Articles in English

A Comparative Study of WhatsApp and Telegram in Enhancing English Language Learning: A Case Study at the English Department, University of Benghazi, Suluq Campus

Dr.Faraj Mohamed Altalib Aljarih.[1]

1. Assistant lecturer in the English Department, College of Arts and Sciences, Suluq, Faraj.Aljarih@UoB.edu.ly

Abstract:

This qualitative study compared the effectiveness of the instant messaging apps WhatsApp and Telegram in enhancing English language learning among students at the English Department of the University of Benghazi Suluq Campus in Libya. The research employed participant observation, focus group discussions, and individual interviews to gain insights into students' experiences and perceptions of using these platforms. A total of 35 students from CALL, Teaching Language Skills, and Reading Comprehension classes participated in the study. The key findings revealed that both WhatsApp and Telegram contributed to increased engagement, motivation, and facilitation of collaborative learning. Students appreciated the convenience and accessibility offered by mobile access to course materials and discussions. However, differences emerged in user experiences, with WhatsApp perceived as more user-friendly while Telegram offered advanced features. Challenges included potential distractions, privacy concerns, and the need for digital literacy skills.

The study highlights the potential of integrating instant messaging apps into computer-assisted language learning while considering individual preferences, implementing guidelines, and providing digital literacy support. Recommendations for future research include longitudinal studies, integration with other CALL tools, cross-cultural comparisons, quantitative/mixed methods designs, and exploration of alternative platforms. The findings contribute to the growing literature on technology-enhanced language education and offer insights for educators seeking to effectively leverage instant messaging apps in their teaching practices.

Keywords: WhatsApp, Telegram, English language learning, Computer-assisted language learning (CALL), Engagement, Motivation, Collaborative learning.

دراسة مقارنة بين الواتساب والتلغرام في تعزيز تعلم اللغة الإنجليزية: دراسة حالة في قسم اللغة الإنجليزية، جامعة بنغازي، فرع سلوق

أ.فرج محمد الطالب الجارح [1]
1.محاضر مساعد بقسم اللغة الإنجليزية، كلية الآداب والعلوم، سلوق

الملخص:

قارنت هذه الدراسة النوعية مدى فعالية تطبيقي المراسلة الفورية WhatsApp و Telegram في تعزيز تعلم اللغة الإنجليزية بين الطلاب في قسم اللغة الإنجليزية بمقر جامعة بنغازي سلوق في ليبيا. استخدم البحث ملاحظة المشاركين، ومناقشات مجموعة التركيز، والمقابلات الفردية للحصول على نظرة ثاقبة لتجارب الطلاب وتصوراتهم حول استخدام هذه المنصات. شارك في الدراسة ما مجموعه 53 طالبًا من فصول LLAC وتدريس المهارات اللغوية وفهم القراءة. وكشفت النتائج الرئيسية أن كلا من واتساب وتيليجرام ساهما في زيادة المشاركة والتحفيز وتسهيل التعلم التعاوني. أعرب الطلاب عن تقديرهم للراحة وسهولة الوصول التي يوفرها الوصول عبر الهاتف المحمول إلى مواد الدورة التدريبية والمناقشات. ومع ذلك، ظهرت اختلافات في تجارب المستخدم، حيث يُنظر إلى WhatsApp على أنه أكثر سهولة في الاستخدام بينما يقدم Telegram ميزات متقدمة. وشملت التحديات عوامل التشتيت المحتملة، والمخاوف المتعلقة بالخصوصية، والحاجة إلى مهارات القراءة والكتابة الرقمية.

الكلمات المفتاحية: واتساب، تيليجرام، تعلم اللغة الإنجليزية، تعلم اللغة بمساعدة الكمبيوتر (LLAC)، المشاركة، التحفيز، التعلم التعاوني.

Scan QR & Read Article Online.

Faraj Mohamed Altalib Aljarih

I. Introduction

Background of the Study

The advent of technology has revolutionized the field of language learning, leading to the emergence of Computer-Assisted Language Learning (CALL) (Gillespie, 2020). CALL integrates the use of computers and technology into language learning, providing an interactive and engaging environment for learners (Gillespie, 2020). With the proliferation of instant messaging apps like WhatsApp and Telegram, there is a growing interest in exploring their potential in enhancing language learning (Pérez-Paredes, 2019).

Statement of the Problem

While there is a considerable amount of research on the use of WhatsApp and Telegram in education (Pérez-Paredes, 2019), there is a lack of comparative studies that explore the effectiveness of these platforms in the context of CALL, particularly in the English Department at the University of Benghazi, Suluq Campus. Furthermore, most of the existing studies are quantitative in nature, leaving a gap in our understanding of the qualitative aspects of using these platforms for language learning.

Objectives of the Study

The primary objective of this study is to compare the effectiveness of WhatsApp and Telegram in enhancing English language learning among students in the CALL, Teaching Language Skills, and Reading Comprehension C classes at the University of Benghazi, Suluq Campus. The study aims to understand the students' experiences and perceptions of using these platforms for language learning and to identify the strengths and weaknesses of each platform.

Significance of the Study

This study is significant as it contributes to the growing body of literature on the use of instant messaging apps in CALL (Gillespie, 2020). The findings of this study could provide valuable insights for educators and researchers in the field of CALL, helping them understand how to effectively integrate these platforms into their teaching practice. Furthermore, the study could inform the development of strategies and guidelines for the effective use of WhatsApp and Telegram in language learning.

II. Literature Review

Overview of CALL

Computer-Assisted Language Learning (CALL) has seen significant growth over the past decade, becoming an integral part of language education (Gillespie, 2020). CALL integrates the use of technology into language learning, providing an interactive and engaging environment for learners. It encompasses a wide range of technologies, from traditional desktop computers to mobile devices and social media platforms, and it can be used to enhance all aspects of language learning, including reading, writing, speaking, and listen-

ing (Gillespie, 2020).

The use of technology in language learning has been shown to increase student motivation, improve language proficiency, and promote autonomous learning (Gillespie, 2020). Furthermore, CALL allows for individualized instruction, enabling students to learn at their own pace and according to their own needs and preferences. This is particularly important in the context of English language learning, where students often have diverse backgrounds and varying levels of proficiency. Previous Studies on the Use of WhatsApp and Telegram in CALL

In recent years, instant messaging apps like WhatsApp and Telegram have gained substantial popularity in both academic and practical domains. A comprehensive analysis of 12,947 articles indexed in Dimensions. ai spanning from 2011 to March 2023 revealed a remarkable and continuous growth in the number of academic studies dedicated to WhatsApp (Verma & Yuvaraj, 2023). These studies have explored diverse applications of WhatsApp, including its utilization in education and learning, as a communication tool, in medical education, cyberpsychology, security, psychology, and behavioral learning (Verma & Yuvaraj, 2023).

Similarly, the use of Telegram in education has also been explored, although to a lesser extent compared to WhatsApp. The focus of these studies has been on the use of Telegram for facilitating communication and collaboration among students, enhancing student engagement, and improving learning outcomes. For instance, a study by Dewi (2019) found that the use of Telegram in an English writing class significantly improved students' writing skills and increased their motivation to learn.

Gap in the Literature

Despite the growing body of research on the use of WhatsApp and Telegram in education, there is a notable gap in the literature. Specifically, there is a lack of comparative studies that explore the effectiveness of these platforms in the context of CALL, particularly in the English Department at the University of Benghazi, Suluq Campus. Most of the existing studies are either focused on one platform or the other, or they explore the use of these platforms in a general educational context rather than specifically in language learning. Furthermore, most of the existing studies are quantitative in nature, leaving a gap in our understanding of the qualitative aspects of using these platforms for language learning.

This study aims to fill this gap by conducting a comparative study of the use of WhatsApp and Telegram in CALL at the English Department, University of Benghazi, Suluq Campus. By adopting a qualitative approach, this study will provide deeper insights into the experiences and perceptions of students using these platforms for language learning.

Faraj Mohamed Altalib Aljarih

Faraj Mohamed Altalib Aljarih

III. Methodology

Research Design

This study was conducted using a qualitative research approach, which is particularly effective for exploring the subjective experiences and perceptions of individuals (Creswell & Poth, 2018). This approach allowed for an in-depth understanding of the phenomena under investigation, namely, the use of WhatsApp and Telegram in the context of Computer-Assisted Language Learning (CALL).

Participants

The participants of this study were students from the CALL, Teaching Language Skills, and Reading Comprehension C classes at the English Department, University of Benghazi, Suluq Campus. The study involved a total of 35 students, with a gender distribution of 6 males and 29 females. The students' level of study ranged from intermediate to upper intermediate, and their age range was from 18 to 25. This diverse group of participants allowed for a wide range of experiences and perspectives to be explored in the study (Creswell & Poth, 2018).

Data Collection Methods

1.Implementation: Both WhatsApp and Telegram were actively used in the mentioned classes for a week each. These platforms were seamlessly integrated into the teaching through activities such as group discussions, homework assignments, and Q&A sessions. The use of these platforms in real classroom settings provided an authentic context for the study, allowing for the exploration of how students interact with these platforms in their natural learning environment (Creswell & Poth, 2018).

2.Participant Observation: Detailed notes were taken on how students interacted with the platforms during class and for homework. Observations focused on the frequency and quality of student interactions, the types of questions asked, the depth of discussions, and responsiveness to each other's posts. Participant observation allowed for the collection of rich, detailed data on the students' behaviors and interactions, providing insights into how they used WhatsApp and Telegram for language learning (Creswell & Poth, 2018).

3.Focus Groups: Focus group discussions were conducted with the students about their experiences using WhatsApp and Telegram. Participants for the focus groups were selected randomly, ensuring a mix of genders and proficiency levels. Discussions were recorded and transcribed for analysis. Focus groups provided a platform for students to share their experiences and perceptions, allowing for the exploration of group dynamics and collective experiences (Creswell & Poth, 2018).

4.Individual Interviews: A few students were selected for in-depth interviews based on their active participation and unique insights during the focus group discussions. The inter-

views were conducted in person, each lasting about 30 minutes. Individual interviews allowed for the exploration of individual experiences and perceptions in depth, providing rich, detailed data on the students' experiences using WhatsApp and Telegram for language learning (Creswell & Poth, 2018).

Data Analysis: The data collected from the notes, focus group discussions, and interview transcripts were analyzed in a qualitative manner. This process involved:

1.Reading and Understanding: All the data was read multiple times to gain a deep understanding of the content. This helped in immersing in the data and getting familiar with the experiences and perspectives of the participants (Creswell, 2014).

2.Identifying Key Ideas: While going through the data, key ideas, thoughts, and concepts were identified. These key ideas represented the most important and recurring themes in the data (Saldaña, 2015).

3.Creating Categories: Based on the key ideas, broad categories were created. Each category represented a major theme in the data (Saldaña, 2015).

4.Assigning Data to Categories: All the data was then reviewed again, and each piece of data was assigned to one of the categories based on the theme it represented (Creswell, 2014).

5.Interpreting and Understanding Themes: Each category was then studied in detail to understand the theme it represents and to interpret what it means in the context of the study (Creswell, 2014).

This approach ensured a thorough and grounded analysis of the data. It allowed for the identification of key themes and insights related to the use of WhatsApp and Telegram in the context of Computer-Assisted Language Learning (CALL). This approach is particularly useful when the goal is to understand experiences and perceptions, rather than to quantify data. It provides a rich, detailed, and nuanced understanding of the data.

V. Ethical Considerations

Measures Taken to Protect the Privacy and Confidentiality of the Students

In conducting this study, utmost care was taken to protect the privacy and confidentiality of the students. All data collected during the study was anonymized, ensuring that the identities of the students could not be linked to the data. Any information that could potentially identify a student, such as names or other personal identifiers, was removed or replaced with pseudonyms. Furthermore, all data was stored securely, with access restricted to only the researchers involved in the study. These measures were in line with the ethical guidelines for research involving human subjects (American Psychological Association, 2017).

Process of Obtaining Informed Con-

Faraj Mohamed Altalib Aljarih

Faraj Mohamed Altalib Aljarih

sent and Ensuring Voluntary Participation

Before the study commenced, informed consent was obtained from all students. They were provided with a consent form that clearly explained the purpose of the study, what their participation would involve, the potential benefits and risks of participation, and their rights as participants, including the right to withdraw from the study at any time without penalty. The students were given sufficient time to read the consent form and ask any questions they had before deciding whether to participate. This process ensured that the students' participation in the study was voluntary and based on a clear understanding of what the study entailed (American Psychological Association, 2017).

VI. Timeline

The research was conducted over a period of several weeks, following a structured timeline that ensured a systematic and organized approach:

Initial Phase: The study began with the introduction of the study to the students and obtaining informed consent. This was followed by the implementation of WhatsApp and Telegram in the classes on designated days.

Observation Phase: Participant observation was carried out during the implementation of both platforms. Detailed notes were taken focusing on various aspects of student interactions.

Discussion Phase: Focus group discussions were conducted with a diverse group of students. These discussions were recorded, transcribed, and prepared for analysis.

Interview Phase: Individual interviews were conducted with selected students who showed active participation and unique insights during the focus group discussions.

Analysis and Reporting Phase: The collected data was analyzed, and a detailed research report was written, including the findings, discussion, and conclusion.

VII. Findings

The data analysis from the various data collection methods employed in this study revealed several significant themes and insights regarding the use of WhatsApp and Telegram in the context of Computer-Assisted Language Learning (CALL) at the English Department, University of Benghazi, Suluq Campus. The findings are presented in detail, supported by evidence from the data, and structured according to the identified themes.

Findings from the Data Analysis

1. Engagement and Motivation

The participant observation data and focus group discussions provided compelling evidence that the use of WhatsApp and Telegram contributed to increased student engagement and motivation in language learning activities. During the observation phase, it was noted that students were more actively participating and interacting when the plat-

forms were used for group discussions, homework assignments, and Q&A sessions.

In the focus group discussions, several students expressed their enthusiasm for using these platforms, describing the experience as "fun," "engaging," and "motivating." One student commented, "I found myself looking forward to the activities on WhatsApp and Telegram because they were different from our usual classes and kept me interested."

The individual interviews further corroborated these findings, with students attributing their increased motivation to the interactive and collaborative nature of the platforms. As one student stated, "Working together with my classmates on these platforms made the learning process more enjoyable and kept me motivated to participate."

2. Collaborative Learning

Both WhatsApp and Telegram facilitated collaborative learning among students, as evidenced by the participant observation data and focus group discussions. The group chat features of these platforms enabled students to engage in discussions, share resources, and work together on assignments.

During the observation phase, it was noted that students actively participated in group discussions, sharing their perspectives, and building upon each other's ideas. They also collaborated on homework assignments by sharing resources, asking questions, and providing feedback to one another.

In the focus group discussions, students highlighted the benefits of this collaborative approach. One student remarked, "Being able to work together with my classmates on these platforms really helped me understand the material better. We could exchange ideas and learn from each other's experiences."

The collaborative nature of these platforms fostered a sense of community among the students, as expressed in the individual interviews. One student shared, "Using WhatsApp and Telegram made me feel like I was part of a supportive learning community, where we could all help each other grow and improve our language skills."

3. Convenience and Accessibility

Students consistently appreciated the convenience and accessibility offered by WhatsApp and Telegram, as evidenced across all data collection methods. In the focus group discussions, students frequently mentioned the ability to access course materials, participate in discussions, and communicate with classmates and instructors from their mobile devices as a significant advantage.

One student commented, "The best part was being able to access everything right from my phone. I could quickly check the group chat for any updates or reminders, and I didn't have to be tied to a computer or traditional classroom."

Faraj Mohamed Altalib Aljarih

Faraj Mohamed Altalib Aljarih

The individual interviews further highlighted the integration of language learning into students' daily lives facilitated by these platforms. As one student explained, "With WhatsApp and Telegram, I could practice my English skills anytime, anywhere — while commuting, during breaks, or even while doing other tasks. It made language learning a more seamless part of my routine."

4. Differences in User Experience

While both WhatsApp and Telegram were found to be effective in enhancing language learning, the data revealed distinct differences in students' user experiences with these platforms.

From the participant observation data, it was noted that students generally found WhatsApp to be more intuitive and user-friendly, with a simpler interface and better familiarity among the group. In contrast, some students initially struggled with navigating the more advanced features of Telegram, such as its file-sharing capabilities and organization of group chats.

These observations were corroborated in the focus group discussions, where several students expressed a preference for WhatsApp due to its familiarity and ease of use. One student remarked, "I already use WhatsApp for personal communication, so it was really easy for me to adapt to using it for language learning as well."

However, some students appreci-

ated the advanced features of Telegram, as revealed in the individual interviews. One student commented, "While Telegram took a bit more time to get used to, I found its file-sharing and organization features really helpful for keeping track of our course materials and discussions."

5. Challenges and Limitations

Despite the numerous benefits identified, the data also revealed some challenges and limitations associated with the use of WhatsApp and Telegram in language learning. During the participant observation phase, it was noted that some students occasionally engaged in off-topic conversations or shared non-academic content on the group chats, which could potentially serve as a distraction. In the focus group discussions, several students raised concerns about privacy and data security when using these platforms for educational purposes. One student expressed, "I was a bit hesitant to share personal information or sensitive materials on these platforms because I wasn't sure how secure they were." The individual interviews highlighted the need for adequate digital literacy skills to effectively use these platforms for educational purposes. One student shared, "While the platforms themselves were user-friendly, I sometimes struggled with things like organizing files or navigating certain features, which made it a bit challenging to fully utilize them for language learning."

Faraj Mohamed Altalib Aljarih

Identified Themes and Their Implications

The findings of this study provide valuable insights into the potential of instant messaging apps like WhatsApp and Telegram in enhancing language learning experiences within the CALL context. The increased engagement and motivation observed among students align with previous research suggesting that the integration of technology and interactive platforms can positively impact student motivation and learning outcomes (Gillespie, 2020).

The collaborative learning facilitated by these platforms is particularly significant, as it aligns with contemporary pedagogical approaches that emphasize the importance of social interaction and peer learning in language acquisition (Vygotsky, 1978). The participant observation data and focus group discussions clearly demonstrated how students engaged in meaningful interactions, exchanged ideas, and supported each other's learning journeys through the group chat features of WhatsApp and Telegram. This collaborative approach fostered a sense of community among the learners, which can further enhance their motivation and overall learning experience.

The convenience and accessibility afforded by these platforms are also noteworthy, as evidenced by the students' appreciation for the ability to access course materials, participate in discussions, and communicate with classmates and instructors from their mobile devices. This flexibility addresses the needs of modern learners who often juggle multiple responsibilities and require access to educational resources on-the-go. By integrating language learning into students' daily routines and allowing them to engage with the material in a more seamless and contextual manner, these platforms can promote continuous and contextualized learning experiences.

The differences in user experience between WhatsApp and Telegram highlight the importance of considering individual preferences and needs when selecting and implementing technology-enhanced learning tools. While WhatsApp's user-friendliness appealed to a broader audience, as evidenced by the participant observation data and focus group discussions, Telegram's advanced features were appreciated by some students, as revealed in the individual interviews. This diversity of preferences underscores the need for educators to carefully evaluate the specific requirements of their learners and select the most appropriate platform or combination of platforms to meet those needs effectively.

The challenges and limitations identified, such as potential distractions, privacy concerns, and the need for digital literacy skills, underscore the importance of providing adequate guidance and support to students when integrating these platforms into language learning. The participant observation data and focus group discussions revealed

Faraj Mohamed Altalib Aljarih

instances of off-topic conversations and concerns about data security, which highlight the need for clear guidelines and protocols to ensure a productive and secure learning environment.

Furthermore, the individual interviews highlighted the necessity of equipping students with the necessary digital literacy skills to fully harness the potential of these platforms for educational purposes. Providing training or resources on effective organization, file management, and navigation of platform features can help mitigate the challenges faced by some students and ensure a more seamless integration of these tools into the learning process.

Overall, the findings of this study contribute to the growing body of knowledge on the use of instant messaging apps in language learning and provide valuable insights for educators and researchers in the field of CALL. By triangulating data from multiple sources, including participant observation, focus group discussions, and individual interviews, this study offers a comprehensive and well-rounded understanding of the strengths, limitations, and implications of using platforms like WhatsApp and Telegram in language learning contexts.

The evidence gathered through these diverse data collection methods supports the identified themes and lends credibility to the conclusions drawn. The participant observation data provided a firsthand account of students' interactions and behaviors when using the platforms, while the focus group discussions and individual interviews allowed for an in-depth exploration of students' experiences, perceptions, and perspectives.

By understanding the factors that contribute to increased engagement, motivation, and collaborative learning, as well as the challenges and considerations involved in implementing these platforms, educators can make informed decisions about their integration into language learning curricula. Additionally, the insights gained from this study can inform the development of best practices, guidelines, and support mechanisms to maximize the effectiveness of instant messaging apps in language learning and ensure a positive and productive learning experience for students.

VIII. Conclusion

This study aimed to compare the effectiveness of WhatsApp and Telegram in enhancing English language learning among students in the CALL, Teaching Language Skills, and Reading Comprehension C classes at the University of Benghazi, Suluq Campus. The research employed a qualitative approach, utilizing participant observation, focus group discussions, and individual interviews to gain a comprehensive understanding of students' experiences and perceptions.

Faraj Mohamed Altalib Aljarih

The data analysis revealed several key findings:

1. Increased engagement and motivation: The use of WhatsApp and Telegram contributed to increased student engagement and motivation in language learning activities, due to the interactive and collaborative nature of these platforms.

2. Facilitation of collaborative learning: Both platforms enabled collaborative learning among students, fostering a sense of community and peer learning through group discussions, resource sharing, and collaborative assignments.

3. Convenience and accessibility: Students appreciated the convenience and accessibility offered by these platforms, as they could access course materials, participate in discussions, and communicate with classmates and instructors from their mobile devices.

4. Differences in user experience: While both platforms were effective, students identified distinct differences in their user experiences. WhatsApp was perceived as more user-friendly and intuitive, while Telegram offered advanced features that some students found helpful.

5. Challenges and limitations: Despite the benefits, students also identified challenges and limitations, such as potential distractions, concerns about privacy and data security, and the need for adequate digital literacy skills.

Discussion of Their Implications

The findings of this study have significant implications for the integration of instant messaging apps like WhatsApp and Telegram into language learning curricula and teaching practices.

The increased engagement and motivation observed among students highlight the potential of these platforms to create an interactive and stimulating learning environment that can enhance the overall learning experience. By leveraging the collaborative features of these apps, educators can foster a sense of community among learners, facilitate peer learning, and promote active participation in language learning activities.

The convenience and accessibility afforded by these platforms align with the needs of modern learners, who often require flexible and mobile-friendly educational resources. By integrating language learning into students' daily routines and allowing them to engage with the material anytime, anywhere, these platforms can promote continuous and contextualized learning experiences.

The differences in user experience between WhatsApp and Telegram underscore the importance of considering individual preferences and needs when selecting technology-enhanced learning tools. Educators should carefully evaluate the specific requirements of their learners and select the most appropriate platform or combination of platforms to meet

Faraj Mohamed Altalib Aljarih

those needs effectively.

Furthermore, the challenges and limitations identified, such as potential distractions, privacy concerns, and the need for digital literacy skills, highlight the necessity of implementing appropriate guidelines, protocols, and support mechanisms. Educators should provide clear guidelines for productive and secure use of these platforms, as well as offer training or resources to enhance students' digital literacy skills, ensuring a seamless integration of these tools into the learning process.

Suggestions for Future Research

While this study provides valuable insights into the use of WhatsApp and Telegram in language learning, further research is needed to explore additional aspects and contexts:

1. Longitudinal studies: Conducting longitudinal studies to investigate the long-term effects of using these platforms on language proficiency, retention, and overall academic performance could provide important insights into their sustainability and effectiveness over extended periods.

2. Integration with other CALL tools: Exploring the integration of WhatsApp and Telegram with other CALL tools and technologies, such as virtual learning environments, gamification, and multimedia resources, could reveal potential synergies and best practices for a comprehensive language learning experience.

3. Cross-cultural comparisons: Conducting cross-cultural studies to compare the effectiveness and perceptions of using these platforms in different cultural and educational contexts could enhance our understanding of the role of cultural factors in the adoption and integration of technology-enhanced language learning tools.

4. Quantitative and mixed-methods studies: While this study employed a qualitative approach, future research could incorporate quantitative or mixed-methods designs to provide additional perspectives and insights, including the potential for statistical analysis and generalization of findings.

5. Exploration of alternative platforms: As technology continues to evolve, it would be valuable to explore the potential of other emerging instant messaging apps or social media platforms in the context of language learning, in addition to WhatsApp and Telegram.

By pursuing these lines of future research, educators and researchers in the field of CALL can continue to expand our understanding of the role of instant messaging apps and other technology-enhanced tools in language learning, ultimately leading to more effective and engaging language education practices.

References:

1.American Psychological Association. (2017). Ethical principles of psychologists and code of conduct. American Psychologist, 71(9), 900.

2.Creswell, J. W., & Poth, C. N. (2018). Qualitative inquiry and research design: Choosing

among five approaches. Sage publications.

3.Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

4.Gillespie, J. (2020). CALL research: Where are we now? ReCALL, 32(2), 127-144.

5.Dewi, R. (2019). Using WhatsApp to enhance students' learning process in writing class. Journal of English Teaching, 5(1), 1-12.

6.Pérez-Paredes, P. (2019). A systematic review of the uses and spread of corpora and data-driven learning in CALL research during 2011—2015. Computer Assisted Language Learning

7.Saldaña, J. (2015). The coding manual for qualitative researchers. Sage.

8.Verma, M. K., & Yuvaraj, M. (2023). What's up in WhatsApp research: a comprehensive analysis of 12,947 papers indexed in Dimensions.ai. Library Hi Tech.

Faraj Mohamed Altalib Aljarih