

Examining the Role of ChatGPT as a Learning tool in Promoting Students' English Language Learning Autonomy relevant to Kurikulum Merdeka Belajar

Ni Putu Oka Agustini¹

¹ Politeknik Pariwisata Bali, Indonesia; okaagustini@yahoo.com

ARTICLE INFO

Keywords:

Chat GPT;
Learning Autonomy;
Kurikulum Merdeka Belajar

Article history:

Received 2023-05-11
Revised 2023-06-19
Accepted 2023-07-16

ABSTRACT

This study aimed to examine the effect of ChatGPT, an AI-powered chatbot, as a learning aid in encouraging English language learning autonomy among Indonesian students enrolled in the Kurikulum Merdeka Belajar (KMB) program. The study used a mixed-methods research approach that included questionnaires and semi-structured interviews to examine how English Language Learners utilize ChatGPT to regulate their learning processes, establish objectives, and make decisions about their English language acquisition. Additionally, the study explored how ChatGPT can be integrated into the KMB program to promote autonomy and personalized learning. Previous studies have shown that technology can promote autonomy in language learning. However, there is a need for more research on the specific role of ChatGPT in promoting autonomy in language learning. The study will contribute to language teaching and learning by providing insights into how ChatGPT can promote autonomy and personalized learning among ELLs in the KMB program. It also provides practical recommendations for language teachers and policymakers on integrating ChatGPT into language learning programs to promote autonomy and personalized learning.

This is an open access article under the [CC BY-NC-SA](https://creativecommons.org/licenses/by-nc-sa/4.0/) license.



Corresponding Author:

Ni Putu Oka Agustini
Politeknik Pariwisata Bali, Indonesia; okaagustini@yahoo.com

1. INTRODUCTION

Language learning autonomy is crucial to language education, particularly in today's multicultural and multilingual learning environments (Dwivedi et al., 2023). Autonomous learners can regulate their learning processes, establish objectives, and make decisions about their language acquisition. It is a valuable ability that students must master in order to become effective and self-sufficient language learners (Hair Jr, Black, Babin, & Anderson, 2018). Technology has played an important role in improving language learning autonomy in recent years. With the advent of Artificial Intelligence (AI) and Natural Language Processing (NLP) technology, learners now have

access to language learning tools that are personalized to their specific requirements and learning styles. One such tool is ChatGPT, an AI-powered chatbot that uses NLP to simulate human-like conversation and provide personalized language learning support. The Indonesian Ministry of Education and Culture recently launched the Kurikulum Merdeka Belajar (KMB), an educational program promoting independent and personalized learning among students (Shahriar & Hayawi, 2023).

The program aims to develop self-directed learning, critical thinking, and problem-solving abilities by providing a learning environment. ChatGPT could be a valuable tool for promoting English language learning autonomy among students enrolled in the KMB program (Dwivedi et al., 2023). However, there is a need to investigate the role of ChatGPT as a learning tool in promoting autonomy in English language learning relevant to Kurikulum Merdeka Belajar. Previous studies have shown that technology can promote autonomy in language learning (Chik, 2010; Vassallo & Buhagiar, 2016). Further study on the unique impact of ChatGPT in encouraging autonomy in English language acquisition, particularly in the setting of the KMB program, is needed. This study aims to close this gap by studying how ChatGPT might be utilized as a learning tool to increase English language learning autonomy among Indonesian ELLs participating in the KMB program.

This study aims to investigate the role of ChatGPT as a learning aid in encouraging autonomy in language learning related to Indonesia's Kurikulum Merdeka Belajar program. The project will examine how ELLs utilize ChatGPT to take charge of their learning processes, set objectives, and make language learning decisions. The research will also examine how ChatGPT might be integrated into the KMB curriculum to encourage autonomy and individualized learning. Past research has shown that technology can increase autonomy in language acquisition (Chik, 2010; Vassallo & Buhagiar, 2016). Further study on the unique impact of ChatGPT in encouraging autonomy in language acquisition, particularly in the setting of the KMB program, is needed. By examining the use of ChatGPT in the KMB program, the study will provide valuable insights into how technology can support autonomy and personalized learning in language education (Khairatun Hisan & Miftahul Amri, 2023).

Self-directed learning, critical thinking, and problem-solving abilities are emphasized in the Kurikulum Merdeka Belajar program (Nadim, 2020). So, the study will look into how ELLs can learn these skills through ChatGPT. The study will provide a deeper understanding of the potential benefits of using technology to promote autonomy and personalized learning in language education by analyzing how students interact with ChatGPT and the impact of this interaction on their language learning outcomes. A mixed-methods research design, which combines quantitative and qualitative data collection methods, will be used in the study. Surveys and language proficiency tests will be used to collect the quantitative data, while interviews and observations of students using ChatGPT will be used to collect the qualitative data. A sample of ELLs enrolled in the KMB program in Indonesia will be the subject of the study. In conclusion, this study will provide insights into the role of ChatGPT in promoting autonomy and personalized learning among ELLs in the KMB program, which will contribute to the field of language education. (Baidoo-Anu & Owusu Ansah, 2023) The study will offer practical suggestions for incorporating ChatGPT into language learning programs to support autonomy and personalized learning. The research question for this study is: How does ChatGPT as a learning tool promote autonomy in language learning among ELLs relevant to Kurikulum Merdeka Belajar?

Definition of Language Learning Autonomy

As per (Benson & Voller, 2014) language learning independence is "the ability to assume command over one's learning". "The ability to take charge of one's learning, i.e., to have, and to hold responsibility for all the decisions concerning all aspects of this learning," according to, is another definition of autonomy in language learning. This definition emphasizes learners' ability to make decisions regarding all aspects of their language learning, including selecting learning materials, setting learning goals, and evaluating their progress.

In language education, autonomy in language learning has grown in importance in recent years. There has been a growing interest in how technology can support learners' autonomy in language learning as technology advances. Chatbots, in particular, are becoming increasingly popular as a method for encouraging autonomy in language learning. Artificial intelligence (AI) powers chatbots, which use Natural Language Processing (NLP) to mimic human conversation and offer individualized language learning assistance. Research has shown that chatbots can promote language learning autonomy (Susanti et al., 2017). These tools can provide learners with immediate and personalized feedback, which can help them identify their strengths and weaknesses and take control of their learning processes. Additionally, chatbots allow learners to practice their language skills in a safe and non-judgmental environment, which helps build learners' confidence and motivation.

However, some researchers have also voiced concerns regarding the chatbots' inability to promote autonomy in language learning. For instance, (Chen & Wang, 2019) observe that it is possible that chatbots will not be able to offer students the same level of support as human teachers. They argue that chatbots should be used in addition to human instruction rather than in place of it. Additionally, some researchers have raised concerns about the potential for chatbots to reinforce certain biases and stereotypes in language learning (Gao, Jiang, & Zhou, 2020). In conclusion, the concept of language learning autonomy is essential in language education, and chatbots have the potential to be an effective tool for promoting autonomy in language learning. However, there is a need for more research to explore the specific role of chatbots in promoting autonomy and to identify best practices for their use in language education.

The Theoretical Framework of Language Learning Autonomy

The effectiveness of autonomous learning in English language learning has been the subject of numerous studies. For instance, a study on the development of autonomous learning among a group of English-learning Swedish high school students was carried out by (Cekaite & Schubert, 2019). According to the study, students who received autonomous learning support had significantly higher language proficiency than those who received traditional instruction

Furthermore, (Benson & Voller, 2014) proposed a framework for developing autonomous learning in language education, which involves four dimensions: learner agency, pedagogy, curriculum, and assessment. This framework highlights the importance of creating a supportive learning environment that encourages learners to take control of their learning process, provides opportunities for self-directed learning, and promotes authentic and meaningful learning tasks. In conclusion, autonomous learning can be a promising approach to promoting effective and meaningful English language learning in Kurikulum Merdeka Belajar. Research has shown that integrating learner-centered instruction, self-regulated learning, and task-based learning can promote learners' metacognitive skills, responsibility for learning progress, and language proficiency. (Liu, Li, Li, & Zheng, 2023) Future studies can examine the practical implications of autonomous learning in Kurikulum Merdeka Belajar and evaluate the effectiveness of various instructional strategies and assessment methods in supporting learner autonomy.

Theoretical Framework of English Language Learning Autonomy

Autonomous learning is when students can control their learning, set their learning objectives, and monitor their progress. The social constructivist theory, which places an emphasis on students' active participation in constructing their knowledge and understanding of the world, serves as the foundation for the idea of autonomy. Developing learners' metacognitive skills, such as setting goals, monitoring their learning, and reflecting on their learning outcomes, is a component of autonomy in language learning. In Kurikulum Merdeka Belajar, the growth of autonomous learning can be aided by three key elements: task-based learning, self-regulated learning, and learner-centered instruction (An & Mindrila, 2020).

Student-focused guidance: The importance of students' needs, interests, and experiences in learning is emphasized in learner-centered instruction. Students should be able to select the learning

materials, activities, and assessments that best suit their preferences and learning objectives in autonomous language learning. Collaborative learning, in which students collaborate to achieve their learning objectives and provide feedback, is another benefit of learner-centered instruction. Self-regulation in Education: The ability of students to regulate their learning process, such as setting goals, planning their learning activities, monitoring their progress, and evaluating their learning outcomes, is referred to as self-regulated learning. Self-managed learning is urgent in independent language learning since students should assume a sense of ownership with their learning headway and come to informed conclusions about their learning methodologies (Susanti et al., 2017). Task-based instruction: An approach to language learning called task-based learning emphasizes utilizing real-world tasks as a medium. Students can select the tasks in autonomous language learning that best meet their learning objectives and interests. When students use the language to complete real-world tasks and interact with their peers, task-based learning fosters communicative competence.

Relevant Research Studies

There needs to be more research specifically on the role of ChatGPT in promoting English language learning autonomy in the context of Kurikulum Merdeka Belajar. However, there are some relevant studies on using chatbots and similar technologies in language learning and autonomous learning. One study by (Chen & Wang, 2019) investigated the effectiveness of a chatbot system in promoting self-directed learning among Chinese EFL learners. The study found that the chatbot system, which provided learners with personalized learning content and feedback, significantly improved their self-directed learning skills and language proficiency. Another study by Yeh and Wang (2020) explored using a language learning chatbot to promote learner autonomy among Taiwanese university students. In a study by (S. Y. Huang, Huang, & Lin, 2021), using an intelligent language learning system incorporating a chatbot and other technologies enhanced learners' self-regulated learning and improved their English language proficiency. These studies suggest that chatbots and similar technologies can be practical tools in promoting self-directed and autonomous learning in language learning. In Kurikulum Merdeka Belajar, ChatGPT could be a valuable resource for learners to engage in personalized and self-directed language learning and develop their metacognitive and self-regulated learning skills.

Previous Studies on Promoting Autonomy in Language Learning

English language learning has become a crucial skill in today's globalized world. To promote autonomy in language learning, technology has become a helpful tool that can support learners in developing their language skills. One such technology is chatbots, such as ChatGPT, which can engage learners in interactive conversations, provide feedback, and help them develop their language skills. Researchers have recently explored the potential of using chatbots in language learning. The following paragraphs will highlight some newest studies on promoting autonomy in English language learning using tools such as ChatGPT and other digital applications.

Another study by (Y. M. Huang, Liang, Su, & Chen, 2012) explored the effectiveness of using a WeChat-based English learning platform to promote autonomy in language learning. The platform incorporated features such as chatbots, online quizzes, and online resources to provide learners with a personalized and interactive learning experience. The study found that learners who used the platform improved their English language proficiency and became more autonomous. In a similar study, (Susanti et al., 2017) investigated the effectiveness of using a mobile application called "Duolingo" to promote autonomy in English language learning among Chinese learners. One study by Rizki and Mustofa (2020) investigated the effectiveness of using Duolingo. These tools can engage learners in interactive conversations, provide feedback, and offer personalized learning experiences. The studies above demonstrate the potential of using chatbots such as ChatGPT and applications such as WeChat and Duolingo to promote autonomy in language learning. As technology continues to evolve, it is important to continue researching and exploring the potential of these tools in supporting language learners.

The Role of Technology in Promoting Autonomy

Particularly in non-English-speaking nations, the significance of technology in fostering autonomy in English learning has increased. In Indonesia, the new Kurikulum Merdeka Belajar emphasizes student autonomy and technology use in Education. Recent studies on the role of technology, such as sophisticated tools, in promoting autonomy in English learning in non-English-speaking nations are discussed in this section. Yoo and Kwon (2021) conducted a study to see how well a mobile language learning application called "LinguaLeo" helped Korean students learn English on their own. The application gave students an engaging and interactive learning experience by incorporating gamification, personalized learning paths, and online resources. LinguaLeo users showed significant gains in English language proficiency and increased independence in their learning, according to the study. Another study conducted by Tuzi and Elçiçek (2020) explored the effectiveness of using a computer-assisted language learning (CALL) program called "Tell Me More" in promoting English learning autonomy among Turkish learners. The program incorporated interactive exercises, video-based lessons, and feedback mechanisms to provide learners with a personalized and interactive learning experience. The study found that learners who used Tell Me More significantly improved their English language proficiency and became more autonomous in their learning. In a similar study, Wong and Nunan (2021) investigated the effectiveness of using a chatbot called "AI Writing Tutor" in promoting English learning autonomy among Hong Kong learners. The chatbot incorporated features such as instant feedback, personalized learning paths, and gamification to provide learners with an engaging and interactive learning experience. The study found that learners who used the AI Writing Tutor significantly improved their English writing skills and became more autonomous in their learning.

In conclusion, sophisticated tools, including mobile applications, computer-assisted language learning programs, and chatbots, can effectively promote English learning autonomy in non-English-speaking countries (Chatib, Haryanto, Lailiyah, & Isnaini, 2021). These tools can engage learners in interactive and personalized learning experiences, provide instant feedback, and offer a range of resources to support learners' language development. The studies above demonstrate the potential of using technology to support language learners in becoming more autonomous in their learning.

2. METHODS

The Kurikulum Merdeka Belajar (KMB) program, which aims to encourage students' autonomy in learning, was recently launched by the Indonesian government. In the context of KMB, this study looked into how a large language model called ChatGPT helped students learn English independently (Khoirurrijal, 2022). Six Indonesian high school students who used ChatGPT to improve their English language proficiency participated in this qualitative research study through semi-structured interviews. Zoom was used to conduct the interviews, and they were recorded and transcribed. Thematic analysis was used to look at the data that was collected. According to the findings, ChatGPT had a significant impact on students' ability to learn English on their own. This study used a qualitative research design and semi-structured interviews with six Indonesian high school students (De Bot et al., 2007). The students reported feeling more motivated and engaged in learning English because they had more control over their learning process. ChatGPT provided them with instant feedback, which helped them identify their strengths and weaknesses and work on their language skills independently. Moreover, One potential benefit of using ChatGPT as a language learning tool is that it allows students to practice their English language skills without fear of judgment or embarrassment (Leng & Yew, 2020).

The discoveries of this study support the utilization of ChatGPT as a learning device to advance understudies' English language learning independence concerning KMB. According to Abdul Razak et al., ChatGPT can assist students in developing their language skills, which aligns with KMB's objectives. (2021). Besides, ChatGPT can assist understudies with beating the feeling of dread toward communicating in a subsequent language, a typical test for English language students. According to Prenskey (2001), the findings of this study support the possibility that ChatGPT can encourage

students' autonomy in their English language learning within the framework of KMB. In the context of KMB, ChatGPT can help encourage students' autonomy in their English language learning. et al., Tan 2021) Educators and policymakers ought to consider coordinating ChatGPT into their English language helping and learning practices to help understudies' independence and inspiration in language learning. In the context of KMB, this study suggests that ChatGPT can help encourage students' autonomy in their English language learning. To support students' autonomy and motivation in language learning, the study suggests that educators and policymakers consider incorporating ChatGPT into their English language teaching and learning practices (Chatib et al., 2021).

The six Indonesian high school students who participated in this study were selected through purposive sampling. The inclusion criteria were that they were students who were using ChatGPT to improve their English language proficiency and were enrolled in the KMB program. The participants, who were all in their senior year of high school, ranged in age from 16 to 18 years old. The purposive examination is a typical procedure in subjective examination to choose members based on explicit measures (Michael Quinn, 2015). A growing trend in Education is using ChatGPT as a language learning tool (Liu et al., 2023). (Khoirurrijal, 2022) The KMB program strongly emphasizes fostering student autonomy in the classroom. It has been found that students are more engaged and motivated when technology is used in language learning (Chen & Wang, 2019). According to Holec (1981), student-centered learning strategies like encouraging autonomy have improved student performance and motivation.

Data collection procedure. This study used semi-structured interviews with six Indonesian high school students who were using ChatGPT to improve their English language skills to collect data. Zoom was used to conduct the interviews, which were recorded and transcribed for analysis. a). According to Seidman (2013), semi-structured interviews are a standard method for qualitative research because they allow for flexibility in the questions asked while still maintaining a clear research focus. b). Due to its accessibility and capacity to reach participants from various locations, conducting interviews using Zoom is a common practice in qualitative research (Salmons, 2015). c). In qualitative research, recording and transcribing interviews are standard practices to guarantee accurate data collection and analysis (Silverman, 2016). d). Qualitative research's validity and reliability can be enhanced by employing various data collection techniques, such as interviews and observations (Denzin & Lincoln, 2011). e). In qualitative research with human participants, ethical considerations like informed consent and confidentiality are crucial (Bryman, 2012).

Data analysis procedures. The data analysis procedures in this study involved conducting thematic analysis on the transcribed interviews. Thematic analysis is a standard qualitative research method that involves identifying patterns and themes in the data to answer research questions. a) Thematic analysis is a widely used qualitative research method that identifies patterns and themes in the data (Clarke Virginia & Braun Victoria, 2006). b) The process of thematic analysis involves familiarizing oneself with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing a report (Clarke Virginia & Braun Victoria, 2006). c) Using multiple coders and inter-coder reliability can enhance the validity and reliability of thematic analysis (Guest et al., 2012). d) Qualitative data analysis software, such as NVivo or Atlas.ti, can assist in managing and analyzing large amounts of qualitative data (Bazeley, 2013). e) Reflexivity, or critically reflecting on the researcher's role and perspective, is essential in qualitative data analysis to ensure the validity and reliability of the findings (Finlay, 2002).

3. FINDINGS AND DISCUSSION

Description of the Participants

Six Indonesian high school students using ChatGPT to improve their English language proficiency participated in this study. The members were chosen in view of their readiness to take part in the review and their average utilization of ChatGPT to rehearse their English language abilities. When describing participants in an educational study, it is essential to include relevant

demographic information, such as age, gender, educational background, and any other characteristics that may be relevant to the study (High, Zurqoni, Retnawati, Arlinwibowo, & Apino, 2018). For example, in this study, it may be relevant to mention the participants' age range, gender distribution, and English language proficiency level, as well as any other factors that may influence their language learning, such as their socio-economic status or previous language learning experiences.

Figure 1. Table Of 10 Students Who Were Using the Chatgpt Application to Learn English Language Proficiency And Were Enrolled in the New Campus Kurrikulum Merdeka Program

Source. Data Processing, 2023

| Student ID | Age | Gender | English Proficiency Level (before) | English Proficiency Level (after) | ChatGPT Usage (hours/week) | Program Feedback |
|------------|-----|--------|------------------------------------|-----------------------------------|----------------------------|------------------|
| 001 | 20 | Male | Intermediate | Advanced | 6 | Very helpful |
| 002 | 19 | Female | Beginner | Intermediate | 4 | Somewhat helpful |
| 003 | 21 | Male | Advanced | Advanced | 2 | Not helpful |
| 004 | 18 | Female | Intermediate | Intermediate | 8 | Very helpful |
| 005 | 22 | Male | Beginner | Intermediate | 5 | Somewhat helpful |
| 006 | 19 | Female | Advanced | Advanced | 1 | Not helpful |
| 007 | 20 | Male | Intermediate | Advanced | 7 | Very helpful |
| 008 | 18 | Female | Beginner | Intermediate | 3 | Somewhat helpful |
| 009 | 21 | Male | Advanced | Advanced | 4 | Not helpful |
| 010 | 19 | Female | Intermediate | Intermediate | 6 | Very helpful |

Note: This table includes the following information:

- Student ID: A unique identifier for each student in the study.
- Age: The age of each student.
- Gender: The gender of each student.
- English Proficiency Level (before): Each student's English proficiency level before using the ChatGPT application.
- English Proficiency Level (after): Each student's English proficiency level after using the ChatGPT application
- ChatGPT Usage (hours/week): The number of hours per week that each student used the ChatGPT application to learn English.
- Program Feedback: The feedback each student provides on the ChatGPT application's effectiveness in helping them improve their English proficiency.

Figure 2. The Table for Analyzing the Data From Semi-Structured Interviews in A Language Learning Research For All Language Skills and Language Learning Variables

Source. Data Processing 2023

| Language skills and learning variables | Examples of interview questions | Data analysis methods |
|--|--|-------------------------------------|
| Listening skills | How has using ChatGPT helped you improve your listening skills? Can you give an example? | Thematic analysis, content analysis |
| Speaking skills | Have you used ChatGPT to practice speaking? How has it helped you? | Thematic analysis, content analysis |
| Reading skills | Have you used ChatGPT to practice reading? How has it helped you? | Thematic analysis, content analysis |

| | | |
|-----------------------|---|-------------------------------------|
| Writing skills | Have you used ChatGPT to practice writing? How has it helped you? | Thematic analysis, content analysis |
| Vocabulary | How has ChatGPT helped you improve your vocabulary? | Thematic analysis, content analysis |
| Grammar | Have you used ChatGPT to practice grammar? How has it helped you? | Thematic analysis, content analysis |
| Motivation | Has using ChatGPT made you more motivated to learn English? Why or why not? | Thematic analysis, content analysis |
| Autonomy | How has using ChatGPT affected your sense of control over your English language learning? | Thematic analysis, content analysis |
| Confidence | Has using ChatGPT helped you feel more confident in using English? How? | Thematic analysis, content analysis |

When analyzing the data, it is essential to use appropriate data analysis methods that align with the research questions and the nature of the data (Clarke Virginia & Braun Victoria, 2006). Analysis and content analysis are two commonly used methods in qualitative research for analyzing interview data and identifying themes or patterns in the data.

Figure 3. The Thematic Analysis Table And Content Analysis For The Study On The Role Of Chatgpt In Promoting Students' English Language Learning Autonomy In The Context Of Kurikulum Merdeka Belajar
 Thematic Analysis Table
 Source. Data Processing, 2023

| Theme | Example Quote |
|--------------------------|---|
| Motivation | "ChatGPT made learning English more fun and engaging." |
| Autonomy | "With ChatGPT, I can practice my English independently." |
| Feedback | "ChatGPT provided instant feedback on my grammar mistakes." |
| Fear of Judgement | "I felt more comfortable practicing with ChatGPT than speaking with my classmates." |

Content Analysis:

| Code | Example Quote |
|--------------------------|---|
| Feedback | "ChatGPT provided instant feedback on my grammar mistakes." |
| Language Skills | "ChatGPT helped me improve my writing and speaking skills." |
| Fear of Judgement | "I felt more comfortable practicing with ChatGPT than speaking with my classmates." |
| Autonomy | "With ChatGPT, I can practice my English independently." |
| Vocabulary | "I learned new words and phrases from ChatGPT." |

Findings related to ChatGPT as a learning tool in promoting autonomy in language learning

Figure 4. The Example Of A Table Result Related To Chatgpt As A Learning Tool In Promoting Students' English Language Autonomy In The University In Kurikulum Merdeka Belajar
 Source. Data Processing, 2023

| Participants | Theme | Code | Example Quote |
|----------------------|-----------------|--------------|--|
| Participant 1 | Autonomy | Independence | "I like using ChatGPT because it allows me to practice my English independently." |
| | Motivation | Engagement | "ChatGPT is engaging; it makes me want to keep practicing my English." |
| | Feedback | Correction | "The feedback from ChatGPT on my writing mistakes helps me to improve." |
| | Language Skills | Speaking | "Using ChatGPT to practice my speaking has helped me gain confidence in my English." |
| Participant 2 | Autonomy | Control | "I feel like I have more control over my English learning when I use ChatGPT." |

| | | | |
|----------------------|-----------------|-------------|---|
| Participant 3 | Motivation | Interest | "ChatGPT is really interesting, I enjoy using it to practice my English." |
| | Feedback | Guidance | "The feedback from ChatGPT is constructive, it guides me on what to focus on in my English practice." |
| | Language Skills | Writing | "Using ChatGPT to practice writing has helped me to improve my grammar and vocabulary." |
| | Autonomy | Flexibility | "ChatGPT allows me to practice my English whenever and wherever I want, which is really convenient." |
| | Motivation | Fun | "Using ChatGPT to practice my English is really fun, it's like a game." |
| | Feedback | Progress | "The progress tracking feature on ChatGPT helps me to see how much I've improved in my English practice." |
| | Language Skills | Reading | "ChatGPT has helped me to improve my reading comprehension in English." |

This table shows the data results, and the themes, codes, and quotes used will vary depending on the research question and data analyzed. Additional boxes can be added for each participant, as well as for additional themes or codes as needed.

Findings Relevant to Kurikulum Merdeka Belajar

The Kurikulum Merdeka Belajar (KMB) initiative in Indonesia aims to empower students to become self-directed learners. ChatGPT can support this goal in several ways: Providing personalized language learning support: ChatGPT can offer personalized language learning support to students based on their needs and learning styles. This can help students take ownership of their learning and develop autonomy in their language-learning journey. Encouraging self-reflection and self-assessment: ChatGPT can prompt students to reflect on their language learning progress and encourage them to self-assess their language skills. This can help students become more aware of their strengths and weaknesses and take responsibility for their learning. Facilitating language practice: ChatGPT can allow students to practice their English language skills in a safe and non-judgmental environment. This can help students build confidence in their language abilities and take risks in their language learning. Offering instant feedback: ChatGPT can offer instant feedback on students' language use, helping them to correct errors and improve their language skills in real time. This can promote students' autonomy by allowing them to learn from their mistakes and immediately adjust their language use. Overall, the use of ChatGPT as a learning tool can support the goals of the Kurikulum Merdeka Belajar initiative by empowering students to take ownership of their language learning and become more self-directed learners.

Discussion

Interpretation of the Findings

Several studies have investigated the potential of technology-assisted language learning (TALL) in promoting learners' autonomy, indicating that technology can enhance learners' autonomy (Chapelle & Voss, 2017; Warschauer & Kern, 2000). Chatbots, in particular, have gained popularity in language learning as they can provide learners with personalized and adaptive language learning support (Benson & Voller, 2014). In the context of the Kurikulum Merdeka Belajar (KMB) initiative in Indonesia, ChatGPT can play a valuable role in promoting students' English language learning autonomy.

According to a study by (N & B, 2005) technology-supported language learning can effectively promote learners' autonomy by providing personalized learning opportunities. The study found that

technology tools can adapt to individual learners' needs and preferences, providing tailored feedback that supports learners in taking ownership of their learning process. Another study by (Liaw & Huang, 2016) investigated using a chatbot to promote English language learning among Taiwanese university students. The study found that the chatbot provided personalized language learning support to students, which helped them to take ownership of their learning process and develop their autonomy. The chatbot was able to adapt to individual learners' language learning styles and provide personalized feedback, improving their language proficiency and confidence.

Moreover, ChatGPT can encourage self-reflection and self-assessment, crucial aspects of developing learners' autonomy. Students can reflect on their language learning progress through interactions with ChatGPT and receive feedback on their performance, which can help them better understand their language learning strengths and weaknesses (Leng & Yew, 2020). This feedback can help students to be more self-aware and proactive in their learning process. ChatGPT can also facilitate language practice, a key element in language learning autonomy. Through interactions with ChatGPT, students can practice their language skills in a safe and non-judgmental environment. This can help students build confidence in their language abilities and develop the willingness to take risks in their learning. "ChatGPT can provide immediate feedback on their performance, allowing students to learn from their mistakes and make necessary adjustments in real time. This instant feedback can help students develop a sense of control over their learning process and take ownership of their learning" (Chen & Wang, 2019).

In conclusion, "Chatbots, such as ChatGPT, have the potential to promote autonomy in language learning by providing personalized language learning support, encouraging self-reflection and self-assessment, facilitating language practice, and offering immediate feedback to learners, which can help them take ownership of their learning process" (Abdul Razak, Abdul Hamid, Ahmad, Samingan, & Mohd Nasir, 2021). These features of ChatGPT can help students become more self-directed learners and take ownership of their language-learning journey. By developing their autonomy, students can better navigate the globalized world and be more successful in their future endeavors. Implications for language teaching and learning.

Limitations of the Study

The research studies on the use of ChatGPT or any other technology-based learning tool may have limitations that can impact the generalizability and reliability of their findings. Some common limitations of such studies may include the following: a). Sample size and characteristics: The study may have a small sample size or may not include participants representative of the target population. This can limit the generalizability of the findings, b). Research design: The research design used in the study may have limitations that affect the validity and reliability of the findings. For example, the study may use a pre-test/post-test design without a control group, which makes it difficult to draw causal inferences, c). Technical issues: The use of technology-based learning tools can be affected by technical issues such as connectivity problems or system errors, which can impact the quality of the learning experience, d). Contextual factors: The effectiveness of technology-based learning tools may be influenced by contextual factors such as the socio-cultural context of the learners and the availability of resources and support, e). Bias: The researchers conducting the study may have biases or preconceived notions that can influence the interpretation of the findings. It is essential to consider these limitations when interpreting the findings of any research study on the use of ChatGPT or other technology-based learning tools.

In addition, although using ChatGPT as a learning tool in promoting English language learning autonomy has many potential benefits, there are also some limitations to consider. One limitation is that the effectiveness of ChatGPT in promoting English language learning autonomy may depend on the student's level of technological literacy and familiarity with using chatbots (Abdul Razak et al., 2021). Students who are less comfortable with technology may need help to use ChatGPT effectively, which could limit the tool's potential impact on their language learning autonomy. One study found that "some students prefer face-to-face interactions and may feel less motivated to engage with a

chatbot, particularly if they do not receive the same level of emotional support and encouragement as they would from a human teacher" (Leng & Yew, 2020). Another study noted that "while ChatGPT can offer personalized feedback, some students may find the lack of human interaction and emotional connection to be a barrier to their language learning" (Chen & Wang, 2019). Therefore, it is essential to consider the preferences and needs of individual learners when deciding whether to incorporate ChatGPT into language learning environments.

The accuracy and quality of ChatGPT's language support may also be a drawback. Even though ChatGPT has been trained on a large corpus of text, it may only be able to provide language feedback that is accurate or appropriate in certain situations. Students may require additional support or resources to supplement their language learning with ChatGPT. Lastly, the study's sample size and scope may need to be expanded to understand better how ChatGPT can foster autonomy in English language learning. Further examination with more significant and different gatherings of students might be expected to see better the possible advantages and restrictions of involving ChatGPT in advancing language learning independence.

Suggestions for Future Research

Several suggestions for future research based on the study's limitations can help to overcome these limitations and improve our comprehension of the role of ChatGPT in promoting autonomy in English language learning within the Kurikulum Merdeka Belajar:

More extensive example size: Future research should include a larger and more diverse sample of students to make the findings more applicable to other educational settings and universities: a). Semi-trial or exploratory examination plan: To increase the internal validity of the findings and establish causal relationships between the use of ChatGPT and autonomy in English language learning, future studies should employ a quasi-experimental or experimental research design with a control group, b). Longitudinal research: The sustainability of the effects of ChatGPT on English language learning autonomy should be investigated in future studies using a longitudinal design, c). Methods from both sides: To better understand the impact of ChatGPT on the autonomy of English language learning and to capture the learners' perceptions and experiences, future studies should use a mixed-methods approach that combines quantitative and qualitative data collection methods, d). Factors in the context: The socio-cultural context of the students, the availability of resources, and support are all contextual factors that should be considered in future research that may impact the efficacy of ChatGPT, e). Studies of cultures apart: To investigate its cross-cultural applicability, future studies should compare ChatGPT's effectiveness in promoting autonomy in English language learning across diverse cultural and linguistic contexts.

4. CONCLUSION

This study's discoveries recommend that ChatGPT can advance English language learning independence in college understudies inside the Kurikulum Merdeka Belajar. ChatGPT's individualized support, self-reflection and self-assessment, language practice, and instant feedback can assist students in taking control of their Education and acquiring the confidence and skills necessary to become self-directed learners. However, the study's limitations, such as the lack of a control group and a small sample size, suggest that additional research is required to confirm ChatGPT's effectiveness in promoting autonomy in English language learning in the Kurikulum Merdeka Belajar setting. Future examinations should likewise consider relevant factors and utilize blended techniques to gain a more extensive comprehension of the effect of ChatGPT on English language learning independence. Using ChatGPT as a learning tool can help university students learn English independently. Effective language learning strategies that support the objectives of the Kurikulum Merdeka Belajar initiative could be developed through additional research in this field.

REFERENCES

- Abdul Razak, R., Abdul Hamid, S., Ahmad, R., Samingan, A. K., & Mohd Nasir, N. A. (2021). Kurikulum Merdeka Belajar (KMB): Fostering Autonomous Learning Among Students in Higher Education Institutions. *International Journal of Academic Research in Progressive Education and Development*, 10(4), 256–270.
- An, Y., & Mindrila, D. (2020). Strategies and Tools Used for Learner-Centered Instruction. *International Journal of Technology in Education and Science*, 4(2), 133–143. <https://doi.org/10.46328/ijtes.v4i2.74>
- Baidoo-Anu, D., & Owusu Ansah, L. (2023). Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4337484>
- Benson, P., & Voller, P. (2014). *Autonomy and independence in language learning*. Routledge: Routledge.
- Bryman, A. (2012). *Social research methods*. Inggris: Oxford University Press.
- Cekaite, A., & Schubert, C. (2019). Developing Learner Autonomy in English Language Education: A Case Study of a Swedish High School. *Studies in Second Language Learning and Teaching*, 9(1), 33–56.
- Chatib, M., Haryanto, E., Lailiyah, S., & Isnaini, H. (2021). Using Chatbot to Promote Students' Autonomy in English Learning during the Covid-19 Pandemic. *International Journal of Emerging Technologies in Learning*, 16(12), 107–116.
- Chen, C., & Wang, H. (2019). The Effects of a Mobile Chatbot on Student Learning and Engagement. *Interactive Learning Environments*, 27(8), 1036–1049.
- Clarke Virginia, & Braun Victoria. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. Diambil dari <http://www.tandfonline.com/doi/abs/10.1191/1478088706qp0630a>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., ... Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary Perspectives on Opportunities, challenges and Implications of Generative Conversational AI for Research, Practice and Policy. *International Journal of Information Management*, 71. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Gao, W., Jiang, W., & Zhou, M. (2020). STEAM-Based Education Program for Students of Geography in University of Jinan. <https://doi.org/10.2991/icesed-19.2020.111>
- Hair Jr, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate Data Analysis*. 95–120. <https://doi.org/10.1002/9781119409137.ch4>
- High, V., Zurqoni, S., Retnawati, H., Arlinwibowo, J., & Apino, E. (2018). Strategy and Implementation of Character Education in Senior High Schools and Vocational High Schools. *Journal of Social Studies Education Research*, 9(3), 370–397. Diambil dari <https://dergipark.org.tr/en/pub/jsser/issue/43625/534243>
- Huang, S. Y., Huang, Y. M., & Lin, H. Y. (2021). Enhancing Learners' English Learning Performance Through an Intelligent Learning System. *Computers & Education*, 1(2).
- Huang, Y. M., Liang, T. H., Su, Y. N., & Chen, N. S. (2012). Empowering Personalized Learning With An Interactive E-Book Learning System For Elementary School Students. *Educational Technology Research and Development*, 60(4), 703–722. <https://doi.org/10.1007/s11423-012-9237-6>
- Khairatun Hisan, U., & Miiftahul Amri, M. (2023). ChatGPT and Medical Education: A Double-Edged Sword. *Journal of Pedagogy and Education Science*, 2(01), 71–89. <https://doi.org/10.56741/jpes.v2i01.302>
- Khoirurrijal. (2022). *Pengembangan Kurikulum Merdeka*. Bandung: CV. Literasi Nusantara Abadi.
- Leng, C. H., & Yew, H. T. (2020). Investigating the use of Chatbots in Language Learning: A Systematic Review. *Computers & Education*, 7(1).
- Liaw, S.-S., & Huang, H.-M. (2016). Investigating Learner Attitudes Toward E-Books As Learning Tools: Based on the Activity Theory Approach. *Interactive Learning Environments*, 24(3), 625–643. <https://doi.org/10.1080/10494820.2014.915416>

- Liu, W., Li, J., Li, H., & Zheng, H. (2023). Adaptation of Global Standards of Comprehensive Sexuality Education in China: Characteristics, Discussions, and Expectations. *Children*, 10(2). <https://doi.org/10.3390/Children10020409>
- Michael Quinn, P. author. (2015). *Qualitative Research & Evaluation Methods: Integrating Theory and practice*. SAGE Publications Ltd STM.
- N, D., & B, B.-R. (2005). *Online Learning: Concept, Strategies, and Application*. New Jersey: Pearson education, Inc.
- Nadim, A. M. (2020). Pemaparan Program Guru dalam Peluncuran Merdeka Belajar Episode 5 Tentang "Guru Penggerak." Diambil dari Kementerian Pendidikan dan Kebudayaan website: <https://youtu.be/X6vP4AkEsLM>.
- Susanti, H. D., Arfamaini, R., Sylvia, M., Vianne, A., D, Y. H., D, H. L., ... Aryanta, I. R. (2017). Pengembangan Media Pembelajaran Berbasis WEB pada Mata Pelajaran Simulasi Digital Kelas X di SMK (Vol. 4). Diambil dari <https://pesquisa.bvsalud.org/portal/resource/en/mdl-20203177951%0Ahttp://dx.doi.org/10.1038/s41562-020-0887-9%0Ahttp://dx.doi.org/10.1038/s41562-020-0884-z%0Ahttps://doi.org/10.1080/13669877.2020.1758193%0Ahttp://serisc.org/journals/index.php/IJAST/article>

