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# University students' English learning outcomes and their perceptions of learning English through WhatsApp discussions

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This research aimed to examine the profile of students' English learning outcomes after implementing WhatsApp group discussions, explore students' perceptions of learning English using WhatsApp discussions, and investigate the relationship between their perceptions and their English language learning outcomes, as well as identify the advantages of learning English via WhatsApp group discussions. This study was quantitative correlation research. One hundred and twenty-five first-year university students who were registered in the General English course in the first semester participated in this study. The researchers collected data using the English test and questionnaire. An online survey was used to collect data from 125 first-year university students. Data were analyzed using descriptive statistics and simple linear regression analysis. Descriptive statistical analysis of the survey results revealed that the students agreed that learning English through WhatsApp discussions makes learning easy (55%), clarifies content (42%), helps solve problems (37%), enables faster knowledge sharing (77%), supports exploring valuable information (54%), and provides enough time (64%). However, the result of the simple linear regression

analysis revealed that there was no correlation between student perceptions of the English learning process through discussion using WhatsApp and students' English language learning outcomes. This research expands the body of research on students' perspectives on using technology to learn English as a foreign language at university. This research supported the idea that the use of technology, especially a social media application, can improve the process of learning English of university students and their English learning outcomes.

**Keywords:** English language learning through an application, WhatsApp discussion, learning outcomes, students' perceptions

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## Introduction

In Indonesia, English as a foreign language is a compulsory course at the university (Bahar & Husain, 2021; Lena et al., 2022). This course is often delivered through blended learning instruction, which includes technology-mediated instruction with face-to-face classroom-based methods. Although most students at university have been learning English as a foreign language (EFL) since elementary school, their English language proficiency is still low (Jufri, 2019). Given the importance of achieving the learning outcomes of the English course, this research aimed to explore students' perceptions of learning English using WhatsApp discussion and its effect on their learning outcomes in this context. This research provides insight into how mobile-assisted language learning tools can support the achievement of English course objectives and enhance students' learning experiences in this context.

Numerous empirical studies have been conducted on the use of online or digital learning applications in English teaching and learning. Most of the research mainly showed positive effects on the conveyance of material and instruction via digital and virtual modes. Rahaded et al. (2020) examined how undergraduate behavior influences learning. They found positive effects on knowledge sharing, class preparation, attention, participation, engagement, and willingness to take extra classes or explore more content, but also a negative effect of increased narrowness of focus. Shobeiry (2021) investigated why WhatsApp is used and its educational benefits in Iranian EFL settings, finding it to be the preferred platform because it enables instant access to materials, participation in online group discussions, and easy sharing and review of learning resources.

The value of WhatsApp as an instructional application is reflected in its features, which facilitate easy access to learning content, posting unlimited messages, file sharing, posting relevant course content, and user support (Suardika et al., 2020). This mobile text messaging system allows users to send and accept information asynchronously and synchronously. This application allows users to send information in various types, such as files, audio, pictures, and video, and provides links to some resources. It also allows users to continue chatting without postponing the device (Rahaded et al., 2020).

In addition, some scholars agree that WhatsApp gives learners satisfaction

by supporting continuous and active learning and learner-educator interaction (Stanov Roßnagel et al., 2020). It is argued that WhatsApp motivates students to learn foreign languages since it encourages students to express their perceptions and share material with others (Stanov Roßnagel, 2020; Damanik, 2020). For these reasons, it is considered a very effective tool for improving students' speaking skills (Al Ayub Ahmed et al., 2022; Kartal, 2024), vocabulary (Kartal, 2024; Namaziandost et al., 2020), writing (Khan, 2024), and enhancing critical thinking in English language learning (Suardika et al., 2020).

Another value of using WhatsApp as an instructional application is its positive effect on student attitudes toward the process of learning. In their study, Rahaded et al. (2020) assert that WhatsApp improves problem-solving and enables students to solve learning difficulties related to both the learning process and materials easily. It is argued that WhatsApp increases student knowledge sharing, attention span, interaction, participation, and preparation for class. For the learning process, WhatsApp helps students create a group discussion, which improves discussion and increases students' collaborative participation (Annamalai et al., 2024).

Despite its value, WhatsApp has limitations. Research showed that the application can only be used if students have smartphones (Munir et al., 2021) and need an internet connection for effective use. Furthermore, Meetings via WhatsApp video conference can be done over a short timeframe, and using WhatsApp on smartphones for too long can cause eye strain. Moreover, constant messaging might annoy or overwhelm students (Munir et al., 2021). Other scholars argue that WhatsApp is limited to only presenting superficial material that does not warrant deep learning (Stamov Roßnagel et al., 2021).

Most studies on WhatsApp in English language learning focus on English language skills, such as vocabulary for English as a Foreign Language (EFL) learners (Ghaithi et al., 2024; Namaziandost, et al., 2020), and creativity in writing (Khan, 2024).

Other studies on English learning through WhatsApp have focused on the use of WhatsApp for teaching a subject in the educational institution (Suardika et al., 2020), WhatsApp for teaching English language learners (Namaziandost et al., 2020; Damanik, 2020), WhatsApp usage among postgraduate students in Malaysia (Malecela, 2016), and undergraduate students' experience using WhatsApp to learn English (Annamalai et al., 2024) and developing quantitative instruments for assessing mobile collaborative learning (MCL) using WhatsApp (Nyambe & Howard, 2020).

Various studies are on the advancement of virtual English learning. WhatsApp helped Nigerian students be fully informed and educated about English courses (Soroghaye et al., 2023). Students also used Duolingo apps as social-emotional supports for English language learning (Neuschafer, 2023). Undergraduates utilized smartphone apps to access learning material (Tella et al., 2021). Additionally, the use of quizzes via Moodle web and Augmented Reality apps improved the capabilities to motivate students during the learning process (Rodrguez et al., 2023). However, there is a dearth of literature available on empirical studies focused on student learning outcomes, their

perceptions of learning English through WhatsApp discussions, and their correlation with student learning outcomes. As such, this study aimed to explore students' perceptions of learning English using WhatsApp discussion and their relationship with their English language learning outcomes.

This study is significant because it explored the relationship between the use of WhatsApp in English language learning and students' learning outcomes. This study provided insight into university students' perceptions of learning English through WhatsApp discussions, emphasizing student engagement, motivation, and interaction in informal digital spaces that help educators better understand student learning preferences and incorporate more technology-integrated strategies centred on the student in English instruction. This research contributed empirical evidence to the ongoing debate on the pedagogical value of mobile communication tools. The findings informed policy decisions, teaching practices, and the design of online English language courses, especially in contexts where digital learning is prioritised. It contributed to the body of research on students' perspectives on using technology to learn English as a foreign language at university.

The study aims to answer these questions: 1) What is the profile of the English outcomes of the students after implementing the WhatsApp group discussions? 2) What are students' perceptions of the English learning process through discussion using WhatsApp? 3) Do students' perceptions of the English learning process through discussion using WhatsApp (X1) have any correlation with students' English language learning outcomes (Y)? 4) What are the advantages of learning English using WhatsApp group discussions?

## Literature review

### *Learning outcomes*

Learning outcomes are what a student should know and do in a programme. According to Lena et al. (2019), learning outcomes are what a student is supposed to know and show after a learning process. These two key aspects of learning outcomes are what educators expect students to recognise and do.

Learning outcomes are most often evaluated through grades, self-reports, and test-based measures. Grades are generally based on students' examinations, assignments, tests, and portfolios. The main purpose of grades and tests is to measure the level of complementarity between learning outcomes and student learning skills at the end of a specific period. The student learning outcomes can be used to evaluate the performance of a programme at an institution. Student learning outcomes can be assessed through self-reports, such as surveys and interviews. The findings of self-reports can also inform about the quality of educational programs and their effect on other categories of classification of programs within the institutions. According to Hartikainen et al. (2019), self-report techniques (such as surveys and interviews) and correlational cross-sectional designs are widespread techniques used to assess the learning process of students and the development of their basic skills.

Learning outcomes are influenced by the students' abilities and also by the environment. Furthermore, learning outcomes are not only influenced by motivation (Lena et al., 2022). It can be influenced by the media of instruction used by teachers, such as social media applications. Lee et al. (2023) revealed that WhatsApp is the most common application among students because it is easy to use and can improve the academic performance of students at university. Zheng et al. (2023) showed that Telegram could improve student English performance.

However, little research has been done on the use of WhatsApp on students' English learning outcomes. WhatsApp can increase students' English learning outcomes. Alamer et al. (2023) found that WhatsApp significantly influenced student English language achievement. Further research is needed to understand WhatsApp's role in English education. The next section examines the wider use of digital apps for learning English.

### *Learning English using an App*

Several applications can be used in the English language learning process, such as Zoom, WhatsApp, YouTube, and Skype; these applications help students get information and knowledge on English courses (Soroghaye et al., 2023). Zhang (2022) revealed that social media applications, such as Facebook and WhatsApp, influence students' motivation to learn English. Another application that can be used in the English learning process is Duolingo. Duolingo discussion boards can help provide three features to improve motivation to achieve educational goals: instrumental, informational, and emotional support (Neuschafer, 2023). Telegram can also be used in teaching EFL because it enhances students' English achievement (Zheng et al., 2023). Another application that can be used to learn English as a second language is Instagram. Research showed that there was a positive and significant correlation between student engagement in English language learning through Instagram and their L2 motivation (Ebadi et al., 2024). However, WhatsApp is the most preferred application to learn English for less motivated and extroverted students (Shobeiry, 2021). WhatsApp supports continuous learning, encourages learner-instructor interaction, and improves learner satisfaction in learning English (Stamov Roßnagel et al., 2021).

Most studies on WhatsApp in English language learning focus on English language skills. For example, a study is about the implementation of WhatsApp in teaching vocabulary to EFL learners (Namaziandost et al., 2020). Ghaithi et al. (2024) also investigated the effect of WhatsApp on student vocabulary. Furthermore, Khan (2024) researched the use of WhatsApp to improve the creativity of EFL students in writing.

Other studies on English learning through WhatsApp have focused on the use of WhatsApp for teaching a subject in the educational institution (Suardika et al., 2020), WhatsApp for teaching EFL learners (Namaziandost et al., 2020; Damanik, 2020), and developing quantitative instruments for evaluating collaborative mobile learning (MCL) using WhatsApp (Nyambe & Howard, 2020). Furthermore, research has been done on the role of WhatsApp in the teaching

and learning process, and it shows that WhatsApp adds value to everyday school activities by closing time and distance gaps between students, teachers, parents and principals (Afzal & Abdullah, 2022), and the use of WhatsApp to increase motivation and achievement and minimise anxiety in learning English (Alamer et al., 2023). Annamalai et al. (2024) investigated the experience of undergraduate students using WhatsApp to learn English.

Many studies have been conducted on WhatsApp and learning English. For example, MacKay et al. (2021) researched the participation and interaction of students in the learning of English as a foreign language. The results showed that student participation and interaction increased with WhatsApp. Imamyartha et al. (2022) explored students' English language engagement and motivation using WhatsApp and found that this application improved student engagement, motivation, and self-regulated learning. Maruf et al. (2024) investigated the use of WhatsApp for the cognitive processes of students and their reading comprehension ability. The results of this study revealed that WhatsApp effectively developed the cognitive processes of students and increased their reading comprehension ability. Janah and Cahyono (2022) investigated students' motivation in online English learning using WhatsApp. They found that students were motivated to learn, writing was a favourite subject for them, and teachers used WhatsApp as a medium of interaction.

In the case of using WhatsApp in the English learning process, Syairofi et al. (2023) showed that WhatsApp supports active English learning activities and builds positive interactive interaction between students and the teacher, increasing students' satisfaction, motivation and independence in learning English. WhatsApp can also be used to improve students' motivation and achievement and decrease anxiety (Alamer et al., 2023). Students also have positive attitudes toward using WhatsApp to learn vocabulary and have a better perspective and motivation for learning (Alenezi & Bensalem, 2022).

Research has shown that learning English with WhatsApp can improve students' English language skills. For example, research has shown that the use of WhatsApp can improve the listening skills of students (Annamalai et al., 2024). Students' speaking skills also improved when using WhatsApp in their English class (Al Ayub Ahmed et al., 2022; Annamalai et al., 2024). Some studies revealed that the use of WhatsApp can enhance the vocabulary of students (Annamalai et al., 2024; Ghaithi et al., 2024; Klimova, 2021; Namaziandost et al., 2020). Furthermore, WhatsApp increased students' comprehension of reading texts (Annamalai et al., 2024). WhatsApp also improved students' writing skills (Alouch, 2021; Annamalai et al., 2024; Khan, 2024; Savitri, 2022). While these studies highlight language skill development, it is also important to explore how students perceive WhatsApp as a learning tool. The next section discusses students' perceptions of learning English using WhatsApp.

### *Student perception of learning using WhatsApp*

According to Goldstein (2019), perception is the human interpretation to obtain knowledge from the environment, it is used to determine the input of the data

and ensures that the information captured by humans is recorded, and it allows the formation of abstraction and meaning of the world, creating internal processes for making, thinking, conceptualizing, etc. It can support effective teaching and learning because learning can only occur after exposure to stimuli. The process of perception can enable people to interpret knowledge based on what they taste, hear, see, touch, and smell. Perception can also be described as the process of gaining consciousness and receiving information.

Human perception is influenced by numerous factors, including sensory information (Goldstein, 2019; Vetter et al., 2024), relationships (Fiske & Taylor, 2017), and the interpretation of the environment (Bruner, 1990). Prasetijo and Ithalauw (2005) categorize these factors that influence perception into internal factors (including experience, needs, assessments, and expectations/hope) and external factors (extrinsic appearance, the characteristics of the stimulation, and the environmental situation).

Much research has been conducted on students' perceptions of using WhatsApp in their learning processes. For example, Rahaded et al. (2020) carried out research on WhatsApp's impact on the behaviour of University of Ahmad Dahlan (UAD) undergraduate students in the English language learning process. They revealed that WhatsApp eases learning and facilitates rapid knowledge sharing. Furthermore, by using WhatsApp, students can prepare before class, pay attention, focus on group discussions, and improve their abilities through collaborative engagement. Additional reasons why students choose WhatsApp include its ability to create a learning community, foster knowledge development, and facilitate information sharing with others.

Furthermore, Meylinda (2023) interviewed some university students about their perceptions of using WhatsApp in learning English, and she found that students revealed that using WhatsApp was fruitful for accomplishing English tasks and reduced their anxiety about expressing their opinions; they were more relaxed learning via WhatsApp. Tungka and Tarinje (2021) explored the perceptions of students about using WhatsApp in their English learning process and found that students reported that WhatsApp could be used as a medium to share course information and other materials. Alfiansyah et al. (2021) investigated students' perceptions and attitudes toward the English learning process through WhatsApp and found that students revealed that the WhatsApp group discussion was a convenient, accessible, and fast medium for learning and building self-confidence.

## Methodology

Quantitative correlation research was used to examine students' perceptions about learning English through WhatsApp group discussions and the profile of their English learning outcomes, and to examine the relationship between them. This design was appropriate because the primary objective was to determine whether there is a statistically significant relationship between two measurable variables (Creswell & Creswell, 2018): student perceptions and student outcomes in the English language. A correlational approach allows

for the collection of numerical data that can be analysed to identify patterns, trends, and associations, providing objective evidence on how student attitudes toward mobile-assisted learning relate to their actual learning results. Data were collected using a test to assess student learning outcomes and a questionnaire to explore student perceptions about learning English using WhatsApp discussions and the advantages. Participants were asked to respond as agree, disagree, or neutral. Participants in this study were 125 students taking English courses. A cluster random sampling technique was used to select the sample, and a lottery method was used to randomly choose the clusters. Furthermore, descriptive quantitative analysis and simple linear regression analysis were used to analyse the data.

In this study, WhatsApp was utilized as an instructional tool to support English learning. Students participated in discussions within WhatsApp groups of about 30–32 members. These groups were created specifically for the English course and were supervised by the English lecturer. The WhatsApp discussions, conducted in English, took place once a week for 100 minutes over the course of 10 sessions. For each session, the lecturer assigned a topic aligned with the course content, such as English tenses, articles, conditional sentences, and sentence types. Students were instructed to pose questions, respond to their peers' questions, share their ideas in written English, and interact with classmates by replying to messages and asking follow-up questions. They were also allowed to post materials related to the topic under discussion. The lecturer provided feedback or responses to students' questions and answers. These WhatsApp discussions aimed to promote active engagement, expand opportunities for English practice, and support peer interaction. Students' participation in the WhatsApp group discussions was then analyzed in relation to their English learning outcomes.

### *Sampling*

The research population consisted of 176 university students from the Department of Elementary Education who registered for the General English course in the first semester; their level of English was intermediate based on their English test results. A cluster random sampling technique was used to select samples because the students in each class shared similar characteristics, specifically, varying levels of intelligence and social background, as they were organised into intact class sections; these classes served as naturally occurring clusters. It offered a practical and efficient way of accessing university students enrolled in English courses. Random selection of entire classes reduced logistical challenges, saved time, and minimised disruptions to academic schedules. This method also ensured consistency in the learning environment, as students within each group experienced similar instruction and course content. Therefore, the sample for this investigation included 125 university students (109 women and 16 men). The students in this study used WhatsApp freely, anytime, anywhere.

## *Data collection*

The students were invited to take an English language test that consisted of 30 multiple-choice questions administered in classrooms within 30 minutes to assess their learning outcomes. They were informed that their participation in this study was voluntary, and they could leave the room if they did not wish to participate. The questions related to the material that the students had learned beforehand, specifically English tenses, the English articles, conditional sentences, and types of sentences. Voluntary students completed the questions and submitted them to the researcher. Additionally, the questionnaire was distributed through the WhatsApp application to respondents. The questionnaire was constructed based on literature related to student perceptions of using WhatsApp in English learning and its advantages. The authors utilized a one-to-three-point rating scale for the questionnaire (disagree = 1; neutral = 2; agree = 3), as the constructs being measured did not necessitate detailed differentiation, and the research objective was to simplify participant responses and alleviate cognitive burden. The English language test and questionnaire were presented to some students not included in the sample to confirm their validity and reliability. Both the test and questionnaire were valid and reliable ( $\alpha$  of the test = .86 and  $\alpha$  of the questionnaire = .83). The students took the test first and then completed the survey.

## *Data analysis*

Descriptive quantitative analysis was used in the data analysis. This quantitative research aimed to explore students' perceptions of learning English using WhatsApp discussions and students' English language learning outcomes. Furthermore, simple linear regression analysis was used in data analysis to test the correlation between students' perceptions and English language learning outcomes.

The hypotheses of this research are the following:

H1 = There is a significant relationship between the perceptions of the students of the English learning process through discussion using WhatsApp (X1) and the results of the English language learning of the students (Y).

H0 = There is no significant relationship between the perceptions of the students of the English learning process through discussion using WhatsApp (X1) and the results of the English language learning of the students (Y).

The level of significance was 95%,  $\alpha = .05$ , which means that the precision level of the results of this study was 95% and .05 of defiance.



## Results

### *Students' English language learning outcomes*

After the data were obtained, they were analysed and presented in Table 1. Table 1 presents the data description of the English learning outcomes of the students using WhatsApp group discussions.

**Table 1.** Data on students' English learning outcomes

	Number of students	Value		
		X-max	X-min	$\bar{x}$
Learning English using WhatsApp discussion	125	90	84	86.32

$\bar{x}$ : mean

Table 1 illustrates that of the 125 students who learnt English using WhatsApp discussion, the maximum value of the English learning outcomes was 90, the minimum score was 84, and the average value was 86.32. Therefore, it can be concluded that students who obtained very good grades can be classified into A (85–100) using the criteria provided. For more details, the percentage of students' English language learning outcomes during English lessons through WhatsApp is presented in Table 2.

**Table 2.** Percentage of students' English learning outcomes

Grade	Numbers	Percentage
84	2	2%
85	31	25%
86	34	27%
87	44	35%
88	12	9%
89	1	1%
90	1	1%

Table 2 above shows the data on the English language learning outcomes of the students: one student (1%) got 89 and 90, two students (2%) got 84, 12 (9%) students got 88, 31 (25%) students got 85, 34 (27%) students got 86 and 44 students (35%) got 87.

### *Students' perceptions of the English learning process through discussion using WhatsApp*

The perceptions of the students about learning English using WhatsApp are presented in Table 3 below.



**Table 3.** Students' perceptions of learning English through WhatsApp discussion

Statements	Response of respondents in percent			
	Agree	Neutral	Disagree	Total
English learning process through discussion using WhatsApp makes learning easy	69 (55%)	49(39%)	7(6%)	125
English learning process through discussion using WhatsApp helps to solve problems	46(37%)	58(46%)	21(17%)	125
English learning process through discussion using WhatsApp makes content clear	53(42%)	47(38%)	25(20%)	125
English learning process through discussion using WhatsApp helps sharing knowledge faster	97(77%)	22(18%)	6(5%)	125
English learning process through discussion using WhatsApp helps explore valuable information for learning	68(54%)	54(43%)	3(3%)	125
Provided time for the English learning process through discussion using WhatsApp is enough	80(64%)	40(32%)	5(4%)	125

Table 3 shows that 69 respondents (55%) agreed that the English learning process through discussion using WhatsApp makes learning easy. Furthermore, 49 respondents (39%) declared neutral and only seven respondents (6%) disagreed.

The data also shows that 58 of the respondents (46%) declared neutral that WhatsApp discussion helps solve problems. Forty-six of the respondents (37%) agreed and only 21 respondents (17%) disagreed that using WhatsApp helps solve problems.

Most of the respondents (53 or 42%) agreed that the English learning process through WhatsApp discussions also makes the content clear. Only 47 of the students (38%) declared neutral and 25 students (20%) disagreed.

The English learning process through discussion using WhatsApp helps to share knowledge faster. Ninety-seven students (77%) agreed that the English learning process through discussion using WhatsApp helps to share knowledge faster. Twenty-two of the students (18%) stated that they were neutral and six students (5%) disagreed.

Meanwhile, 68 respondents (54%) agreed that the English learning process through the discussion using WhatsApp helps to explore valuable information for learning. Fifty-four of the respondents (43%) chose neutral and three students (3%) chose to disagree.

Furthermore, 80 of the respondents (64%) agreed that providing time for the English learning process through discussion using WhatsApp is enough, only five of the students (4%) disagreed and the other 40 of the respondents (32%) chose neutral.

*The relationship between students' perceptions of the English learning process through discussion using WhatsApp (X1) and students' English language learning outcomes (Y)*



The hypothesis testing of the H1 result using regression analysis is presented in Table 4.

X1 = Students' perceptions of the English learning process through discussion using WhatsApp

Y = Students' English language learning outcomes

**Table 4.** Regression analysis of students' perceptions and English learning outcomes

Model	Unstandardized coefficients		Standardized coefficients		Sig.
	B	Std. error	Beta	t	
1 (constant)	85.714	.539		158.959	.000
Students' perceptions	.040	.036	.101	1.127	.262

The significant value for the relationship of X1 and Y was  $.262 > .05$  and the t-count was  $1,127 < t\text{-tabel } 1.97944$ , therefore H1 was rejected, meaning there was no significant correlation between students' perceptions of the English learning process through discussion using WhatsApp (X1) and students' English language learning outcomes (Y). Furthermore, the contribution or the relationship between students' perceptions of the English learning process through discussion using WhatsApp and students' English language learning outcomes is presented in Table 5.

**Table 5.** Model summary of simple linear regression analysis

Model	R	R-square	Adjusted R-square	Std. error of the estimate
1	.101 <sup>a</sup>	.010	.002	1.072

a. Predictor: (constant), Students' perceptions

Table 5 shows that the R-square is 0.010, which means that the perceptions of the students are a very weak predictor of the results of English language learning. The contribution or relationship of X1 and Y is 1% and 99% related to other factors.

*The advantages of learning English using WhatsApp group discussion*

Table 6 presents the data of the students' responses on the advantages of learning English using the WhatsApp group discussion in percentages.

**Table 6.** The advantages of learning English using WhatsApp group discussion

Statements	Response of respondents in percent		
	Yes	No	Total
English learning process through discussion using WhatsApp enhances my motivation to learn English	101(81%)	24(19%)	125
English learning process through discussion using WhatsApp improves my participation in the English learning process	117(94%)	8(6%)	125
English learning process through discussion using WhatsApp improves my confidence to learn English	107(86%)	18(14%)	125
English learning process through discussion using WhatsApp improves my knowledge and understanding of the topic discussed	69(55%)	56(45%)	125
English learning process through discussion using WhatsApp improves my English skills both spoken and written	62(50%)	63(50%)	125

The data in Table 6 above shows that 101 of the respondents (81%) agreed that the English learning process through discussion using WhatsApp improves students' motivation to learn English, and only 24 students (19%) disagreed with the statement.

Data also showed that 117 of the respondents (94%) of this study stated that the English learning process using WhatsApp discussion improves students' participation in the English learning process, and only eight respondents (6%) disagreed.

Furthermore, 107 respondents (86%) agreed that the English learning process through WhatsApp discussion improves students' confidence to learn English, and only 18 students (14%) disagreed.

Fifty-five percent of the respondents (69) agreed and the other 45% or 56 students disagreed with the item that the English learning process through the discussion using WhatsApp improves students' knowledge and understanding of the discussed topic.

Furthermore, 63 respondents (50%) said the English learning process through discussion using WhatsApp does not improve their English skills, both spoken and written, but 62 respondents (50%) reported that the English learning process through discussion using WhatsApp improves their English skills, both spoken and written.

## Discussion

Regarding research question one, the profile of the English outcomes of the students after implementing the WhatsApp group discussion, the result of this research showed that most of the students obtained grades in English between

85 and 87. Therefore, this research revealed that students had good English language learning outcomes using WhatsApp group discussions because students can read a lot of material related to the topic that they discussed, and they can ask questions during the learning process if they do not understand the topic. Additionally, the lecturer can ask questions to check the students' understanding during the learning process. Research revealed that WhatsApp usage had a significant impact on improving students' English language learning outcomes (Alamer et al., 2023; Warman, 2018).

In regards, research question two, students' perceptions of the English learning process through discussion using WhatsApp, this study revealed that 55% of the respondents agreed that the English learning process through discussion using WhatsApp makes learning easy because students can share their assignments before the class in a WhatsApp group, and during the class, students can access any material online from different sources and share it to the class directly or copy and paste the information they found in WhatsApp group, as well as they can ask and answer questions directly by type it into WhatsApp group, and every student can respond to it as soon as they get the answer. This result is in alignment with the findings of Rahaded et al. (2020) that WhatsApp made the English learning process easier because the system is intuitive, simplistic, easy to use, and gives time for students to prepare for their class (to confirm time, schedule, and material). Tungka and Tarinje (2021) also revealed that WhatsApp made students access materials and send tasks easier and faster. Meylinda (2023) found that WhatsApp provided students with easy access to participate in English class because it was not required to have a stable Internet connection. Annamalai et al. (2024) revealed that WhatsApp provided flexibility for students to connect with course materials and lecturers anytime and in any way. WhatsApp made it easy to receive up-to-date information about the course and material and seek advice from teachers about the material (Naghdipour & Manca, 2023)

This study revealed that 37 percent of respondents agreed that using WhatsApp helps solve problems. This is because using this application allows students to discuss and share their work or information in small or classical groups, and students can collaborate with others in doing their assignments. This result was in alignment with Rahaded et al.'s (2020) statement that this application improves problem solving.

The English learning process through discussion using WhatsApp also makes the content clear and helps explore valuable information for learning. This study showed that 53 respondents (42%) agreed that the English learning process through discussion using WhatsApp also makes content clear. This is because students can confirm directly with the teacher about the content, and the teacher can clarify immediately. WhatsApp made it easy for students to ask the teacher for clarification about the learning content (Naghdipour & Manca, 2023). This result was supported by the research by Suhardika et al. (2020) that WhatsApp made it easy for students to access learning materials. WhatsApp allows users to send all information, such as files, audio, pictures, video, and

links to some resources, which is another advantage of using this application (Rahaded et al., 2020).

The result showed that 77% of the respondents agreed that the English learning process through discussion using WhatsApp helps to share knowledge faster. This is because WhatsApp can be used anytime and anywhere and it allows students and teachers to post or share any type of material. This result corresponded to the results of the study conducted by Rahaded et al. (2020), that is, WhatsApp makes students share knowledge faster with their friends in formal and informal classes. Naghdipour and Manca (2023) revealed that WhatsApp provided communication quickly and conveniently for students and teachers, and students received immediate feedback from teachers.

This study revealed that 54% of the respondents agreed that the English learning process through discussion using WhatsApp helps explore valuable information for learning. This is because students are allowed to share any materials related to the topic discussed and can download any type of material they want. This finding is in agreement with the results of the research conducted by Suardika et al. (2020) that users could post unlimited messages to the group on WhatsApp, post or share many different categories of file formats, and be able to post relevant course contents.

Furthermore, the result showed that 64% of the respondents agreed that providing time for the English learning process through discussion using WhatsApp is enough. This is because, using WhatsApp, every student can participate at the same time without waiting for other students' responses, like in traditional classes. Therefore, students have enough time to learn English. This result corresponded with the findings of the study conducted by Suardika et al. (2020) that WhatsApp helped to create a learning community for the students so they could easily construct knowledge and share it with others. This result was also consistent with the argument of Damanik (2020) that WhatsApp encouraged students to state their ideas and opinions and share information.

In regard to research question three, students' perceptions of the English learning process through discussion using WhatsApp (X1) have any correlation with students' English language learning outcomes (Y). This study indicated that there was no significant correlation between students' perceptions of the English learning process through WhatsApp discussion (X1) and students' English language learning outcomes (Y). This result contradicts the research result conducted by Ma and Luo (2022), who showed that the perception of students of the use of technology in teaching English as a foreign language, especially fully online flipped instruction (FOFI), affects their English learning results.

To address research question four, the advantages of learning English using WhatsApp group discussions, this study showed that 81% of the respondents agreed that the English learning process through WhatsApp discussion enhances students' motivation to learn English. It is because students learn English through social media applications that they use frequently in daily activities, and they are motivated to learn English. This result is consistent with previous studies that showed that WhatsApp had a significant impact on



improving students' motivation to learn English (Alamer et al., 2023; Stamov Roßnagel et al., 2021).

This study showed that 117 of the respondents (94%) stated that the English learning process using WhatsApp discussion improves the participation of students in the English learning process. This is because, in the learning process using WhatsApp, students are encouraged to post questions related to the topic, and other students will respond to any questions immediately if they know the answer. Therefore, all students are involved in the learning process. This result corresponds to the results of the research by Rahaded et al. (2020), WhatsApp can promote cooperative learning that affects the learning process and active engagement. Annamalai et al. (2024) also found that WhatsApp encouraged active learning. Stamov Roßnagel et al. (2021) used WhatsApp in the English class to encourage active learning. However, Ghaithi et al. (2024) revealed that student participation was low when using WhatsApp.

Furthermore, this study revealed that 86% of the respondents agreed that the English learning process through discussions using WhatsApp improves students' confidence to learn English. This is because students have more space to interact with their friends and the teacher online, not face-to-face interaction; this reduces their anxiety and builds their confidence in expressing themselves in learning English. Research showed that students' confidence improved when learning through WhatsApp because WhatsApp encouraged them to express their thoughts and opinions and share information with others (Damanik, 2020). Moreover, less confident learners can improve their productivity and participation by using WhatsApp because it enables anonymous, asynchronous collaborative learning (Nyambe & Howard, 2020). Alamer et al. (2023) revealed that learning English using WhatsApp reduced the language anxiety of students.

This study showed that 50 percent of the respondents agreed that the English learning process through discussion using WhatsApp improves students' knowledge and understanding of the topic discussed. This is because students can learn the material from different sources and can choose which material works well for their understanding and can read or watch that material at any time. This result is in line with results reported by Suhardika et al. (2020) that students can understand the topic of discussion greatly, thus improving their critical thinking skills and the new knowledge construction. WhatsApp also allows students to transmit data, such as pictures, files, audio, videos, and links (Rahaded et al., 2020). Therefore, it enables students to gain more knowledge. Savitri (2022) revealed that by using WhatsApp, students share their knowledge and ideas about the material, which leads to increased knowledge and understanding.

Furthermore, this study revealed that 63 respondents (50%) reported that the English learning process through WhatsApp does not improve their English skills, both spoken and written. It could be caused by students not having a lot of time to practice their speaking and writing skills during the discussion, as it is conducted through chatting and they use short text messaging, as they did not allow sending voice notes; the emphasis of the discussion is to comprehend the



material or concepts that are given to the students. This could happen because WhatsApp does not guarantee deep learning (Stamov Roßnagel et al., 2021). Meanwhile, 62 students (50%) agreed that the English learning process through discussion using WhatsApp improves their English skills, both spoken and written. It is because students can benefit from expressing their ideas through chatting to practice their writing at the same time, and they can articulate what they write. This finding corresponds to previous research that highlights that WhatsApp is very effective in improving student listening (Annamalai et al., 2024), speaking skills (Al Ayub Ahmed et al., 2022; Annamalai et al., 2024; Kartal, 2024), vocabulary (Annamalai et al., 2024; Ghaithi et al., 2024; Kartal, 2024; Namaziandost, et al., 2020), reading comprehension (Annamalai et al., 2024), and writing skills (Alouch, 2021; Annamalai et al., 2024; Khan, 2024). Furthermore, Khan (2024) found that WhatsApp significantly improves the spelling, punctuation, capitalization, and grammar of students in their writing.

## Conclusion

Learning English through WhatsApp is beneficial in many ways for students. First, it can improve students' learning outcomes. The English learning process through discussion using WhatsApp makes learning easy, clarifies content, helps to share knowledge faster, and helps to explore valuable information for learning. The time provided in English through WhatsApp for learning is also sufficient. Furthermore, students feel that the English learning process through discussions using WhatsApp enhances their motivation and improves their participation and confidence in learning English. The English learning process through discussion using WhatsApp also improves students' knowledge and understanding of the topic discussed.

Half of the students revealed that their speaking and writing skills were improved using WhatsApp discussion, and others revealed that learning English through WhatsApp does not help students improve their speaking and writing skills. This is because the discussion via the WhatsApp group does not encourage or train students to speak or write; they just use WhatsApp to discuss the topic that was given to them to improve their understanding of the concept. They are not encouraged to send voice notes to practice their speaking, and they also do not send long messages during the discussion via WhatsApp. Furthermore, this research showed that students' perceptions of the English learning process through discussion using WhatsApp (X1) do not significantly correlate with students' English language learning outcomes (Y).

However, this research has some limitations. The samples of this investigation were small (125 students), and the ratio of men and women was not equal. It is suggested that future research should consider a larger sample size for better results, and also focus on specific learning outcomes, such as a particular skill or subskill, while offering guidance on group discussions (whether formal or informal) to allow for a more detailed exploration of correlations. Furthermore, employing mixed-methods research that incorporates focus-group interviews can provide deeper insights into students' perceptions,

perceived benefits, and challenges associated with using WhatsApp discussions in the English learning process.



## Implications

This study provides valuable information on how WhatsApp can support English language learning in university settings. Practically, WhatsApp enables teachers to extend learning beyond the classroom by sharing materials and maintaining communication with students. Its accessibility and familiarity help support continuous learning and student engagement. Pedagogically, the use of WhatsApp for group discussions encourages collaborative learning, peer interaction, and student autonomy. It also serves as a platform for immediate feedback, allowing teachers to respond to individual student learning needs more efficiently. Theoretically, the study contributes to the research on mobile-assisted language learning (MALL) by highlighting the relationship between the perceptions of learners about WhatsApp-based learning and their English learning outcomes. These findings align with constructivist learning theories that emphasise the importance of interaction, social context, and learner-centred approaches in the acquisition of a second language (Guo, 2024). In general, integrating WhatsApp into English instruction can enhance both engagement and performance. Educators and curriculum designers should consider its use as a complementary tool in blended learning environments. Future research could further examine how different uses of WhatsApp impact various language skills and learner profiles.

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