The Influence of ChatGPT on Reading Comprehension Exercises Among Foreign Language Learners

Elhassan, Nedal: Misurata University – Libya

nidal.elhassan@gmail.com

Al-abeedy, Sara: Misurata University – Libya

m211028@art.misuratau.edu.ly

Abstract

This study examines the influence of the AI-driven language model, ChatGPT, on reading comprehension exercises among foreign language learners within the Faculty of Arts, English Department, at the University of Misurata during the 2024-2025 academic year. The research aims to assess the extent to which ChatGPT facilitates tasks such as summarization, vocabulary enhancement, and text interpretation. Employing a quantitative research design, data were gathered via a questionnaire that included demographic inquiries and ten Likert-scale items to evaluate students' perceptions and attitudes regarding the efficacy of ChatGPT as a supplementary reading tool. The sample comprised 25 students enrolled in the Reading Comprehension course, representing a range of English proficiency levels. Ethical guidelines were meticulously adhered to in order to safeguard participants' confidentiality and rights. The anticipated findings are expected to offer insights into whether ChatGPT enhances reading comprehension skills, thereby enriching the educational experience for foreign language learners.

Keywords: ChatGPT, Reading Comprehension, English as a Foreign Language (EFL), Artificial Intelligence in Education, Educational Technology.

The Problem and Its Background

Introduction

Mastering reading comprehension is an essential skill that English learners must cultivate, (Xiao, et al, 2023).

Providing current and engaging reading activities customized to each student’s abilities and interests can ignite their passion for learning and enhance their English skills. However, acquiring a wide range of diverse materials is essential.

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In the field of higher education, there is growing interest in leveraging technological advancements to enhance learning processes, (Aljawarneh, 2020; Garcia Botero et al., 2019; Hoi, 2020; Parmaxi & Demetriou, 2020; Shadiev & Yang, 2020; Sun & Gao, 2020).

Artificial intelligence (AI) has begun to significantly influence people's lives, making a profound impact on nearly every aspect of contemporary society including foreign language education (Naidu, 2019).

The fast development of (AI), such as ChatGPT from Open AI, BERT from Google, RoBERT from Meta, has introduced new possibilities and challenges in reading educational contexts, (Le, & Mohd). One area of particular interest is the impact of these technologies on foreign language learning at the university level. ChatGPT has demonstrated impressive natural language processing capabilities, including the ability to generate human-like responses in multiple languages. This raises questions about how university students might utilize ChatGPT to assist with foreign language assignments, exercises, and other learning tasks.

Research has shown that technology-enhanced reading interventions can lead to improved comprehension outcomes. For instance, studies have indicated that digital tools can facilitate higher-order thinking skills and promote collaborative learning environments. However, the specific impact of conversational AI on reading comprehension exercises remains underexplored, particularly in the context of foreign language learners. This study aims to fill this gap by examining how ChatGPT influences students' engagement with reading tasks, their comprehension levels, and their overall learning experiences.

Misurata University, located in Libya, serves as an intriguing backdrop for this research. With its diverse student population and a curriculum designed to meet the demands of a globalized world, the university is committed to enhancing the quality of its language programs. The English Department, in particular, strives to equip students with the necessary skills to navigate the complexities of the English language. By integrating ChatGPT into reading comprehension exercises, this study seeks to evaluate not only the pedagogical implications but also the broader educational impact on students' language proficiency.

Moreover, this research is situated within the theoretical framework of constructivist learning, which posits that knowledge is constructed through interaction with the environment and social contexts. By utilizing ChatGPT as a co-learning partner, students are encouraged to take an active role in their learning process, facilitating deeper engagement and understanding. The study will

explore various dimensions of this interaction, including student perceptions, the quality of comprehension, and the effectiveness of ChatGPT as a supplemental learning tool.

In conclusion, the influence of ChatGPT on reading comprehension exercises represents a significant area of inquiry within the field of foreign language education. As language learners increasingly engage with digital tools, understanding the implications of such technologies on their learning outcomes is paramount. This study aims to provide valuable insights into how conversational AI can enhance the reading experiences of English Department students at Misurata University, ultimately contributing to the broader discourse on technology in education and its potential to reshape language learning paradigms.

Statement of the Problem

The purpose of this study is to investigate the impact of ChatGPT on foreign language learning among university students. Specifically, the research will explore how students are using ChatGPT to help solve reading comprehension exercises and understanding texts.

Research Questions

This study seeks to answer the following questions:

1. What effect does CHATGPT have on the reading comprehension abilities of learners studying a foreign language?

2. What impact does CHATGPT have on the accuracy of learner's answers to reading comprehension questions?

Scope the Delimitation

This study aims to focus on examining the impact of ChatGPT on the reading comprehension activities of foreign language learners, with a specific focus on students who passed this course in English Department, in Misurata University, Faculty of Arts in the academy year (2024-2025), focusing on its effectiveness in tasks like summarization, vocabulary aid, and answering questions, including students' capacity to understand, and interpret texts. Data are gathered through questionnaires.

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Definition of Terms

For the purposes of this study, the following terms are defined:

1. ChatGPT (Chat Generative Pre-Trained Transformer). It is a large language model developed by OpenAI, based on the transformer architecture. It was pre-trained on bast text datasets to understand and generate human-like responses in natural language conversations (OpenAI, 2023).

2. Language Model. It is an artificial intelligence system trained to predict the likelihood of a sequence of words. It analyzes large corpora of text to learn patterns of language and can generate coherent and contextually relevant text based on a given input (Brown et al, 2020).

3. Reading Comprehension. It is the ability to process written text, understand its meaning, and integrate it with existing knowledge. It involves skills such as identifying main ideas, making inferences, and critically analyzing content (National Reading Panel, 2000).

4. Foreign Language Learning. It refers to the process by which individuals acquire a language that is not their native tongue, often in a formal educational setting. This learning includes developing skills in listening, speaking, reading, and writing in the new language and is often influenced by cognitive, emotional, and social factors (Lightbown & Spada, 2020).

Literature Review

The use of AI-powered language models, such as ChatGPT, in educational contexts has been a growing area of interest among researcher and practitioners. Several studies have explored the potential benefits and challenges of integrating these technologies into language learning environments.

Reading Comprehension Exercises Development

Recent studies highlight the challenges faced by English teachers in providing engaging and effective reading exercises tailored to the diverse capabilities and interests of their students. According to Xiao et al. (2023), educators believe that modern, well-designed reading tasks can ignite students' enthusiasm for learning and enhance their English proficiency. However, teachers often struggle to identify authentic reading materials suitable for English as a Foreign Language (EFL) learners and must frequently create corresponding activities from scratch, which is a time-intensive process.

To address this issue, Xiao et al. (2023) developed reading comprehension exercises specifically for Chinese middle school students using ChatGPT. The authors describe these exercises as comprising two main components: a coherent passage and a series of multiple-choice questions aligned with the text. The evaluation of these AI-generated materials involved human assessors, including English teachers and native speakers, who compared them with human-authored passages and exercises on similar topics. ChatGPT was directed to produce specific reading comprehension tasks, with detailed instructions regarding the genre, length, difficulty level, and content focus of the text, as well as the types and number of options for the multiple-choice questions.

Evaluators rated the quality of both the AI-generated and human-written passages on a scale from 1 to 5, considering factors such as readability, correctness, coherence, engagement, and overall quality. Additionally, they assessed the usefulness and appropriateness of the questions for middle school students, as well as their alignment with the passage content. Participants also rated the extent to which they believed the questions were generated by language models, aiming to identify any discernible differences between AI-generated and human-generated exercises. The findings indicated that the passages created by CHATGPT received higher scores than those written by humans. However, the multiple-choice questions produced by AI were rated lower than those crafted by humans across all evaluated dimensions. Overall, the study suggests that integrating AI technology in educational contexts for developing reading comprehension exercises may be beneficial for both instructors and students, as teachers perceive such systems as valuable tools that can significantly reduce costs and time while offering diverse and personalized learning materials.

In another experimental study, Shin and Lee (2023) compared 12 assessment materials developed by CHATGPT with human-generated reading exercises. The majority of participants were undergraduate students aspiring to become teachers, alongside a smaller group of in-service English professors. Without disclosing the sources of the materials, participants evaluated the reading passages and multiple-choice questions using a Likert-scale questionnaire. Four criteria were established for assessment: the naturalness of the text flow, the authenticity of English expressions, the appeal of multiple-choice options, and the overall quality of the testing items. The results revealed no significant difference between AI-generated and human-created materials regarding the naturalness of flow and English expressions. However, several participants noted a lack of distractors in the AI-generated multiple-choice questions, resulting in significantly lower ratings for their attractiveness. Comments such as, "There are no compelling option choices for this question," underscored this sentiment (p. 34). Additionally, data analysis indicated that in-service professors

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rated the naturalness of flow and overall completion level of the items lower than pre-service teachers, suggesting that participants' proficiency levels are crucial factors in this research.

Finally, the automatic evaluation of reading comprehension exercises generated by ChatGPT has also been explored. Säuberli and Clematilde (2024) focused on generating multiple-choice questions to enhance learners' skills in the German language and introduced a novel evaluation metric that combines answerability and guessability to assess the quality of the exercises in terms of informativeness. While human assessment remains essential in the evaluation process, this new metric was applied to automatic evaluations as well. When provided with specific prompts, GPT-4 and Llama 2 Chat were tasked with evaluating previously generated questions. Results demonstrated that CHATGPT was capable of producing reliable evaluations, outperforming the other language model. The high inter-annotator agreement between GPT-4 and human reviewers suggests its viability as an evaluator, whereas results from Llama 2 showed less consistency (p. 34).

Overall, recent research emphasizes the potential of AI technologies to transform the role of language teachers. CHATGPT has not only been tested as a tool for creating reading comprehension exercises but has also been utilized in evaluating the quality of educational materials. This study aims to provide further evidence of the model's applicability in the educational sector, particularly in developing reading materials for EFL middle school students.

Pre-trained Large Language Models (LLMs) have been proposed by researcher as a solution to the labor-intensive and unscalable challenges faced in this context (Zhai, 2022; Dwivedi et al., 2023). Reading comprehension exercises generally consist of a coherent passage and multiple-choice questions aligned with its content. For LLMs to generate such exercises effectively, they must possess advanced linguistic understanding and inference capabilities. While previous research has focused on generating long texts and question-and-answer pairs (Li et al., 2021; Kurdi et al., 2020), existing task-specific models still fall short, as their outputs remain distinguishable from human-written texts and lack adequate personalization for diverse learners (Kurdi et al., 2020), limiting their direct application in educational settings.

Evaluation of Al-Generated Materials

The quality of outputs generated by artificial intelligence (AI) raises several concerns regarding the assessment criteria typically applied in evaluations. As noted by Belz et al. (2023) "While some aspects of evaluations such as type and size of rating scale, evaluation mode, etc., are relatively easy to determine from papers, the confusion over which evaluations assess which aspect of quality, and

the paucity of detail about experimental design in the majority of papers, currently hinder our ability to establish comparability." Consequently, it is challenging to identify objective definitions for each quality criterion. Terms such as "readability," "language naturalness," "coherence," and "grammaticality" are frequently employed in discussions of Natural Language Processing (NLP), yet their definitions vary significantly across different studies, complicating efforts to replicate and compare research projects. This challenge of establishing clear and well-defined evaluation criteria is echoed by van der Lee et al. (2021, p. 6), who state, "Many studies take some notion of 'text quality' as their primary evaluation measure, but this goal is not easy to assess since text quality criteria differ across tasks. [...] In short, there is no standard evaluation model for NLG, nor agreement in terminology, and explanatory details for the criteria are often lacking."

To categorize evaluation characteristics, Belz et al. (2020) proposed a framework that divides values into three main categories: quality criteria, evaluation mode, and experimental design. The first category examines the type of quality being assessed, the nature of the system output, and whether the evaluation frame of reference is internal or external. Evaluation modes can be classified as objective or subjective, absolute or relative, and extrinsic or intrinsic. Experimental design encompasses elements such as the scale or rating instrument, information about evaluators, and the format of responses. Regarding the type of output assessed, it is important to differentiate between the form and content of AI-generated materials. Clark (2021) utilized this distinction to compare human-written and machine-generated texts, specifically focusing on stories, news articles, and recipes. Participants were shown examples of both human-authored texts and passages generated by GPT-2 or GPT-3, and they were asked to identify the source of each text. The results indicated that participants were generally able to distinguish between human and GPT-2 texts, while GPT-3 outputs were less easily recognizable. The study also aimed to categorize evaluators' feedback according to specific criteria. Comments regarding the form of the text were classified into three categories: grammaticality, level of detail, and genre. In contrast, comments pertaining to the content were divided into five categories: repetition, factuality, consistency, common sense, and coherence. This categorization is straightforward yet specific, as it provides detailed descriptions of each criterion along with examples of relevant comments.

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Theoretical Framework

Second Language Acquisition (SLA) Theories:

- The Input Hypothesis (Krashen) highlights the importance of comprehensible input for language acquisition. ChatGPT can generate tailored reading materials that match learners' proficiency levels, thereby providing appropriate input that facilitates comprehension.

Related Studies

The following section provides a review of related studies:

Alhammad (2024) conducted a study titled "The Impact of ChatGPT in Developing Saudi EFL Learners' Literature Appreciation" and he investigated how an AI tool, specifically ChatGPT, can enhance literature appreciation skills among English as a Foreign Language (EFL) learners.

Alhammad (2024) study shares several similarities with the current research. Firstly, both investigations explore the impact of ChatGPT on foreign language learners, emphasizing its role in enhancing language skills. Secondly, each study involves university students learning English as a foreign language, thereby addressing comparable educational contexts. Thirdly, both studies evaluate students' attitudes toward the use of ChatGPT, revealing a generally positive reception of the technology. Furthermore, each study is situated within an educational framework—one in a high school setting and the other at the university level—underscoring the relevance of ChatGPT across various educational stages. Lastly, both studies collect participant feedback regarding their experiences with ChatGPT, aiming to assess its effectiveness as a learning tool. In contrast, the recent study focuses on literature appreciation skills, investigating how ChatGPT facilitates understanding of literary themes, symbols, and character development. Conversely, the current study emphasizes reading comprehension, examining how ChatGPT assists with clarifications, summaries, and the overall understanding of texts. The recent study is conducted with 28 female English as a Foreign Language (EFL) learners at Prince Sattam Bin Abdelaziz University in Saudi Arabia, while the current study includes 25 undergraduate students—both female and male—from the English Department at Misurata University in Libya, featuring a mixed-gender sample with diverse levels of English proficiency. Moreover, the recent study employs a distinctive method of gathering real-time experiential data by encouraging participants to document their interactions with ChatGPT following sessions. In contrast, the current study utilizes a survey comprising 16 items: three designed to elicit demographic information (name, age, gender, semester, and whether participants are enrolled in a

Reading Comprehension course) and ten items on a 5-point Likert scale, aimed at enabling a statistically powered analysis based on a somewhat larger sample. The recent study was conducted during the first semester of 2023, whereas the current study is set in the semester of the 2025 academic year. While the recent study specifically targets literature appreciation, the current study adopts a broader focus on reading comprehension exercises. Finally, the recent study measures improvements in literature appreciation scores and specific interpretive skills, while the current study emphasizes vocabulary acquisition, inferencing, and overall comprehension abilities.

Aldowsari and Aljebreen (2024) conducted a study titled "The Impact of Using a ChatGPT-Based Application to Enhance Saudi Students' EFL Vocabulary Learning." This study investigates the influence of a ChatGPT-based application on vocabulary acquisition among Saudi high school students. Employing a quasi-experimental design, the study comprised an experimental group utilizing the application and a control group. Data were collected from 57 female students through pre- and post-tests, along with a follow-up questionnaire.

Aldowsari and Aljebreen (2024) study and the current research exhibit notable similarities, particularly in their examination of ChatGPT's impact on language learning, focusing on vocabulary and reading comprehension. Each study adopts a quantitative research design to gather and analyze data, facilitating statistical comparisons. Furthermore, both investigations evaluate students' attitudes toward the use of ChatGPT, revealing a generally positive reception of the technology. The studies are situated within educational frameworks—one in a high school context and the other in a university environment—thereby underscoring the relevance of ChatGPT across various educational stages. Both studies employ statistical methods to assess the effectiveness of ChatGPT in improving language learning outcomes. In contrast, the recent study involves 57 female high school students, while the current study includes 25 undergraduate students of both genders, within a university setting. The recent study primarily focuses on vocabulary acquisition, whereas the current study emphasizes reading comprehension skills, including inferencing and text interpretation. Additionally, the recent study utilizes a quasi-experimental design with both an experimental group and a control group, while the current study employs a survey consisting of 12 items: two designed to gather demographic information (gender and semester) and ten items measured on a 5-point Likert scale, aimed at enabling a statistically robust analysis based on a somewhat larger sample. Moreover, the recent study features a larger sample size (57 students) compared to the current study (25 students), potentially influencing the statistical power of the findings. The former study is conducted in Saudi Arabia, while the current is situated in Libya, reflecting distinct educational contexts and challenges. Furthermore,

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the current study specifically targets students enrolled in a Reading Comprehension course, whereas the recent study does not specify a particular course focus.

Research Design

The current research employs a quantitative research design in its data collection and comprehension exercises among foreign language learners, with a focus on English department students at Misurata University. It seeks to determine whether ChatGPT contributes to the improvement of students' reading comprehension skills, including vocabulary acquisition, inferencing, text interpretation, and overall understanding. Furthermore, the study examines students' perceptions and attitudes toward the effectiveness of ChatGPT as a supplementary reading tool.

Participants and Setting

The participants in this study are 25 undergraduate students who are learning English as a foreign language (EFL). These students are either at their third, fifth, eighth, and ninth semesters; and enrolled in the Reading Comprehension course.

The study employed a simple random assignment of intact groups as the sampling method. The sample includes both male and female participants, with different levels of English proficiency. A total of 25 students were selected to ensure sufficient statistical power for analysis and to facilitate meaningful interpretation of the results.

The locality of this research in the English Department, Faculty of Arts, Misurata University in Misurata, Libya, in the spring semester of the Academic Year 2024-2025.

Research Instrument

The instruments the researcher adopted in order to find out the significant findings is a questionnaire. The questionnaire is comprised of 12 items: 2 for eliciting demographics information of gender and semester, and 10 5-point Likert scale items aimed for a statistically powered analysis based on a slightly larger sample.

Data collection

Before conducting the study, permission was obtained from the head of the English Department, Faculty of Arts, Misurata University. Data were collected using a questionnaire (Appendix B) designed to capture students' perceptions of ChatGPT's effectiveness and their experiences with it.

The questionnaire employed Likert-scale items for quantitative data collection. Originally developed by Rensis Likert in 1932 as a tool for measuring attitudes, the Likert scale is typically structured as a five-point ordinal scale that allows respondents to indicate their level of agreement or disagreement with a statement (Sullivan & Artino, 2013).

Ethical considerations

Firstly, the research. sought the permission from the people in charge.This study followed ethical guidelines to ensure the protection of participants' rights. All ethical considerations were carefully addressed throughout the research. The personal information of participants remained strictly confidential, with no real names disclosed in any written reports or data discussions to safeguard their privacy. Participants were fully informed about the study's objectives, their role in the research, and their right to withdraw at any stage without any consequences. Moreover, their participation in this study had no impact on their academic performance or course grades,the use of ChatGPT in the study aligns with the institution's policies and guidelines.

Data analysis

After obtaining the data from online questionnaire the researcher using the appropriate tools for analysis them. This research investigates the influence of ChatGPT on reading comprehension exercises among foreign language learners. It includes Likert scale items (1–5), strongly agree, agree, neutral, disagree, strongly disagree, used a Descriptive Statistics for Likert Scale Responses, the response frequencies collected from participants via Google Forms were analyzed using Microsoft Excel to assess their degrees of agreement and disagreement with the questionnaire items.

Results

This chapter begins with a descriptive analysis of the quantitative data collected through the participants' responses to the questionnaire. The questionnaire consists of 10 items and is designed to examine the impact of ChatGPT on reading comprehension exercises. This analysis is directly related to the research questions and hypothesis, focusing on the effects of ChatGPT in enhancing reading comprehension skills among foreign language learners in the English Department at Misurata University.

The following bar chart in Figure1 illustrates how ChatGPT supports learners in comprehending and interacting with texts, thereby enhancing their reading comprehension skills.

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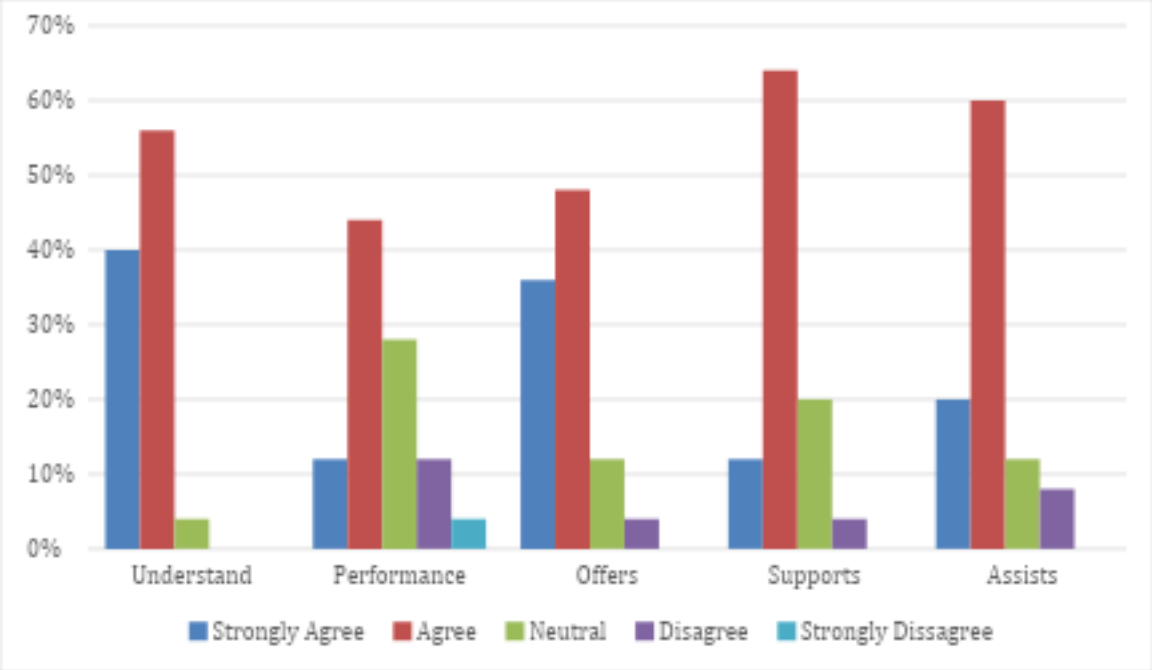

Figure1 Impact on Reading Comprehension

As illustrated above in figure (1), a generally positive perception of ChatGPT among respondents regarding its effectiveness in enhancing reading comprehension and language understanding.

Firstly, the overwhelming majority (96%) of respondents agree that ChatGPT aids in understanding difficult English texts, indicating that users find the tool effective and valuable for comprehension. A small portion (4%) remains neutral, suggesting that while they may not have a strong opinion, they do not fully endorse the effectiveness of ChatGPT, which could point to a need for further improvement in certain areas or simply reflect that some users have not had enough experience to form a solid opinion. Notably, the absence of disagreement (0%) is a strong indicator that users generally perceive ChatGPT positively in this context, reflecting a high level of satisfaction and confidence in the tool's capabilities.

The second section in Figure (1), A little over half (56%) of respondents agree that using ChatGPT enhances their reading comprehension performance, indicating a positive, albeit moderate, perception of the tool's effectiveness compared to self-study methods. Conversely, a significant portion (28%) of respondents chose to remain neutral, suggesting that many users recognize potential benefits but may be uncertain about the impact or have not observed a clear difference in their performance. Additionally, the (16%) of respondents who disagree highlights a notable minority that does not find ChatGPT beneficial for improving their reading comprehension, which could be attributed to various

factors, including differing individual learning styles or specific challenges that the tool may not adequately address.

The next section in Figure (1), A significant majority (84%) of respondents agree that ChatGPT provides clear explanations of vocabulary and phrases, indicating a high level of satisfaction with the tool's effectiveness in enhancing language understanding. Additionally, a small portion (12%) of respondents opted for a neutral stance, suggesting that while they acknowledge the potential for improvement, they may not have a strong opinion or have not fully experienced the benefits of the tool. Furthermore, the minimal disagreement (4%) reflects a generally positive perception of ChatGPT's explanatory capabilities, indicating that very few users find the explanations unclear or unhelpful.

Section four in Figure (1), a significant problem (76%) of respondents affirm that the use of ChatGPT enhances their ability to develop independent reading comprehension skills, highlighting a positive perception of the tool's role in fostering self-directed learning. Conversely, (20%) of respondents maintain a neutral stance, indicating that, while they recognize some potential benefits, they lack a strong opinion or experience regarding ChatGPT's effectiveness in this area; this suggests an opportunity for improvements in user engagement and support. Additionally, the (16%) of respondents who express disagreement represent a minority who do not find ChatGPT beneficial for developing their independent skills, which may reflect specific challenges or preferences that the tool fails to adequately address.

The final section in Figure (1), a substantial (80%) of respondents indicate that ChatGPT effectively assists them in identifying key ideas and essential details within texts, reflecting a high level of satisfaction with the tool's capacity to enhance comprehension and focus on critical information. Moreover, only (12%) of respondents selected a neutral response, suggesting that the majority of users possess a definitive opinion regarding ChatGPT's effectiveness in this regard; this low level of neutrality indicates a general confidence in their experiences. Additionally, the minimal (8%) of respondents who express disagreement highlights that very few users find ChatGPT unhelpful in recognizing key concepts, which positively underscores the tool's capabilities, although it also suggests that some users may not be fully benefiting from its features.

The following bar chart in Figure2 assesses the learners’ motivation and preference for using ChatGPT compared to traditional methods like textbooks and dictionaries.

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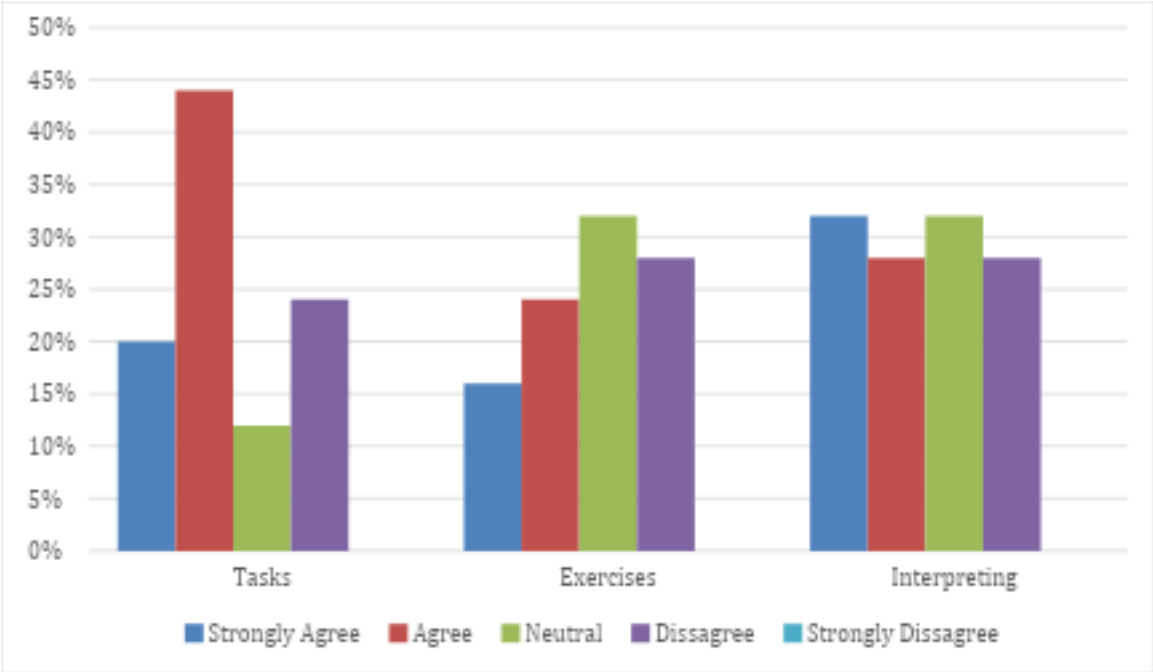

Figure2 Perceived Effectiveness and Engagement

As shown above in Figure 2, collectively reveal insights into user perceptions of ChatGPT in relation to motivation, engagement, and preference compared to traditional reading tools.

Firstly, a moderate majority (64%) of respondents agreed that using ChatGPT encourages them to complete reading comprehension tasks, suggesting a positive impact on motivation for most users and indicating that the tool is somewhat effective in fostering engagement. However, a small proportion (12%) of respondents adopted a neutral stance, which reflects uncertainty or indifference; these individuals may lack a strong opinion or may have had mixed experiences that hinder their ability to fully endorse or reject the tool's effectiveness. Additionally, the significant disagreement from (24%) of respondents highlights that nearly a quarter of users do not feel motivated by ChatGPT in their reading tasks, indicating the presence of barriers to motivation for some individuals.

The second section in Figure (2), only 40% of respondents agree that ChatGPT enhances engagement and interactivity in reading exercises, indicating that less than half of the users perceive a significant improvement compared to traditional methods. Additionally, a notable (32%) of respondents adopted a neutral stance, reflecting uncertainty or ambivalence regarding the effectiveness of ChatGPT in making reading exercises more engaging; this suggests that many users may not have fully experienced or recognized its potential benefits. Furthermore, the (28%) of

respondents who express disagreement indicates that a considerable portion of users do not find ChatGPT to be more engaging than conventional approaches, which may point to limitations in the tool's design or its capacity to accommodate diverse learning preferences.

The final section in Figure (2), a survey reveals a moderate preference for ChatGPT among respondents, with (60%) indicating that they prefer it over traditional dictionaries or textbooks for interpreting reading passages, thereby highlighting its perceived utility as a resource for content comprehension. Additionally, a notable (32%) of respondents expressed a neutral stance, suggesting ambivalence regarding ChatGPT's superiority, which may indicate a need for enhanced features or greater familiarity with the tool to improve user experience. Furthermore, only (8%) of participants disagreed with the use of ChatGPT, underscoring a general acceptance of this modern alternative for text interpretation and a shift away from conventional methods.

The final bar chart in Figure3 illustrated evaluate the perceived accuracy and clarity of the explanations provided by ChatGPT, which influences learners understanding.

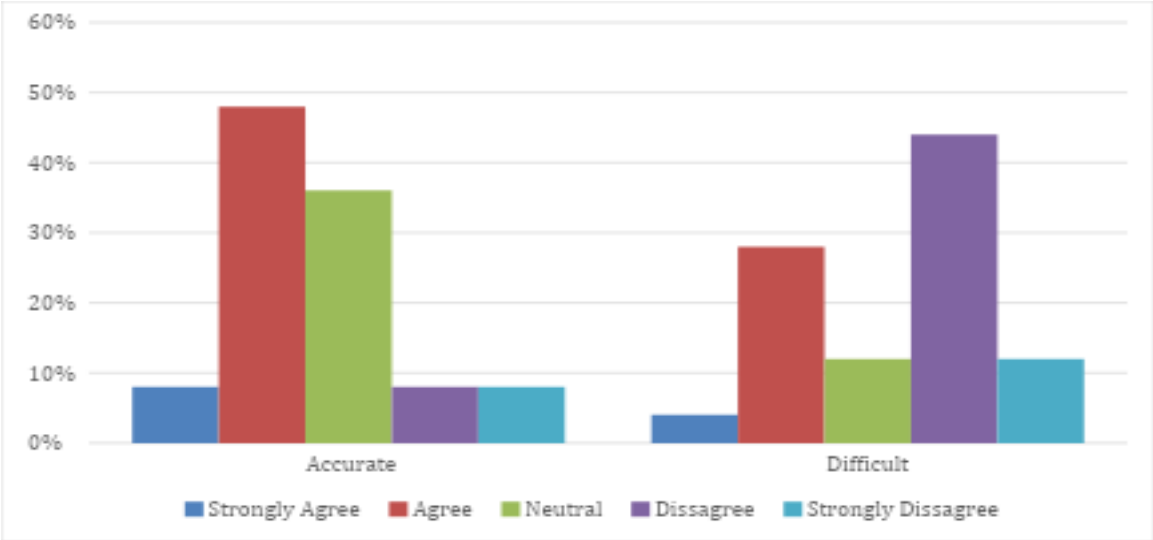

Figure3 Reliability and Clarity of Information

The information presented in Figure 3 highlights user perceptions about the reliability and clarity of the information provided by ChatGPT.

Section one, a survey of respondents regarding the reliability and accuracy of information provided by ChatGPT reveals a moderate level of agreement, with (56%) affirming that the information is dependable. This positive perception, however, indicates a need for further

enhancement in trust and reliability. Notably, a significant (36%) of respondents expressed a neutral stance, reflecting uncertainty or ambivalence towards the reliability of ChatGPT's outputs; this may stem from insufficient experience or exposure to mixed results. Moreover, only (8%) of respondents disagreed with the notion that the information is fundamentally unreliable, suggesting that while the majority view the tool favorably, there remain concerns among a minority of users.

The final section in Figure 3, the findings regarding user perceptions of ChatGPT's explanations reveal a nuanced landscape of clarity. A moderate (32%) of respondents expressed that they find the explanations unclear or difficult to understand, indicating some concern about clarity, although this viewpoint does not represent a majority. Furthermore, only (12%) of respondents adopted a neutral stance, suggesting that most users hold definitive opinions regarding the clarity of ChatGPT's explanations, either positive or negative. In contrast, a significant (56%) of respondents disagreed with the assertion of lack of clarity, indicating that the majority perceive ChatGPT's explanations as clear and understandable. This predominance of positive responses is encouraging and underscores the tool's effectiveness in communication.

Discussion

The analysis of the survey results reveals a predominantly favorable perception of ChatGPT among users, particularly regarding its effectiveness in enhancing reading comprehension and language skills. A significant majority of respondents concur that ChatGPT is instrumental in facilitating the understanding of complex English texts, indicating a high degree of user satisfaction. The lack of disagreement among most participants underscores a strong confidence in the tool's capabilities. However, the presence of a minority of neutral responses suggests potential area for improvement or indicates that some users may not possess sufficient experience with the tool.

This study raises two primary research questions. The data analysis presented in the results section provides substantive answers to these inquiries, which are central to the study's objectives.

The first question, "What effect does ChatGPT have on the reading comprehension abilities of learners studying a foreign language?" is addressed through the data illustrated in Figures 1 and 2. The findings from Figure 1, related to reading comprehension performance, indicate that a substantial majority perceives ChatGPT positively in fostering independent reading comprehension skills. Nonetheless, the presence of neutral and dissenting responses suggests that not all users find the tool beneficial, highlighting opportunities for enhancing user experience and ensuring that ChatGPT effectively addresses diverse learning needs.

The results from Figure 2, which pertains to motivation and engagement, indicate that users generally prefer ChatGPT over traditional resources for interpreting reading passages. This shift in user attitudes reflects a growing recognition of ChatGPT as a valuable alternative. However, the significant proportion of neutral responses points to a need for improved user familiarity and feature enhancements to fully capitalize on the tool's potential.

The second research question, "What impact does ChatGPT have on the accuracy of learners' answers to reading comprehension questions?" is examined through Figure 3. User perceptions regarding the reliability and clarity of information provided by ChatGPT are mixed. While most users find ChatGPT's explanations to be clear, a notable minority do not, suggesting a critical area for improvement in communication clarity.

In summary, these findings indicate that although ChatGPT is generally regarded positively as a tool for enhancing reading comprehension and language understanding, there remain several avenues to optimize user experiences to better accommodate varied learning preferences and needs.

Conclusion

The study provides valuable insights into the role of artificial intelligence in enhancing language learning, particularly among university students in the English Department at Misurata University. By focusing on the impact of the AI-powered language model, ChatGPT, on the reading comprehension skills of students enrolled in a dedicated course, this research contributes to the growing body of literature on technology-assisted language learning.

The findings of this study indicate that ChatGPT serves as an effective supplementary tool for improving various facets of reading comprehension among foreign language learners. Specifically, participants reported significant benefits in areas such as summarization, vocabulary acquisition, inferencing, and overall text interpretation. The structured questionnaire, comprising Likert-scale items, revealed a strong consensus among students regarding the utility of ChatGPT in facilitating their understanding of complex texts. This aligns with previous research that highlights the positive influence of technology on student engagement and learning outcomes.

Moreover, the study underscores the importance of students' perceptions and attitudes towards the use of AI in educational contexts. Many participants expressed a favorable view of ChatGPT, citing its ease of use and ability to provide immediate feedback as key advantages. This positive

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reception suggests that integrating AI tools into language curricula may enhance student motivation and foster a more interactive learning environment. The ability of ChatGPT to assist in clarifying doubts and providing contextual explanations can empower learners, making them more autonomous and confident in their reading abilities.

Additionally, the ethical considerations outlined in the research emphasize the researcher commitment to safeguarding participants' rights and ensuring confidentiality. By adhering to ethical guidelines, the study not only reinforces the integrity of the research process but also sets a precedent for future investigations in this domain.

In light of the findings, it is clear that ChatGPT has the potential to transform reading comprehension exercises in foreign language education. However, further research is warranted to explore the long-term effects of using AI tools on language acquisition and comprehension. Future studies could also investigate the applicability of ChatGPT across diverse educational settings, learner demographics, and language proficiency levels to provide a more comprehensive understanding of its impact.

In summary, this study contributes to the ongoing discourse on the integration of technology in language education by highlighting the effectiveness and positive reception of ChatGPT among EFL learners. As educational institutions continue to evolve and adapt to technological advancements, leveraging AI tools like ChatGPT could play a crucial role in enhancing the reading comprehension skills of foreign language learners, ultimately improving their academic outcomes and fostering a deeper appreciation for language learning.

Recommendations

As the integration of artificial intelligence in educational settings continues to expand, ChatGPT has surfaced as a promising instrument for improving language acquisition, especially in the area of reading comprehension. Although existing research offers initial evidence of its efficacy, the current body of work is constrained by limitations in temporal scope, linguistic diversity, and methodological frameworks. To fill theses gaps and achieve a more thorough understanding of ChatGPT's educational influence, several directions for future research are suggested. These recommendations aim to assess the long-term, cross-linguistic, and pedagogical ramifications of deploying AI tools such as ChatGPT across diverse learning contexts:

1. Conduct longitudinal studies to assess the long-term effects of ChatGPT on reading comprehension skills over multiple semesters. This would provide insights into whether improvements are sustained over time.

2. Expand research to include learners of other foreign languages, beyond English, to evaluate the effectiveness of ChatGPT across different language contexts and cultural backgrounds.

3. Implement comparative studies that analyze the effectiveness of ChatGPT against traditional teaching methods or other digital tools in enhancing reading comprehension skills.

4. Incorporate qualitative methods, such as interviews or focus groups, to gain deeper insights into students' experiences and perceptions of using ChatGPT for reading comprehension.

5. Explore the impact of ChatGPT on various educational levels, from primary to secondary education, to see how its effectiveness varies with age and proficiency levels.

6. Investigate the combined use of ChatGPT with other AI language tools to determine synergies that may enhance reading comprehension and overall language learning.

7. Examine the application of ChatGPT in specific subject areas beyond language learning, such as literature or social sciences, to assess its versatility and effectiveness in different academic contexts.

8. Investigate the ethical implications of using AI in education, focusing on issues such as dependency, data privacy, and the impact on critical thinking skills.

In conclusion, the recommended approaches highlight the necessity for mare varied, comprehensive, and ethically informed research regarding the utilization of ChatGPT in educational contexts. Future studies should encompass longitudinal and comparative analyses, as well as cross-cultural and interdisciplinary methodologies, to elucidate both the advantages and constraints of AI-assisted learning. By examining these aspects, researcher and educators can more effectively incorporate ChatGPT into language instruction, thereby improving student outcomes while also addressing ethical and cognitive implication.

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- Nedal Elhassan, a Libyan national, is a graduate of Mount Saint Vincent University (MSVU), Canada, with a degree in English and TESOL. He is currently an Assistant Lecturer at Misurata University, Libya, where he teaches in the Department of English. His academic interests focus on English language teaching, applied linguistics, and second language acquisition