CHAPTER IV

RESULT AND DISCUSSION

A. Result

4.1 Learners' Experience in Using Gemini Chatbot

4.1.1 Initial Experiences in Using Gemini Chatbot

In this chapter, the researcher discussed in detail the findings regarding the initial experiences of users with the Gemini chatbot, revealing how respondents responded to and adapted to this new technology.

a. Easy

Based on the observation results, five respondents (Respondents 1, 5, 6, 7, and 9) indicated that they found it easy when first using the Gemini chatbot. Respondent 1, during the observation, was able to quickly navigate and understand the various functions of the chatbot and felt that its features greatly supported the English learning process, particularly in conversation practice. This was reinforced by their interview statement, *"My first experience using the Gemini chatbot was quite pleasant. The application was easy to use, and I was able to start practicing right away."* This analysis shows that an intuitive and responsive interface played a crucial role in creating comfort from the beginning, which could influence users' motivation and engagement in the long term.

Respondent 5 also reported that using the chatbot was very easy and intuitive, with no difficulties in accessing the various available features. In the interview, they expressed, *"My first experience using the Gemini chatbot was quite positive. I found it easy to interact with the chatbot.*" This indicates that the design of the Gemini chatbot interface successfully met users' expectations for quick and seamless access to learning resources, which is crucial for enhancing learning efficiency and encouraging repeated use.

Respondent 6 felt that the chatbot's appearance and navigation were very user-friendly, allowing them to immediately utilize the chatbot for conversation practice and improve their English skills. The interview affirmed, *"My first experience using the Gemini chatbot was very positive. I found it easy to interact with the chatbot."* This suggests that a user-friendly interface is not only important for starting use but also for maintaining users in the long term, as well as helping users feel more confident and comfortable.

Respondent 7 also emphasized that using the chatbot was easy and enjoyable, especially in the context of conversation. In the interview, they stated, *"My first experience was very impressive. The chatbot was easy to use and engaging."* This experience indicates that the Gemini chatbot can accommodate various levels of user comfort with technology and shows flexibility in adapting to users' needs.

Finally, Respondent 9 reported a very positive initial experience, with easy access and various features that could be immediately utilized for learning English. They confirmed in the interview, *"My first experience using the Gemini chatbot was very positive. I found the chatbot very easy to use and navigate."* This experience highlights that ease of access and navigation are important aspects contributing to an effective learning experience. When users feel comfortable with the interface from the beginning, it increases the likelihood that they will continue using the technology as a learning tool.

From the above analysis, it can be concluded that ease of use is a key factor affecting users' initial experience with the Gemini chatbot. Easily accessible features and a user-friendly interface allowed users to immediately benefit from the chatbot in English language learning. This not only supports an effective learning process but also enhances users' motivation to continue using this technology. This positive initial experience is important because it shapes users' perceptions of the technology and affects long-term engagement. Therefore, it can be said that the Gemini chatbot succeeded in creating a smooth and supportive user experience,

which is a crucial step in the adoption of AI-based learning technology in higher education settings.

b. Confused

In this section, the researcher discusses several respondents who experienced confusion when first using the Gemini chatbot. Observation data showed that this confusion generally revolved around adapting to communication with a machine and understanding how to utilize the available features. Respondent 4, for example, reported feeling confused due to unfamiliarity with machine communication, expressing difficulty in understanding how the chatbot worked and how to interact correctly. Respondent 3 also experienced confusion at the beginning, although they showed interest in the chatbot's features. Their difficulties stemmed from unfamiliarity with the communication methods used by the system. Respondent 8 expressed initial confusion in interacting with the chatbot, particularly regarding how to speak and communicate effectively. Although they eventually felt more comfortable after some adaptation, their initial experience was still marked by confusion. Respondent 10 noted early confusion and discomfort in understanding how the chatbot worked and how to effectively use the available features.

Interview data provided deeper insight into these experiences. Respondent 3 stated, *"At first, I was a bit confused, but after trying the conversation practice feature, I found it helpful for practicing speaking."* This statement indicates that although respondents experienced initial confusion, features like conversation practice could serve as valuable tools in overcoming that discomfort. This adaptation process helped them feel more confident and assisted in their English practice.

Respondent 8 added, *"Initially, I was a bit confused about how to talk. But over time, I got used to it. It was also fun talking to the chatbot as if talking to a friend but using English."* This statement highlights that while initial confusion is common, the experience of speaking with the chatbot became more enjoyable and

effective over time. The adaptation process helped them feel more comfortable with the system, and interactions that were initially confusing became more intuitive.

Respondent 10 expressed, *"At first, I was a bit confused. Because I wasn't used to talking to a machine in English. But over time, it also became fun."* This statement confirms that initial discomfort is often related to unfamiliarity with communicating with machines in English. However, as experience and interaction increased, comfort and enjoyment in communicating with the chatbot developed.

Respondent 4 also mentioned, *"At first, I felt a bit awkward. I was confused about what to say. But over time, it also became fun."* This highlights that initial confusion can be overcome with adaptation over time. Although respondents initially felt unsure and confused about how to speak with the chatbot, further experience and practice helped them feel more comfortable and enjoy the process.

Overall, although initial confusion was a significant challenge in using the Gemini chatbot, these findings suggest that repeated interactions, supportive features, and adaptation time can help users overcome their initial discomfort. This adaptation is crucial in improving user experience and the effectiveness of the chatbot in English language learning. Initial confusing experiences are often followed by progress in comfort and utilization of the technology, indicating that the adaptation and learning process is essential in optimizing user experience with new technology.

c. Challenging

Observations showed that Respondent 2 faced challenges in adjusting to the new technology. These challenges seemed related to the initial feeling of difficulty when using the new technology, which required them to overcome initial discomfort before they began to feel comfortable. This aligns with Respondent 2's interview quote, which noted an initial challenging feeling but also an eventual adjustment that led to comfort.

One quote reflecting this challenge came from Respondent 2, who stated, *"My first experience using the Gemini chatbot was quite challenging because I had to adapt to new technology, but over time I felt comfortable."* This quote provides important insight into how early users might experience anxiety or discomfort when first interacting with new technology like the Gemini chatbot. This adjustment process often involves understanding the interface, new features, and interaction methods different from previous learning experiences.

Initial challenges in using new technology often include several key aspects. First, technology adaptation is a process that requires time and effort. New users need to learn how to interact with the system, understand the available features, and overcome confusion that might arise from differences with familiar learning methods. In the context of the Gemini chatbot, this could mean learning how to communicate with the chatbot in English, understanding how the chatbot provides feedback, and utilizing various available features such as conversation practice and grammar feedback.

Respondent 2 noted that initially, they found the chatbot experience to be challenging. This reflects a common transition process in adopting new technology. Users might feel pressured to leave familiar old methods and switch to a new approach that requires learning and adjustment. This process involves not only technical understanding but also mental and emotional adaptation to a new way of learning English.

Additionally, adjustment to the user interface is a critical element in the adaptation process. The Gemini chatbot might offer features different from traditional English learning tools, and users need to learn how to effectively utilize these features. For example, features such as automated conversation practice and real-time feedback might feel new and require time to understand well. Initial discomfort with new technology is often caused by unfamiliarity with the design and functions, which requires extra effort from users to adjust.

However, it is important to note that these initial challenges are not permanent. As experience and usage increase, users often start to feel more comfortable and familiar with the new technology. In the case of Respondent 2, although they felt challenged initially, they eventually felt comfortable with the use of the chatbot after some time. This indicates that with experience and practice, initial challenges can be minimized, and new technology can become an effective tool in the learning process.

The balance between challenges and benefits also needs to be considered. Although there are initial challenges in adapting, the benefits obtained from using new technology like the Gemini chatbot often outweigh the difficulties encountered. This technology can offer innovative and interactive learning methods, as well as real-time feedback, which can ultimately enhance users' English skills. This adaptation process, although challenging, can facilitate a more effective learning experience and motivation. Overall, initial challenges in using the Gemini chatbot reflect common dynamics in adopting new technology. The adaptation process requires effort and time, but with support and patience, users can overcome initial difficulties and leverage the full potential of technology to enhance their English skills. Learning and adjustment at the initial stage often led to a more satisfying and productive experience in the long run.

4.1.2 Experiences While Using Gemini Chatbot

The findings of this part depicted the varied experiences reported by respondents during their interaction with the Gemini chatbot. Some found the learning process to be more enjoyable and engaging, while others felt that the chatbot was helpful.

a. Fun

Based on the observation and interview data, it can be concluded that Respondents 1, 8, and 10 had very positive and enjoyable experiences while using the Gemini Chatbot. These three respondents demonstrated enthusiasm in the learning process through the interactive methods offered by the chatbot. Additionally, they were very

satisfied with the feedback provided by the chatbot, which helped them improve their English skills, particularly in conversation, grammar, and vocabulary.

Respondent 1 described how they found the application easy to use, which made their learning experience enjoyable. This statement was also reinforced in the interview where she said, *"Using the Gemini chatbot was quite enjoyable. The app is easy to use."* The ease of access and operation of the Gemini Chatbot was a significant factor contributing to the positive learning experience. In the realm of language learning, comfort and ease of access are crucial elements that can affect engagement levels and the success of the learning process, and in this case, Gemini Chatbot met users' expectations.

In addition to ease of use, another factor that made the learning experience with Gemini Chatbot enjoyable was the interactivity offered by the chatbot. Respondent 8, for example, found the interaction with the chatbot very engaging and even likened the experience to talking with a friend. In the interview, Respondent 8 expressed, *"It's fun chatting with the chatbot, like talking to a friend but in English."* This indicates that the chatbot was able to create a relaxed yet educational environment where users felt comfortable and motivated to continue using the app. This positive interaction played an important role in encouraging the sustained use of the chatbot. In the context of language learning, especially for learners who may feel less confident in communicating in a foreign language, creating a supportive and non-judgmental environment is crucial. By providing an enjoyable and non-intimidating experience, Gemini Chatbot successfully captured and maintained user engagement.

The same experience was shared by Respondent 10, who initially faced some challenges, particularly with the chatbot's voice recognition. However, after several uses, Respondent 10 found that practicing speaking with the chatbot became an enjoyable activity. In the interview, they stated, *"But eventually, it became fun. I could practice speaking at will without fear of making mistakes."* This shows that Gemini Chatbot provided a safe space for users to practice speaking without the fear of making mistakes. In language learning, especially when dealing with a

newly learned language, the fear of making mistakes often serves as a significant barrier for many learners. However, with a supportive and interactive environment such as that offered by Gemini Chatbot, users can feel freer to practice and experiment with the language, which ultimately enhances their overall skills.

Overall, it can be concluded that Respondents 1, 8, and 10 had very positive and enjoyable experiences using the Gemini Chatbot. They were not only satisfied with the ease of using the app but also highly engaged in the interactive learning process. The chatbot successfully created a supportive learning environment where users could practice without fear, receive helpful feedback, and feel motivated to continue using the app for their English language development. This enjoyable and effective interaction significantly contributed to the increased satisfaction and motivation of the respondents, making Gemini Chatbot a highly valuable tool in English language learning.

b. Helpful

Based on the results of observations and interviews, it can be analyzed that Respondent 3 experienced significant benefits from using the Gemini Chatbot in their English language learning process. Observations showed that the respondent actively engaged in various learning activities offered by the chatbot, including conversation practice, grammar exercises, and vocabulary learning. Additionally, direct feedback from the chatbot was very useful in helping the respondent correct their grammatical errors.

During interactions with the chatbot, Respondent 3 displayed high engagement in various activities provided. Conversation practice, grammar exercises, and vocabulary learning were key elements of their learning experience. Observational data revealed that the respondent was highly involved in these activities, indicating that they not only used the chatbot routinely but also utilized various features offered to improve their language skills.

This high level of engagement is important as it shows that the respondent did not just use the chatbot as an additional tool but integrated it significantly into

their learning routine. Intensive interaction and use of different features of the chatbot reflect the respondent's commitment to improving their English skills. This indicates that the chatbot successfully captured the respondent’s interest and made the learning process engaging and effective.

Observations also showed that the direct feedback provided by the chatbot was very useful for Respondent 3, particularly in correcting grammatical errors. This feedback allowed the respondent to receive timely and relevant corrections, which is crucial for an effective learning process. The ability to receive and apply feedback directly contributed to a better understanding and correction of mistakes. This aligns with findings that direct feedback from the chatbot provided the necessary support for continuous improvement and understanding of grammatical errors.

The valuable feedback indicated that the chatbot functioned not only as a practice tool but also as a mentor providing the necessary guidance for ongoing improvement. With timely feedback, the respondent was able to quickly recognize and correct mistakes, helping them build a stronger language foundation.

Further interviews revealed that the conversation practice feature, in particular, helped the respondent feel more confident in speaking. Respondent 3 mentioned, *"After trying the conversation practice feature, I felt it helped me practice speaking courageously."* This statement underscores the importance of the conversation practice feature in helping the respondent overcome their fear and improve their confidence in speaking. This feature allowed the respondent to practice speaking in a safe and non-judgmental context, which is essential for effectively enhancing speaking skills.

Fear of speaking is a common challenge for many language learners, and having a platform where they can practice without feeling pressured or judged is highly valuable. The chatbot provided a supportive environment where the respondent could feel comfortable practicing, and this helped them feel braver and more confident when speaking. This increased confidence was a direct result of

using the conversation feature, which gave the respondent the opportunity to practice intensively and receive useful feedback.

Overall, observation and interview data indicate that Respondent 3 was significantly helped by using the Gemini Chatbot. Active engagement in various learning activities, benefits from direct feedback, and increased confidence in speaking are clear indicators that the chatbot made a positive contribution to their learning process. This experience shows that the chatbot not only served as an additional learning tool but also as an effective support resource in enhancing English language skills.

c. Interesting

Based on observation results, it was found that Respondent 7 was actively involved in various learning activities offered, including conversation practice, vocabulary learning, grammar exercises, and pronunciation. The high engagement in these various learning activities and appreciation for the feedback provided indicate that the chatbot successfully met the respondent's expectations and offered a learning experience that was not only beneficial but also enjoyable. Positive feedback from the respondent, such as the statement "*The chatbot is easy to use and interesting,*" reinforces the conclusion that the chatbot successfully created an interactive and enjoyable learning experience.

4.1.3 Experiences After Using Gemini Chatbot

After using the Gemini chatbot, respondents reported a variety of experiences. This discussion presented how those experiences shaped their perceptions of the effectiveness and engagement of Gemini in the learning process.

a. Useful

Based on the observations, it was concluded that Respondent 1 found the Gemini Chatbot to be very helpful. Their activities included conversation practice and vocabulary learning, as well as receiving immediate feedback which they considered highly beneficial.

One prominent aspect was the role of the Gemini Chatbot in providing detailed and immediate feedback on mistakes made by the students. This was evident from the interview results with Respondent 1. According to her, *"The feedback from the chatbot was very helpful because it was detailed and immediately pointed out the mistakes I made. This made it easier for me to correct them."* From this statement, it was apparent that the presence of the chatbot provided significant assistance in the learning process. Students could immediately identify their mistakes and make corrections quickly, thus enhancing their learning effectiveness.

In the context of language learning, quick and accurate feedback is a key element in accelerating the correction process and mastering the language. The Gemini Chatbot, with its ability to provide detailed and immediate feedback, met this need very well. This was particularly important in language learning where grammatical errors, vocabulary, and phrase usage can directly impact learning progress. By promptly identifying errors and offering corrective suggestions, the chatbot allowed respondents to correct their mistakes more efficiently than if they had to wait for feedback from other sources.

Overall, the observation data and interview statements indicated that the Gemini Chatbot was highly beneficial for Respondent 1 in their learning process. The chatbot not only assisted in identifying and correcting mistakes but also enhanced engagement and motivation through its detailed and immediate feedback features. This success underscores the importance of direct feedback in the language learning process and demonstrates how technology can be effectively used to support better and faster learning.

b. Recommended

Based on this research, it was concluded that the use of the Gemini Chatbot had great potential to enrich English language learning experiences for students engagingly and interactively. Observations and in-depth interviews showed that the Gemini Chatbot not only offered useful features such as conversation practice,

vocabulary learning, and grammar exercises but also provided effective and detailed immediate feedback.

Respondents, as stated in interviews, expressed high satisfaction with their learning experiences using the Gemini Chatbot. One significant statement from Respondent 1 was: *"I would definitely recommend the Gemini chatbot because it is suitable for those who want to learn English in a fun and interactive way."* This statement reflected that respondent felt the chatbot met their needs for learning English in a way that was not only efficient but also engaging.

This recommendation was supported by several key factors emerging from the observation and interview data. Firstly, high engagement in learning activities provided by the chatbot, such as conversation practice and vocabulary learning, indicated that these features were quite engaging and beneficial for students. Secondly, the immediate feedback provided by the chatbot was proven to be very helpful in correcting language errors and improving overall language skills. Respondents felt that the detailed and rapid feedback allowed them to correct mistakes efficiently, thus accelerating their learning process.

The success of the Gemini Chatbot in providing a positive learning experience also reflected its ability to meet students' high expectations in terms of interactivity and learning support. Data showed that the chatbot effectively created an interactive and enjoyable learning environment, which in turn increased students' motivation to continue learning and practicing English.

Overall, this research affirmed that the Gemini Chatbot was a highly useful and recommended tool for students looking to enhance their English language skills through innovative and engaging methods. The chatbot's success in offering effective feedback, increasing engagement, and providing a pleasant learning experience made it an excellent choice for anyone seeking a new and interactive way to learn English.

c. Feature Improvement

After using the Gemini Chatbot, some respondents shared their opinions on feature improvements that could better support their learning experiences. Based on interviews with Respondent 5 and Respondent 6, there were two main areas they considered important for enhancing the chatbot's features: new vocabulary learning and correct English pronunciation.

Respondent 5 suggested adding a feature specifically designed to help users learn new vocabulary. She stated, *"I think the Gemini chatbot could be improved by adding a feature to help users learn new vocabulary."* This suggestion indicated that, although the chatbot was effective in various aspects of language learning, there was an unmet need for vocabulary enrichment. Vocabulary is a fundamental element in language mastery, and features that offer more in-depth vocabulary practice that could help users expand their understanding of the language being learned. This feature improvement could make the chatbot more comprehensive in assisting users not only in correcting grammar and pronunciation but also in expanding their vocabulary skills.

Respondent 6 highlighted the need for additional features focusing on correct English pronunciation. She remarked, *"I think the Gemini chatbot could be improved by adding a feature to help users learn correct English pronunciation."* Pronunciation is a crucial aspect of language learning that often requires specific guidance and practice. Features such as audio-based pronunciation training, speech recognition, and pronunciation feedback could provide additional valuable assistance. With such features, users could receive immediate feedback on their pronunciation of words, as well as practice needed to correct and refine their pronunciation.

The conclusion from this feedback emphasized two main areas for improvement that could make the Gemini Chatbot a more comprehensive tool in supporting English language learning. Enhancements in vocabulary and pronunciation features would not only expand the functional scope of the chatbot

but also add value in terms of practicality and effectiveness. By incorporating these feature improvements, the chatbot could better meet users' needs, providing a more holistic and integrated learning experience.

Overall, feedback from Respondent 5 and Respondent 6 highlighted the importance of additional features in enhancing the language learning experience through the Gemini Chatbot. This research aimed to explore students' experiences with the Gemini Chatbot, and this feedback was an integral part of the in-depth analysis conducted. By considering and implementing feature improvements based on user feedback, the Gemini Chatbot could be more effective in meeting language learning needs and providing more comprehensive support for its users.

4.2 Difficulties Faced by Learners in Using Gemini

a. Internet Connection

Based on the observation data from Respondent 1, a slow internet connection significantly impacted their experience with the Gemini Chatbot. During the observation session on July 5, 2024, it was observed that the participant faced technical difficulties related to connection speed, which disrupted their interaction with the chatbot.

The issue of slow internet connection was a significant problem faced by users while interacting with the Gemini Chatbot, as expressed in the statement, *"Sometimes I had difficulties with a slow internet connection, which disrupted my interaction with the chatbot."* This problem highlighted the substantial impact of technological infrastructure on user experience and the effectiveness of using digital learning tools. Slow internet connection could affect various aspects of interaction with the chatbot, from response speed to the overall quality of the learning experience.

Firstly, a slow internet connection could directly affect the chatbot's response speed. In the context of language learning, the speed and accuracy of feedback are crucial for an effective learning process. A chatbot unable to provide quick responses due to connection issues might frustrate users and reduce their

motivation to continue using the tool. Long wait times for receiving responses from the chatbot could disrupt the learning flow, making the learning sessions feel unproductive and distracting the user. This could potentially reduce user engagement in the learning process and hinder their progress in language acquisition.

Additionally, slow connection could cause broader technical disruptions, such as failure to load materials or latency in communication. In such cases, users might experience sudden disconnections or loss of important information conveyed by the chatbot. Such disruptions not only diminish the quality of the learning experience but could also cause confusion and uncertainty about the material being learned. If information or feedback is not received in a timely manner, users might not get the assistance needed to correct errors or improve their skills effectively.

Poor connection also affected the interactivity aspect of the chatbot, which was one of the main features in many language learning applications. Chatbots designed to provide interactive experiences, including real-time conversation and feedback-based exercises, heavily rely on a stable connection to function well. Delays or disruptions in communication could make interactions feel stiff and less responsive, reducing the overall user experience. Unsmooth interactions could diminish the effectiveness of the tool as a learning platform and prevent users from fully benefiting from the interactive features offered.

Furthermore, connection issues could impact users' motivation and satisfaction with the learning tool. Learning experiences disrupted by technical problems often lead to frustration and dissatisfaction, which could affect users' willingness to continue using the tool regularly. Users frustrated by connection problems might be more inclined to seek more stable and reliable alternatives, which in turn could affect the success of using the Gemini Chatbot as a language learning tool.

Overall, a slow internet connection was a significant challenge in using the Gemini Chatbot, affecting response speed, interactivity, and user satisfaction.

Addressing this issue was an important step in enhancing the effectiveness and quality of the learning experience offered by the chatbot.

b. Language Understanding

Based on the observation and interview data from Respondent 3 and Respondent 6, there were several challenges related to language understanding that affected their experience with the Gemini Chatbot. These challenges included difficulties in understanding slang and native English speaker accents, as well as their impact on interaction and learning effectiveness.

Observation data showed that Respondent 3 experienced difficulties using slang when interacting with the Gemini Chatbot. During the observation conducted on July 5, 2024, it was evident that when participants used slang, the chatbot could not properly understand the intended message, leading to irrelevant responses or errors in interpretation. This difficulty created frustration for the participant, as they felt the chatbot could not grasp the nuances and context of more informal conversations. This indicated that the chatbot might need improvements in understanding a wider range of language variations, including slang, to provide a more accurate and comprehensive experience.

Meanwhile, Respondent 6 reported difficulties in understanding native English speaker accents. Observations noted that the participant struggled to follow conversations involving accents different from the standard expected accents. This issue made the participant feel less confident in their listening skills and impacted their overall experience with the chatbot. This limitation reflected a common challenge in developing chatbots that need to adapt to variations in accents and pronunciations in the target language.

The chatbot's inability to understand slang hindered smooth and natural interaction between users and the system. Slang often carries contextual meanings that are not always reflected in standard language use. Observations showed that when users employed slang, the chatbot was unable to provide appropriate responses, resulting in confusion and frustration. This reduced the chatbot's

effectiveness as a learning tool, as users could not practice or understand informal language usage adequately.

Difficulty in understanding native accents indicated that the chatbot might not be fully equipped to handle variations in pronunciation and intonation. Observations from Respondent 6 showed that participants faced challenges in following conversations with different accents, making them feel less prepared for real-world communication situations. This limitation suggested that the chatbot needed to improve its speech recognition capabilities and adjust to different accents to enhance accuracy in understanding and responses.

Both of these challenges significantly impacted the user experience with the chatbot. When the chatbot could not understand slang or accents, users felt frustrated and hindered in their learning process. Observations noted that this frustration could affect users' motivation to continue using the chatbot, as well as reduce their confidence in practicing the language. Additionally, users might miss opportunities to develop more complex and diverse language skills.

To address these challenges, chatbot developers could consider several steps. Firstly, improvements in natural language processing (NLP) algorithms to understand various types of slang and informal language variations could enhance the chatbot's ability to respond to different forms of communication. Secondly, integrating more advanced speech recognition technology and training the model with different accents could help the chatbot adapt to various pronunciations and intonations. Providing users with options to report or give feedback on understanding errors could also aid in improving and developing the chatbot's capabilities over time. Overall, challenges in understanding slang and native accents affected the effectiveness of the Gemini Chatbot in providing a comprehensive learning experience. With appropriate improvements, the chatbot could enhance its ability to handle language variations and improve user satisfaction and learning outcomes.

B. Discussion

4.3 Learners' Experience in Using Gemini Chatbot

The user experience with the Gemini Chatbot in English language learning revealed various dynamics that can be understood by referring to several key educational theories. To delve deeper, it is important to relate these findings to theories explaining learner interaction with technology and how this experience impacts their learning.

Baird and Gordon (2009) emphasized that learner experience encompasses more than just their perceptions of the value and quality of education; it is also closely tied to their learning goals. The finding that respondents felt ease and enjoyment while using the Gemini Chatbot illustrated how this technology aligned with their English learning objectives. The ease of using the chatbot and its intuitive interface facilitated better accessibility and interaction, supporting learning goals in a practical and enjoyable manner. This demonstrated that positive experiences with technology, such as ease of navigation and interactive feedback, could enhance the achievement of learning objectives and increase learner satisfaction.

Temple et al (2014) highlighted that learner experience involves their interactions with institutions, both in academic and non-academic contexts. In this case, the Gemini Chatbot acted as a mediator in the academic context, providing direct interactions that supported the language learning process. The user experiences involving immediate feedback and interactive practice reflected positive interactions with technology, which in turn contributed to a more holistic academic experience. The detailed feedback provided by the chatbot supported language skill development in a structured and focused way, showing how technology could enrich academic interactions and support more effective learning.

Ainley (2008) argued that integrated learner experience only exists in a narrow normative sense. According to this theory, learning experiences should encompass broader dimensions of engagement and motivation. The respondents' experiences of finding interaction with the chatbot enjoyable and engaging reflected

this theory, as interactive and enjoyable technology can enhance learner motivation and engagement. Respondents who felt that the chatbot was like talking to a friend and enjoyed the learning process demonstrated that positive and enjoyable learning experiences could expand engagement and increase motivation, aligning with Ainley's view on the importance of motivational dimensions in learning experiences.

Although not directly mentioned in these findings, Vygotsky's (1978) adaptive learning theory was relevant in the context of the feedback provided by the chatbot. This theory emphasizes the importance of support tailored to individual needs in the learning process. The Gemini Chatbot, with its ability to provide immediate and detailed feedback, reflected principles of adaptive learning. Specific and interactive feedback helped learners correct errors and gradually improve their skills. This indicated that technology could play a significant role in providing support tailored to learners' needs, in accordance with principles of adaptive and targeted learning.

Overall, the analysis of user experience with the Gemini Chatbot underscored that this technology could support various aspects of English language learning according to relevant educational theories. The reported ease of use, adaptive feedback, and enjoyable interactions suggested that this technology played a crucial role in creating a positive and productive learning experience. By relating these findings to educational theories, we could better understand how the Gemini Chatbot could be optimized to support language learning more effectively and comprehensively.

4.4 Difficulties Faced by Learners in Using Gemini

A slow internet connection hindered interaction with the chatbot in various ways, directly affecting the user learning experience. First, the slow response speed of the chatbot due to limited internet connectivity disrupted the smooth flow of communication. When users faced long waiting times for responses from the

chatbot, their learning process was interrupted, leading to frustration and dissatisfaction.

In the context of language learning, where speed and accuracy of feedback are crucial, delayed responses could impair the effectiveness of interactions, making learning sessions feel unproductive and reducing user motivation. This experience aligned with Xu's (2020) theory on the importance of transparency in AI algorithms. Although Xu focused on algorithm transparency as key to building user trust, this principle could also apply to technical aspects such as internet connectivity. Just as algorithm transparency affects trust in the accuracy and relevance of information provided by AI, a slow internet connection could also diminish user trust in the chatbot's ability to provide timely and relevant responses. This issue highlighted that stable technical infrastructure was as important as algorithm transparency in creating a positive user experience.

Furthermore, a slow internet connection could also reduce the overall quality of communication. When connectivity was unstable, users might experience technical disruptions such as communication dropouts or loss of important information, ultimately reducing the accuracy of feedback from the chatbot. In this case, Wang, Zhang, & Li's (2023) theory on the importance of inclusive design in educational technology could be applied. Although this theory emphasized cultural and linguistic barriers, technical challenges like internet connectivity also impacted the accessibility and effectiveness of educational tools. A slow connection contradicted the goals of inclusive design, which aimed to provide equal access for all users regardless of their technical background. In other words, while the chatbot was designed to be an inclusive learning tool, poor internet connectivity could hinder the technology's ability to meet these goals, especially for users in areas with inadequate technical infrastructure.

The implications of these findings were significant in the context of language learning using chatbots. Haristiani (2019) highlighted the vast potential of chatbots as learning tools accessible anytime and anywhere, and Huang, Hew, & Fryer (2022) noted the benefits of chatbots in terms of timeliness, ease of use, and

personalization. However, this potential could only be realized if supported by adequate technical infrastructure. In this regard, the findings underscored that although chatbot technology offered various benefits, issues with slow internet connections could impede these advantages and affect the quality of the learning experience. As Coniam (2004) indicated, interrupted or slow interactions could damage the overall learning experience. To address these challenges and maximize the benefits of using chatbots in language learning, several practical steps needed to be considered. First, chatbot service providers needed to collaborate with internet service providers to ensure stable and fast connections. Improving local infrastructure and technical support for internet connectivity issues should be a priority to minimize disruptions caused by poor connections. Second, chatbot developers needed to optimize the design and algorithms of chatbots to be more responsive to slow connection conditions. This could involve developing more efficient algorithms and designs that minimized reliance on high-speed internet. Developing offline features was also an alternative solution for users with limited internet connectivity. By creating offline modes or features, users could continue using the chatbot even under less-than-ideal connection conditions. Third, educating users about the importance of a stable internet connection could also help them understand how this affected their experience with the chatbot. Guidelines on how to fix or address connection issues could be a useful addition. By taking these steps, chatbot providers and developers could improve user experience quality and ensure that chatbot technology delivered maximum benefits in language learning contexts. Overall, this analysis demonstrated that slow internet connections represented a significant challenge in using the Gemini Chatbot and emphasized the importance of adequate technical infrastructure in creating a positive user experience. Stable internet connectivity, inclusive design, and technical optimization were key to maximizing the effectiveness of chatbots as language learning tools and ensuring that all users could access and utilize this technology optimally.

In analyzing difficulties with language comprehension in using the Gemini Chatbot, several learning and cognitive psychology theories provided deep insights.

Cognitive Load Theory (Atkinson & Shiffrin, 1968) explained that cognitive load increased when the chatbot was unable to understand slang or accents, causing users to invest more mental effort in understanding and clarifying responses. This was consistent with findings that users such as Respondent 3 and Respondent 6 experienced confusion and frustration due to irrelevant or incorrect responses, indicating excessive cognitive load in processing information (Atkinson & Shiffrin, 1968).

Furthermore, Constructivist Learning Theory (Bruner, 1996) emphasized the importance of active interaction with material to build knowledge. Difficulties in understanding language variations disrupted the constructive learning process, as users could not engage in meaningful interactions with the chatbot (Bruner, 1996). Information Processing Theory (Simon, 1978) supported these findings by highlighting those disruptions in information processing due to slang and accents hindered efficiency in knowledge processing and retention. This indicated that a chatbot unable to understand language variations reduced effectiveness in the learning process and information retention (Simon, 1978).

Additionally, theories on technical challenges in user experience, as outlined by Xu (2020) and Wang et al. (2023), highlighted those difficulties in language comprehension revealed shortcomings in the technical and inclusive design of the chatbot. Xu (2020) emphasized the importance of technical transparency and efficiency, while Wang et al. (2023) stressed the need for inclusive design to address language variations and improve accessibility. Limitations in the chatbot's ability to understand language variations signaled an urgent need for improvements in design and technical capabilities to enhance the overall user experience (Xu, 2020; Wang et al., 2023). This analysis demonstrated that limited language comprehension in the Gemini Chatbot affected cognitive load, knowledge construction processes, and information processing efficiency, highlighting the need for improvements in technical and inclusive design.