elements of competence and autonomy in self-determination theory, because despite the presence of ChatGPT, she did not notice any change in her learning effectiveness, which indicates that she did not have control or regulation over her learning in English, even after ChatGPT.

Theme of Engagement towards Learning English

Another significant theme identified from the thematic analysis of the focus group discussions was engagement. This theme is closely linked to the second objective and research question of the study. Engagement, within the context of this research, refers to a student's capacity to actively engage in English-related learning tasks or activities and their interaction with teachers following the integration of ChatGPT into English language education.

Initially, a male participant expressed that when they need to complete homework on narration or passivization, they simply instruct ChatGPT, which then transforms the work according to their teachers' requirements. He also mentioned that ChatGPT has had an impact on them. His response is as follows:

ChatGPT has helped me in the fact that, for example, if we have to do our English homework, like if it is a passivization or narration, we just have to give the text and say that, convert it to the, alter the voice as we commanded. It influences; it helps us. It helps in such a way it converts it to the specific answer that our English or English teachers' demand. (Male 13, FGD, 2025)

This response clearly indicates that ChatGPT has been instrumental in simplifying their English language learning, which in turn motivates them to remain engaged with it for completing English-related tasks. This is closely related to the self-determination theory and its principles of autonomy and competence, as the student demonstrates the ability to perform tasks efficiently and manage their initiation and completion. Furthermore, another male participant mentioned that ChatGPT assists them in their English language journey and improves their English learning skills. Regarding the relatedness aspect of self-determination theory, which emphasizes interaction with peers and teachers in English language classrooms, the same male participant noted that while

ChatGPT aids in their English learning, it does not affect their classroom relationships or interactions with teachers. This is because teachers provide a wealth of knowledge, and ChatGPT merely assists them. His response is reflected as follows, “No Sir, because it enhances our English learning skills. But it cannot cut off our relation with our teacher, because our teachers give us knowledge about it and it only helps us by learning English and that’s it” (Male 16, FGD, 2025).

Additionally, when another male participant was questioned about interacting with teachers during English language learning activities, he mentioned that prior to the introduction of ChatGPT, students relied heavily on their teachers for resolving queries, questions, and other learning challenges. However, following its integration, they now turn to ChatGPT for answers to their questions. His response states, “Yes, it has affected the connection with teachers, because before ChatGPT, we often used to call teachers for help, but now we use ChatGPT” (Male 9, FGD, 2025). The two responses provided align well with the relatedness aspect of self-determination theory, highlighting interactions with both peers and educators. Similarly, one male participant noted that he maintained his engagement with teachers despite the availability of ChatGPT, whereas another participant clearly dismissed this idea.

Adding to the same perspective, another male participant said that, “ChatGPT is helpful in learning English, but it can make individual lazy and not engaging in doing English tasks by themselves” (Male 7, FGD, 2025). Some male participants perceived ChatGPT as a beneficial tool for learning English. However, others expressed concerns that it might diminish engagement in English learning by fostering laziness due to excessive reliance on the tool. This perspective aligns with the concept of autonomy, as the respondent emphasized the lack of self-regulation in learning when ChatGPT is used excessively, referencing the self-determination theory (Deci & Ryan, 1985).

On the other hand, when discussing engagement in English learning and the relationship with teachers in the context of ChatGPT, a female English student noted that the incorporation of ChatGPT into English language education has, in her view, adversely affected her interactions with her teachers. She added that face-to-face interaction with the school teachers helps them more efficiently. Her response is as follows, “Yes, by using ChatGPT, I am increasing distance with my school teachers, which I think is the worst. Face-to-face interactions with school teachers help us more efficiently” (Female 2, FGD, 2025). Using ChatGPT as a learning tool can be beneficial, yet interacting with teachers remains crucial and seems to be more effective for educational purposes. This notion aligns with the concept of relatedness from the self-determination theory (Deci & Ryan, 1985), which underscores the importance of connections with peers and educators in a learning setting. The response from a female student indicated that the presence of ChatGPT has adversely affected this connection.

On the contrary, another female participant pointed out that ChatGPT is advantageous for learning English, as it aids in comprehension and motivates the acquisition of new ideas and skills. She mentioned that ChatGPT provides explanations in simple language, making the content accessible (Female 18, FGD, 2025). In essence, the female participant appears to support the idea that ChatGPT has a beneficial impact on her motivation to learn new concepts and skills following its integration, rather than merely accepting its outputs. This type of engagement aligns with the self-determination theory, particularly the aspect of competence, as she indicated that it simplifies tasks for her, enabling her to pursue new learning opportunities (Deci & Ryan, 1985).

Moreover, when questioned on the same topic, another female participant mentioned that ChatGPT has significantly aided her in learning English. She noted that it has improved her English proficiency as well. Additionally, using ChatGPT allows her to pose numerous questions, which are often not thoroughly addressed by her teachers. She further added that by using ChatGPT, she is not in need of a tutor anymore. Her response can be seen as,

It enhanced my English. I asked many questions to it. I had many questions, which, when I used to ask my teachers, they used to not explain deeply, sometimes criticise me, but ChatGPT never did that. It helped me a lot in English. By using ChatGPT, I do not need a tutor anymore. (Female 9, FGD, 2025).

The response from the female student clearly illustrates that ChatGPT is advantageous for her in posing questions and receiving thorough answers. She also highlighted that her English skills have improved thanks to ChatGPT. This corresponds with the competence aspect of self-determination theory, as she reported feeling more capable and knowledgeable after incorporating ChatGPT. Nonetheless, her response also indicates a move away from traditional teachers and a detrimental effect on the student-teacher relationship, as explicitly noted in the relatedness component of self-determination theory (Deci & Ryan, 1985). In general, her enthusiasm for learning increased, but her interaction with teachers suffered negatively.

In addition to this, another female English student expressed that ChatGPT is beneficial for learning as it allows learners to have clear control over their learning process, enabling them to study whenever they choose. Regarding interaction with teachers and

classmates, she noted that ChatGPT positively affects this by encouraging students to come to class prepared, thus actively participating in English learning activities (Female 12, FGD, 2025). Her comments align with the concepts of autonomy and relatedness within self-determination theory, as she highlighted the ability to learn at one's preferred time, indicating self-regulation, and reported a positive impact on teacher engagement, which corresponds to relatedness in the theoretical framework.

Conclusion

The research study examined how male and female secondary school students in Pakistan perceive their critical thinking, problem-solving, and creativity in English, particularly with the integration of ChatGPT. It also assessed how ChatGPT affects their motivation and engagement in learning English. The findings indicated that ChatGPT had a positive effect on enhancing the creativity, problem-solving, and critical thinking skills of both male and female students in English. However, there were many concerns that emerged from the sides of male and female students specifically regarding the diminishing of creativity and critical thinking skills, as a result of over-reliance on ChatGPT in learning. In terms of motivation and engagement in learning with ChatGPT, the majority of male and female students believed that their motivation and engagement in learning English had improved. However, many students also cited negative impacts of ChatGPT on their connection with teachers and their motivation and engagement in learning English. They said that they were becoming lazy and not participating actively in learning activities.

Moreover, it is noteworthy that the predominant findings of this research study are largely consistent with the prior literature and research studies conducted in the international context, with reference to varying levels of education. However, the present research study is pioneering within the context of Pakistani secondary schools insofar as it captures the perceptions of male and female secondary English language students with regard to the use of ChatGPT in English language education. Consequently, the present study makes a distinctive contribution to the existing body of knowledge in this area.

Limitations of the Study

The findings of the study cannot be extrapolated to students from diverse socioeconomic backgrounds, such as those attending public sector schools or other tier schools, nor can they be considered as a comprehensive representation of the perceptions and experiences of students from these backgrounds. Moreover, the primary objective was to conduct all the focus group discussions in audio-recorded format. However, in this particular research study, the focus group discussions were carried out in both audio-recorded and written formats. This approach was adopted in the hybrid form, owing to the reluctance of certain participants to engage in the recorded focus group activities, as they were involved in the research study. A further limitation of the research study was the inability of the researcher to accommodate the desired number of male and female secondary school students in a few selected schools. It should be noted that the students were either unavailable, unwilling to participate, or did not fulfil the selection criteria to take part in the research study. In some cases, the desired number of students from each gender was not available. Consequently, in light of the circumstances, the researcher endeavored to make substantial efforts to accommodate the remaining students of English from the various campuses of the aforementioned educational institutions, wherever applicable, and where permission was granted.

Recommendations of the Study

In light of the comprehensive analysis and the findings, the present research study puts forward the following recommendations: namely, that experimental and longitudinal research studies should be conducted in order to explore the influence of ChatGPT on the skills of male and female students in English language learning at the secondary level. The present study will facilitate a more profound comprehension of the impact of ChatGPT on the creativity, problem-solving, critical thinking, motivation and engagement of students in English following the integration of ChatGPT. Furthermore, it will assist in the consolidation of the extant research study by providing arguments and insights that have been tested through experimentation. In addition, future researchers should consider incorporating a substantial sample of data from male and female students from a diverse range of schools, including low-tier private schools and public sector schools, to facilitate the generalisation of findings. This will facilitate the aggregation of insights from a large cohort of students at the same level, thereby enabling the study to broaden its findings and to generalise its results in a more structured manner. It should be noted that future researchers may wish to consider gender as a variable in order to compare and contrast the perceptions of male and female students.

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