

# The Students' Perception about the Use of Duolingo Application in Improving English Skills at XI Grade Students SMKN 3 Baubau

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## *Abstract*

This research aims to analysis students' perception about the use of Duolingo application in improving English skills at XI grade students of SMKN 3 Baubau. This research uses descriptive qualitative research type. This research qualitative type begins with investigating and understanding the meaning individuals or groups assume to be a social or a human problem. It is used to find out and know why and how a social phenomenon happens and also the participant of this research are students at XI Fashion 2 grade of SMKN 3 Baubau and also the number of research participants are thirty students with details of twenty-six women and four men. The findings indicate types of perception using Irwanto's theory (2002) that there are two types of perceptions, namely positive perceptions and negative perceptions. The results of the research are the positive interpretation arises based on individual satisfaction from observations of the knowledge and experience they have to accept and support the object they perceive. In contrast, negative perception is a person's negative assessment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience in observing the object

Keywords: Perception, English Skills, Duolingo Application

## **1. Introduction**

Globalization and technology are as newest educational issues such as blended learning model offers learning delivery strategies using face-to-face activities, computer-based learning (offline), and online computers (internet and mobile learning) without any specific limitations synchronously or asynchronously between the facilitator and the person

being taught. As line with (p. 905), they exchange and use information with minimum participation human in devices vary such as size, computation power, energy capacity, and storage capability so model BL could be added in class to create and improve a smart learning environment (Siripongdee et al., 2020.).

English is as the international language in this globalization era has an important role; many individuals utilize English as a means of communication, which facilitates connection and conversation between people from different countries. As the international language it is used in education, business, government, and social settings. English as the international languages is also has assumed a prominent position in Indonesia's education. It is a lesson that must be taught in Indonesia in different level especially in a senior high school.

Technology, such as internet-based media, can be utilized to empower students, improve their creativity, nurture their independence, give them access to a variety of learning resources, and aid in the development of their English abilities. Blended learning is a versatile approach to studying English. It can enhance students' English-learning abilities. Blended learning approaches today are extremely beneficial to the student learning process. This method is essential for enhancing students' skills in a space-and time-efficient manner, as it is conducted both online and offline. Blended learning approaches are required for an efficient learning process in which students can study both in and out of class. Blended learning makes it simple for students to acquire new skills.

Students' demands in the learning process can be met by a variety of instructional materials. Students can design a study schedule and choose the skills they wish to acquire based on their own needs. It indicates that blended learning promotes student learning. The most intriguing aspect is that blended learning can be accessed via the internet outside of the classroom, depending on the student's needs. Consequently, blended learning is a flexible style of instruction that can be utilized in the learning process.

In Baubau, as central city of Southeast Sulawesi, all senior high schools, including SMK N 3 Baubau, are required to use technology in the teaching and learning process. This is done to facilitate the teaching and learning processes between teachers and students. From using blended learning model in English learning, students can obtain a more contextualized grasp of the language if they have access to the internet, which teaches how to learn English to facilitate the teaching and learning processes for both teachers and students. To Students they can get a more contextualized grasp of the language through blended learning since they have access to the internet, which demonstrates how to learn English from an infinite source.

This is consistent with the research of learning. Ashraf et al., (2021) which argues that student participation in the learning process using digital media is limited in blended It is difficult for students to connect with teachers regarding technical learning materials, the limitation is that it is difficult for students to interact with teachers regarding technical learning materials, as it leads to student dissatisfaction in achieving the material skills. Therefore, the limitation is that it is difficult for the students to interact with the teacher regarding.

Moreover, there are some expert research, such as that of Wang & Zhang (2022) the research demonstrates that blended learning models, the combination of online and offline learning models optimized from priority factors via instructional forms such as the SPOC model, have a positive effect on the establishment and improvement of independent learning behavior and the efficacy of self-learning. Second, Inal & Korkmaz (2019) stated that blended learning via the DynED platform contributed significantly to student achievement compared to traditional approaches, but did not significantly contribute to student attitudes about English learning. Thirdly, according to Bralić & Divjak. (2018), the blended learning paradigm based on MOOC (Massive Open Online Courses) is a website-based course designed for unrestricted participation and open access. In this study, the blended learning model demonstrated a small number of successful students in the English learning process. This is due to the fact that MOOCs have limited features that can affect students' learning motivation, and the ECTS assessment must be carefully examined due to reasonable student expectations.

Based on the explanations of the three experts above, the blended learning model based on online courses made a positive contribution to student achievement in learning English, but the online course method had no effect on students' attitudes in practicing English and the enthusiasm of students in studying the material is less influential. Aside from that, the Duolingo application provides several additional benefits, including increasing learning motivation, expanding vocabulary, enhancing speaking skills, refining the listening section, matching English to Indonesian and vice versa words, exchanging information about learning difficulties, and practicing directly with other members. Therefore, researchers are interested in examining students' perception about the use of Duolingo application in improving English skills at XI grade students SMKN 3 Baubau.

## **2. Literature Review**

### **Definition of Perception**

Numerous experts have provided varied definitions of perception, even though in principle it involves the same idea, such as Zins (2007) defines

perception as the process of interpreting incentives that come through the sense units by people who implement the sensing process as an improvement in knowledge.

Perception is the result of evaluating information based on our environment through sight and hearing to determine if something is favorable or negative. This is a perspective that influences the actions of obvious individuals. Moreover, according to Ziemke et al., (2005), perception is a process that is anticipated by sensing. Therefore, each individual who processes information in the social context senses a stimulus. Because each person tends to interpret the same object differently based on their experience, knowledge, and the perspective from which they view it. In addition, Schutz (1953) demonstrates that perception also relates to how a person observes an object in distinct ways, applying the sense structures they maintain prior to attempting to understand it. In conclusion, perception is a process that begins with eyesight and culminates in the formation of people's senses, allowing them to perceive everything in their environment. It is widely acknowledged that a range of variables can alter an individual's perception. Consequently, experience, learning, and knowledge all impact perception.

#### Perception Factor

In providing perceptions of an object, each individual will certainly be different. It is because someone's views are influenced by insight, experience, and knowledge of an object experienced. Neisser (1967) states that information is rarely obtained simply from the instantaneous perception that directly fades from consciousness. However, the impression is extended for at least a short time in the main memory image. As in the research by Kim et al., (2021) shows that the formation of prior knowledge as a manifestation of cognitive signs related to interpretive cognitive information obtained in the surrounding environment greatly influences experiences in textual, visual, and gustatory. It provides theoretical support for the concept that tourist multisensory food experiences accumulate knowledge about taste perception in the context of culinary tourist attractions. This significant finding is related to cognitive factors' being part of cognition formation. Hence, the set of cognitive information gleaned from textual and visual interpretations prior to the dining experience and presented as prior knowledge is key to cognitive assessment. In addition, Makridis et al., (2017) on the research demonstrates the role of experience in shaping research participants' perceptions about the importance of cultural heritage in higher education. The results showed that the experience of research participation significantly influenced cultural perception.

The process is generated since participants have visited tour places to learn about monuments and become aware of or participate in local customs in a cultural heritage that affects emotions and cognitions in

shaping the perception. In this case, perception is formed from a cognitive process such as an assessment in evaluating events before the interpretation of the occurrence. This process yields stimulus coding and isolated event classification, which are then combined to form perceptual schemes that determine the overall understanding of the environment over time. Therefore, it can be concluded that in daily life, such comparative behavior in perception is not a function of an event stimulus. It is, however, the result of knowledge continuity formation and experience in particular, which is then involved in a conclusion. Knowledge and experience are involved explicitly in the conclusions about what people usually do to relate to an object or an event. In such situations, direct perception can be clustered and equipped with considerations, judgments, and decisions when it is required to make a response in words or actions. The results of a person's interpretation can be the same or different depending on the situation in people's experiences.

#### Types of Perception

Each person certainly has a different perception, which can be a positive or negative perception. There are two types of perception according to (Irwanto, 2002). They are negative and positive perceptions, which are both explained in the following description;

##### a. Positive Perception

Positive perception is an individual's positive assessment or interpretation of an object. The emergence of this positive interpretation is based on individual satisfaction from the observation results of the knowledge and experience they have to accept and support the object they perceived.

##### b. Negative Perception

Negative perception is a person's negative judgment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience from observing the object. In this case, when the individual is faced with the object, he will reject or deny the perceived.

As stated in Putri (2021) about his research on "Student Perceptions of the Use of the Edlink Platform in the Second Semester of the English Program at the IAIN ParePare Program,". The purpose of this study was to determine student perceptions about using the Edlink platform, and the results show several perceptions, including positive and negative perceptions. Positive student perceptions based on their Edlink platform experience can make work easier, faster, improve student work performance, increase productivity in learning English, and make students more flexible. From the EdLink platform, it helps students to work on and complete course assignments with a percentage of 83.2

percent. This shows a very strong illustration that this application has an easy-to-approve construct, the items are clear and easy to understand. whereas what is perceived negatively is the lowest score that is not easily accessible by the PEOU construct, which is interpreted as there being students who do not agree with the use of Edlink, which can facilitate individual efforts in doing something or the learning process. Students and teachers who have never used media before must try to adapt their abilities to the system's demands. The total proxy score is 164, with a percentage of 60.8 percent. .Likewise, students need to be more independent when learning material so that it is easier for them to follow the ongoing online learning process.

#### Types of Blended Learning

There are several types of blended learning model according Shaidullin (2014):

##### a. Face to Face Driver

The face-to-face driver is a traditional learning model, face-to-face or direct interaction with research participants. The concept of this type of learning model uses electronic as the main program. The participants are controlled by a computer during the training.

##### b. Rotation model

The rotation model is a type of blended learning model that divides between individual dual electronic training and face-to-face training with teachers. The station rotation takes place alternately online and offline in learning groups. Learning groups can consist of the whole class, or the trainer can divide them into smaller learning groups. Related to this learning model, participants access the material online, then the teacher can provide instructions on what else participants should do besides reading, such as do tasks, assignments based on projects, and give opinions based on previous material. This type of learning provides an opportunity for the participants to learn independently and understand how to present their learning outcomes to other participants. In addition, during offline activities, participants meet face-to-face as usual and continue or deepen the material in offline learning.

##### c. Flex Model

The Flex model is a training program where most of the learning programs are conducted online but they are still conducted in schools. Students can access all topics online, either individually or in groups, allowing for flexibility in learning while the teacher remotely monitors students to work on difficult-to-understand material. Teachers as moderators in discussion groups, project work, consultations, project work, and individual and group lessons This is to enable teachers to help students with learning difficulties or problems in relation to the results of monitoring online learning activities that have been carried out. In the

flex model, opportunities are also available for students to discuss directly online if they encounter problems. The key concept of the flexible model is that students are supported by the flexible learning model, but there is still interaction between students and teachers during learning activities. Students can learn independently, which then learns to develop and discover new concepts in the environment and digital era, while the teacher has the role of giving instructions to the students.

#### d. Online Lab Model

Online lab is a training program that adapts to a school's electronic school state on a specific subject. The classroom rules are equipped with computer devices while other classrooms act as other learning modalities. This training is attended of teachers. Students are free from online courses and can use the traditional or face-to-face learning model. This model is particularly useful for schools with limited resources. Classes are controlled online, but the facilities themselves are set from non-teaching staff in relation to student behavior and attendance. In addition, the course choice is unlimited for the available staff. Therefore, students have access to virtually limitless learning opportunities and staff is limited to those required to oversee the facility.

#### e. Self-blended Model

Self-blended learning is a learning program that combines online and face-to-face learning both in inquiry learning and formal learning objectives. Students independently choose additions to the main educational program while schools and educational institutions act as providers of educational content. Students will connect directly with the teacher and digitally in the process. As learning is self-directed from the role of online learning and the teacher is changing, there are no formal online meetings/learning to complete.

The teacher's challenge in this study is how to assess learning and the success of the learning experience without losing authentication. Meanwhile, the challenge for students is how to find product, process, and potential models that can encourage and motivate students to be consistent in learning. In addition students must understand what can help them success and the reason to make an appropriate adjustments related to not suitable conditions related to not accordance goals or ideal condition. In this case, students who need guidance or have difficulty will get support through a very clear path until the students can carry out their respective learning autonomously.

#### f. Online driver model

Online driver is an online learning program that mostly the learning process is use electronic information as the source in education

environment. The tutors or teachers can upload the learning material on web and students also can download the materials remotely allowing the students learn independently outside from the classroom. This allows students to complete and submit the assignment from a long-distance using computer, tablet or smartphone that already connected with internet connection. The online driver program process about intramural, interviews and examination are required. This model is opposite to face-to face leaning model. Therefore, in online driver model the materials are delivered online and meeting switch educators are mostly conducted online rather than face-to-face. This meeting occurs regularly when students need a discussion based on time agreement with the teacher.

#### The Benefit of Blended Learning

There are some reasons why a blended learning approach can be beneficial and effective in the learning process. According to Smyth et al., (2012) :

##### a. Active Participation in Learning

Blended learning allows students to engage with the program when it suits them. Students typically tend to take an active role in their learning activities in traditional learning, which requires students to come to class. This is because the traditional learning system is teacher-centered without involving the students. Therefore, the blended learning method encourages students to be more active, so the occurrence of student passivity is not often encountered. Students can access their respective learning materials and activities so that students can see their activities as they study.

##### b. Blended learning can encourage students' autonomy in learning.

Flexibility and a sense of autonomy help students plan their own learning. The use of blended learning models can increase their satisfaction and learning outcomes. This is because, in the beginning, students already understand and know how the flow of learning will be adopted based on students' expectations. Thus, students can achieve their learning goals well. In addition, the approach model in blended learning provides autonomy in learning as they are responsible for the time they spend on the program. Students will be more focused, better at achieving, and more disciplined for themselves. This approach helps students be more proactive in problem-solving with learning.

##### c. Students can access and engage in the educational program with a free time commitment.

The blended learning model, which employs a combination of online and face-to-face learning, allows students to learn more flexibly and receive material without being limited in time and location. It's different from traditional learning, where students must attend school. The blended



learning method allows students to learn according to their respective abilities. The blended learning model offers them a unique and flexible learning experience as they can access and engage with their educational program from anywhere and at any time. Participants do not have to be in school to be actively involved in their studies.

#### Definition of Duolingo Application

Duolingo is a free multilingual educational app created by an American educational technology company. The creators of this application are Luis Von Ahn and Severin Hacker. The Duolingo application is designed in a way like playing games, which can be accessed via Android, iOS, or Windows Phone. In its development, so far there have been more than 40 different language courses available around the world, such as Spanish, French, German, Italian, Japanese, Dutch, Indonesian, English, and many more, and they have been accessed by around 500 million users. As one of the most popular applications, Duolingo uses methods such as playing games with the aim of creating an easy, light, and weighty learning experience for its users. This is in line with Freeman et al., (2023) research explaining that the free Duolingo application material is created like a game compared to a text book because playing while learning makes learning easier. and, what's more, it can also target the younger ones, as the app is self-explanatory in mobile technology as well as on other devices.

This language course application contains a number of interesting applications, such as offering features with various topics such as food, drinks, colors, subjects, and so on. Unfortunately, every user cannot go to the next level if they have not completed the previous level. It is a challenge and an overview for the user to complete the Language lessons course. Lessons that are completed will get the points that have been determined, while if the answer is still wrong then the user will be given the opportunity to repeat the language course questions until they are correct it.

#### How to Use Duolingo Application and the Features

First make sure that the user has a good connection to access the internet.

Second, Download the application through the playstore or open from link [https:// duolingo.co.id](https://duolingo.co.id) Third, Register with a Google or Facebook account to maintain the progress. Fourth, Select the application and get started menu at the start screen. Choose the language that the learner want to learn after that there will be menu of daily learning goals. For easiest level (5 minutes a day), normal (10 minutes a day), serious.

#### The Effect of Using Duolingo Application

The effect of using Duolingo is also explained according to Ambara. (2020) there are:

1. Students are more motivated to learn and have a better understanding of the subject.
2. Get the same turn in practicing the material.
3. Reduce learning boredom.
4. Facilitated remembering and practicing daily material and enthusiasm in teaching and learning activities

#### English Skill Concept

English skills is the ability to use one's knowledge effectively and readily in execution or performance. There are four skills that must be mastered in order to learn English:

##### a. Listening

Listening is the first skill and basic ability in learning a new language that beginners have to learn. It is a receptive skill, meaning that language learning beginners receive new words from what they have heard or listened to. The ability to receive will affect the ability to produce. If they are good at listening; as a result, they will understand and even have a good competency in productive skills, namely speaking and writing.

##### b. Speaking

Speaking is the ability to pronounce the articulation of sounds or words for expressing, stating, and delivering thoughts, ideas, and feelings. Speaking is the fundamental skill in oral communication, and it is essential for learning and understanding the language. In genuine communication, speaking is aimed at achieving a particular purpose, like expressing a wish or desire to do something, negotiating or solving a particular problem, maintaining social relationships, friends, etc. Everyday speaking is used by someone to communicate with another person, for instance at home, at school, or in another place. Speaking skills are critical because they are the foundation of oral communication and play an important role in learning and understanding the language; they are also important to an individual's living process and experience. The students' problem in speaking could be improved by using varieties learning media (Ekayanti et al., 2021).

##### c. Reading

Reading is an activity or process in which readers use their sense of combination of some symbols and a large number of letters to form words and sentences, resulting in the creation of a text. Reading is also included in receptive skills alongside listening. Besides that, reading is an activity in which the reader interacts with the written text to get information, ideas, and everything that the writer has shared in the text. Readers transfer those words to their brains and manage those words and symbols so that readers can get new information from a text.

Reading allows people to connect with their feelings and thoughts, learn new things, and improve their scientific knowledge. Reading comprehension is the ability to process a text, understand its meaning, and integrate it with what the reader already knows (Fitriani & Muchtar, 2021)

#### d. Writing

Writing is the process of expressing ideas or thoughts, thoughts or feelings in words in written form. The purpose of writing is important to know the purpose of writing since this will influence a good writing result.

"Writing" is the process of using symbols (letters of the alphabet, punctuation, and spaces) to communicate thoughts and ideas in a readable form. A good writing exercise will influence a good writing result. By knowing the purpose of writing, one can decide the most appropriate style of the language. Therefore, the result will be effective in reaching the purpose. These practices are aimed to stimulate good their skill in expressing thoughts in a good passage. Without sufficient practice, it is impossible to write effectively. They should get sufficient writing practice to acquire good writing ability. These exercises are designed to help them improve their ability to express themselves in a good passage. It is impossible to be able to write effectively without having sufficient practice. Writing was usually rather complicated because we had to understand essay components and how to make a sentence well and correctly, so readers could be interested in our writing (Muchtar, 2021)

### **3. Methodology**

#### Research Design

This research is qualitative descriptive design. In this type of research, the researcher collects, classified, analyzed, and draws conclusion based on the data analysis without making a generalization. Muchtar et al., (2023) states that qualitative research is a study to investigate and understand the meaning individuals or groups assume to be a social or a human problem. It is used to find out and know why and how a social phenomenon happens.

This study is also descriptive qualitative. It is used as an approach to the qualitative study because the result of the analysis is the description of the result of the investigation and to understanding the meaning of individuals or group. In this case, the research is focused on the student's perception about the use of the Duolingo application on English skill students of SMKN 3 Baubau.

### Research Setting and Participants

This research study is conducted at SMKN 3 Baubau in Jalan Sijawangkati. Some facilities at SMK N 3 Baubau support the teaching-learning process. The number of classrooms is enormous. The size of each classroom is medium and adequate, used by 29 students. Each classroom has a wall in front of the class and a whiteboard. This school has an internet connection available for all school participants. The internet connection sometimes is used by the students to find the meaning of difficult words through an online dictionary as they are reluctant to bring a real dictionary.

The participants of this study are 29 students of the class. Based on the observation with the students and teacher conducted in June 2022, the researcher knew that class XI students have some problems learning English motivation. This opinion then will support the result of the observation conducted by the researcher that the students are getting bored with the learning model implemented by the school. This session, indeed, is necessary to help with this research study. The study is conducted for about two month, starting on December 6 2023 until January 31 2023. In this research, the use of Duolingo application is used as a method for the treatment to improve the student's English skills in class XI at SMK N 3 Baubau.

### Research Instruments

The researcher used some instruments to gather the data, i.e., an observation guideline and an interview guideline.

#### a. Observation guidelines

The researcher used the observation guide to gather information about all the things happening in the process of teaching and learning by observing the whole section of the teaching and learning process in the classroom.

#### b. English Test

Besides the instruments above, the researcher also gave students English tests. The test are pre-test and post test. The pre-test is given to students before the treatment, and the post-test is given after the treatment. The pre-test and post-test results then will be compared to determine whether or not the treatment improved the students' English skills.

#### c. Questionnaire

The questionnaire consists of the statements about the students' response toward the use of duolingo application about Students English skill.

#### d. Interview guideline

The interview guide helped the researcher to gather and analyzing the data descriptively related to the result of treatment and questionnaire in learning process that occurred in the classroom by interviewing the students.

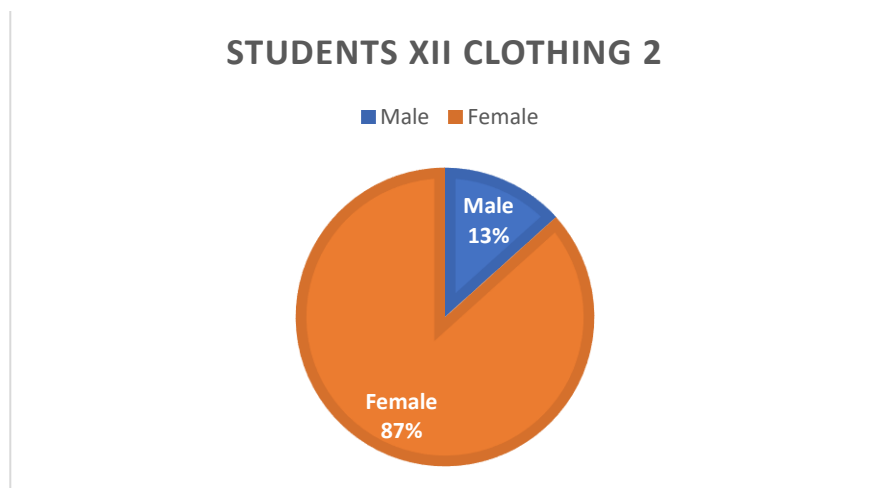
#### Data Analysis Technique

The data are analyzed qualitatively. First the researcher assembles the data that have been collected such as field notes of observation sheet, students' English skill pre-test and posttest, questionnaire and interview transcripts. Then, coding the data, comparing the data, interprets and develops the data that have been obtained. And the last reporting the outcomes, it involves presenting an account of the research such as discussing the questions, describing the context, of the research, outlining the finding, interpret the finding and suggesting the project feedback. The report that researcher means is a kind of the evaluation and conclusion of this research whether the students' English skills are improved.

### 4. Findings

Based on data analysis the researcher answered problem questions related to the question research and from the research on perceptions conducted by students of class XII Clothing 2 SMKN 3 Baubau. From the data the researcher took about 30 respondents, including 4 males and 26 females. The data is showed as follows:

**Figure 1. Percentage of Students XII Clothing 2**



Based on the chart, the researcher analyzed the students' perceptions of class XII Clothing 2 at SMKN 3 Baubau. Therefore the researcher analyze the students perception using Irwanto's theory (2002) that there are two

types of perceptions, namely positive perceptions and negative perceptions.

#### 4.1. Positive Perception

Positive perception is an individual's positive assessment or interpretation of an object. The emergence of this positive interpretation is based on individual satisfaction from the observation results of the knowledge and experience they have to accept and support the object they perceived.

##### 4.1.1. Listening Skill

In this section, researcher explains and analyzes the positive perceptions of listening skills on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows

Data 1:

Informant 10

"Yes, this listening section on Duolingo application helps me to understand the listening skill because it can be accelerated or slowed down what is said by native speaker"

In data 1, informant 10 gives the perception that the duolingo application can help hone listening skill because the duolingo application feature can be set from the volume of the native speaker's speaking speed so that informant 10 can understand the native speaker's conversation in the application.

Data 2:

Informant 21

"If listening is fun because the audio while listening can be written down if it is wrong later repeated again and corrected".

In data 2, informant 21 perceives that the audio in the duolingo application is fun apart from that she hones her listening skills by writing down what the native speaker says after that she corrects one by one and if something is wrong, she can repeat the audio.

Data 3:

Informant 15

"The audio is clearer and easier to understand, for example there are sentences that I don't know so I get new vocabulary from the audio".

From data 3, it is explained that the audio in the Duolingo application is very easy to understand and can find new vocabularies from the native speaker's conversation so that the English Skill experienced by informant 15 can improve drastically.

#### 4.1.2. Speaking Skill

In this section, the researcher analyzes the perception of positive speaking skills on Duolingo application experienced by XII Clothing 2 at SMKN 3 Baubau, The data can be analyzed as follows:

Data 4:

Informant 15

"In speaking there is a written on the screen so we need to speak correctly until we see green sign it means our answer is correct"

In data 4, informant 15 perceives that practiced speaking skill in the Duolingo application is effective because the application can train pronunciation skill correctly and can also provide direction if the spelling done by informant 15 is correct.

Data 5:

Informant 28

"Speaking because I listen and also follow what is spoken by the native speaker"

In data 5, informant 28 said that English Skill that develop quickly are speaking skills because train speaking skills in the Duolingo application can give guidance about the correct pronunciation therefore the informant 28 easily understands the instructions of the application.

Data 6:

Informant 8

"In terms of speaking, knowing more about languages that we don't know yet".

In data 6, informant 8 gave the perception that practicing speaking skills inform the Duolingo application is very helpful because she can learn new vocabulary expressed by native speaker Therefore the new vocabulary is practiced in daily life.

#### 4.1.3. Reading Skill

In this section, researcher explains and analyzes the positive perceptions of reading skill on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows

Data 7:

Informant 12

"Reading skills may be more improved because I often see text, then writing I think is also helps when using the Duolingo application, there is English and Indonesian questions version. Therefore when we are given English questions we can quickly remember the vocabulary that we have

learned before. So it's easy to just arrange the words. Therefore my vocabulary increases”.

Data 7 explains that informant 12's improved English Skill are reading skills, because informant 12 regularly sees reading texts as the text has two versions. There are Indonesian and English versions, he understands the reading and when he is given questions in English, he can remember the vocabulary as he has learned before. Therefore he finds it easy to answer these questions due to the Duolingo application features.

Data 8:

Informant 14

“There are many texts that we are instructed to read and re-write so it helps with my writing skills as well, so it's quite helpful”.

In data 8, informant 14 perceives that in the Duolingo application, there are several texts that are instructed to be read and rewritten from the reading questions therefore she finds it easy to understand the reading material in the Duolingo application. Beside that that writing skills also improve because from the reading results are re-written and get new vocabulary that can improve English skill.

Data 9:

Informant 24

“Because learning with friends is fun and answering the text or questions is challenging”

In data 9, informant 24 stated that the questions from the Duolingo application are interesting and challenging to solve and to understand the reading material presented in the Duolingo application, it is necessary to collaborate with classmates to discuss and comprehend the reading materials presented from the application in order to answer the questions easily and train the mind's ability to criticize the reading material in the Duolingo application.

#### 4.1.4. Writing Skill

In this section, researcher explains and analyzes the positive perceptions of reading skill on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows:

Data 10:

Informant 15

"When writing, it's like being instructed to write about what does it means, and instructed to rewrite the answer until the answer is correct, and if it is not correct, you have to repeat it again until you get it right. So it's like a challenge".



In data 10, informant 15 perceives that in writing skills it can improve a person's thinking ability to answer questions from the Duolingo application until the answer is correct, if the answer is not correct then the next question will not change and this becomes a challenge for informant 15. If she can complete the challenge she feels that the Duolingo application is very fun to use because in the application there are puzzles in English that must be solved.

Data 11:

Informant 16

"Ehm about skills like yesterday there was an English question on the screen like the word "shirt" because I already know some vocabulary so I can understand the meaning but other things like writing skills questions there are words that are missing a few letters sometimes I write them incorrectly. Therefore Duolingo helps me write correctly because when I read the question I just have to adjust it".

From Data 11 informant 16 gives the perception that writing skill in English from Duolingo application is very helpful because the application teaches how to arrange sentences correctly and translate sentences both in English to Indonesian and from English to Indonesian. Therefore, informant 16 can arrange the words, phrasing the word and sentences. In addition, the Duolingo application teaches to know synonyms and paraphrasing the English sentences, to enrich English vocabularies.

Data 12:

Informant 25

"Yes, it is easier because the writing is clearer."

In data 12, informant 12 argues that English Skill are very useful in improving these skills because the directions of the Duolingo application are very clear and easy to understand therefore the informant 25 becomes addicted to learning English in the application. Apart from that, the application provides various games that can improve English Skill so that the concept of the Duolingo application is learning and playing game.

#### 4.2. Negative Perception

Negative perception is a person's negative judgment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience from observing the object. In this case, when the individual is faced with the object, he will reject or deny the perceived.

##### 4.2.1. Listening Skill

In this section, researcher explains and analyzes the negative perceptions of listening skill on the Duolingo application experienced by

XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows:

Data 13:

Informant 4

“I think the problem is about writing and listening skills because I can't distinguish different words with the similar pronunciation”.

In Data 13 the informant 4 said that the difficult skill to improve in English is listening skills, because informant 4 found the same sound but with different meanings, for example the words Flower and Flour. Both words have similar sounds but have different meanings so that Informant 4 has difficulty detecting and understanding the word.

Data 14:

Informant 26

“Yes, the application is easy to use and I can learn while playing. The problem is that sometimes there are some pronunciations that are not clear and difficult for me to understand.”

Data 14 explains the perception experienced from the Informant 26, she said that listening skills is one of the difficult skills to understand in the Duolingo application, it is not about playing but there are some words which the pronunciation is difficult to understand from the speakers.

#### 4.2.2. Speaking Skill

In this section, researcher explains and analyzes the negative perceptions of speaking skill on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows:

Data 15:

Informant 1

"The difficulty is in terms of speaking is sometimes we have to pronounce the answer clearly but the application sometimes responds the answer is unclearly so my answer is perceived as wrong. Therefore, speak about the answer must be very clear."

In data 15, there is a perception expressed by informant 1 that speaking skills in the Duolingo application is difficult because as informant 1 speaks sometimes the system responds in the Duolingo application is not appropriate or unclear and also Informant 1's pronunciation is considered wrong Therefore she feels bored and does not match with the Duolingo application.

Data 16:

Informant 12

"In using the duolingo application, I have difficulty in answering speaking skill questions because there are some vocabularies that are rarely used or difficult for me to pronounce."

In data 16, informant 12 felt that improving speaking skills from the Duolingo application is difficult because informant 12 find some new vocabularies that is more difficult to pronounce. In addition, informant 12 felt confused with the features in the Duolingo application that he think it is difficult to practice his English skills.

#### 4.2.3. Reading Skill

In this section, researcher explains and analyzes the negative perceptions of reading skill on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows:

Data 17:

Informant 3

"The text is just need to read but sometimes it is difficult to understand the reading text on the screen".

In data 17, informant 3 found it difficult to understand the reading text in the Duolingo application because the beginner has the vocabulary same level as the advanced or the reading in the Duolingo application is formal.

#### 4.2.4. Writing Skill

In this section, researcher explains and analyzes the negative perceptions of writing skill on the Duolingo application experienced by XII Clothing 2 Students at SMKN 3 Bau-bau, The data analyzed are as follows:

Data 18:

Informant 19

"The problem is about writing skills, in English, if one letter is not correct, the meaning will also be incorrect, then in the Duolingo application the problem questions is repeated several time so I get bored quickly, just like the features, the animation is less. Therefore it is necessary for the application to add more features to not make us get bored quickly.

In data 18, informant 19 gives the perception that the Duolingo application has limited features so she feels bored. Besides that, the

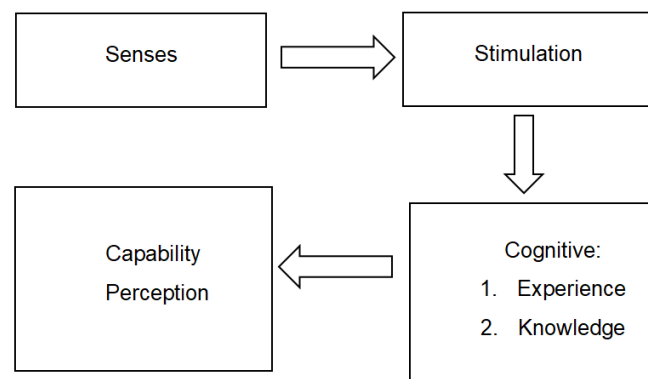
problem from the writing questions section frequently repeats therefore the informant 19 feels bored.

Based on the explanation above, positive perception is an individual's positive assessment or interpretation of an object. The emergence of this positive interpretation is based on individual satisfaction from observations of the knowledge and experience he has to accept and support the object he perceives, while negative perception is a person's negative assessment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience in observing the object. In this case, the researcher developed a conception according to Irwanto (2000) into Capability Perception and Linguistics Perception.

#### 4.3. Capability Perception

Capability perception is the ability to understand or interpret an object based on the cognitive abilities received. In this case, to interpret the perception of an object, the senses are needed as an introduction to the stimulus to be processed cognitively. The cognitive process is divided into two based on knowledge and experience, resulting in capability perception.

**Figure 2. Capability Perception**



Based on figure 2, the researcher developed the concept of perception according to Irwanto (2000), namely positive and negative perceptions. Positive perception describes all knowledge and responses that align with the object of perception, which is continued with efforts to use it. In contrast, negative perception describes all knowledge but does not feel dissatisfied with something. From Irwanto's concept of perception, the researcher analyzes perceptions from data evidence that has been collected from students' perceptions of the Duolingo application so that it is formed into a capability perception. The data evidence can be analyzed as follows:

Data 20:

#### Informant 7

“Reading skills may be more improved because I often see text, then writing I think is also helps when using the Duolingo application, there is English and Indonesian questions version. Therefore when we are given English questions we can quickly remember the vocabulary that we have learned before. So it's easy to just arrange the words. Therefore my vocabulary increases”.

Based on data 20, informant 7 explained that he often works on reading and grammar text questions when using the Duolingo application available in the English- Indonesian and Indonesian-English versions. From the knowledge gained from this habit, the perception arises that informant 7's ability in terms of reading can understand the instructions in the Duolingo media so that he can hone his reading skills, so this process is referred to as Capability Perception.

Data 21:

#### Informant 4

“I think the problem is about writing and listening skills because I can't distinguish different words with the similar pronunciation”.

Based on the data of 21, informant 4 used the Duolingo application when working on listening and writing questions. He had difficulty detecting and understanding each similar word sound from the application. Therefore, from the stimulus captured in listening and the knowledge and experience gained, informant 7 has a less-than-maximum ability to understand spoken sentences. This is called capability perception because informant 4 has insufficient knowledge to solve the problem properly.

#### 4.4. Linguistics Perception

Linguistic perception is the result of understanding that arises from the ability to recognize or analyze words, phrases, or language units that play a role for a person in remembering and describing understanding based on the speaker's instructions. The data evidence can be analyzed as follows:

Data 22:

#### Informant 8

“There are many texts that we are instructed to read and re-write so it helps with my writing skills as well, so it's quite helpful”.

Based on data 22, it is explained that informant 8 responded to using the Duolingo application by practicing working on several reading and writing texts. From the questions in analyzing words or sentences of written, sign, and spoken language, informant 8 felt that his reading and writing skills had improved, and he gained new vocabulary to improve

his English skills. This can be concluded as linguistic perception because the results of informant 14's ability were obtained from understanding the instructions in working on English questions.

Data 23:

Informant 10

"Yes, this listening section on Duolingo application helps me to understand the listening skill because it can be accelerated or slowed down what is said by native speaker"

Based on data 23, informant 10's response in using the Duolingo application helps hone listening skills when the native speaker speaks by adjusting the audio speed so that what the native speaker says can be understood more clearly by informant 10. so it can be concluded that informant 10 can analyze and recognize spoken language even with a regulated audio speed called linguistic perception.

## 5. Discussion

In this section, the researcher explains the results of using the Duolingo application and its effects on students' English Skill. This study aims to see students' perceptions of the use of the Duolingo application on students' English Skill, the implementation of the Duolingo application in developing students' English Skill, and the effects of using the application on students' English Skill. The Duolingo application is the number 1 free multilingual learning application consisting of approximately 40 language courses, including English. In this case, the Duolingo application aims to create a learning experience to hone English Skill, easy and flexible for its users.

Based on the study results, it is explained that students' perceptions of the Duolingo application, researchers use Wuryanto's theory (2002) regarding positive and negative perceptions.

Positive perception is an individual's positive assessment or interpretation of an object. This positive interpretation arises based on individual satisfaction from observations of the knowledge and experience he has to accept and support the object he perceives. Meanwhile, negative perception is a negative perception is a person's negative assessment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience in observing the object. In this case, when the individual is faced with the object, he will reject or deny what is perceived. Then its relation to the research results on positive perceptions can be described in Data 1 informant 10, who said

"Yes, this listening section on Duolingo application helps me to understand the listening skill because it can be accelerated or slowed

down what is said by native speaker". Atau pada data 7 informan 12 "Reading skills may be more improved because I often see text, then writing I think is also helps when using the Duolingo application, there is English and Indonesian questions version. Therefore when we are given English questions we can quickly remember the vocabulary that we have learned before. So it's easy to just arrange the words. Therefore my vocabulary increases".

Based on the data above, it is an example of a positive perception because the statements above describe all the knowledge and responses of informants who align with the object of perception, which continues with their efforts to use the application used. This is in line with Sinelnikov et al., (2015) claims perception is conducted to advance the state of knowledge and practice on the topic of using leading indicators to measure people's ability. Therefore, not all individuals have the same perception because they have different processes, so the ability to capture objects is different. Iyamuremye et al., (2022) also added that Experience is a significant predictor of perceived usefulness, which shows that increased Experience can increase perceived usefulness. This shows that positive perceptions will arise when Experience provides improvement, benefits, and motivation, towards an object. Next, the negative perception provides an overview of the data 13 Informant 4 "I think the problem is about writing and listening skills because I can't distinguish different words with the similar pronunciation" or in the data 15 Informant 1 "The difficulty is in terms of speaking is sometimes we have to pronounce the answer clearly but the application sometimes responds the answer is unclearly so my answer is perceived as wrong. Therefore, speak about the answer must be very clear."

The statement above gives a negative perception based on dissatisfaction, knowledge, and individual experience in observing the object. In this case, when individuals are faced with using the Duolingo application, they reject or deny the use or are dissatisfied with something. This is in line with Amedi et al., (2005), the magnitude of the effect during visual perception may be smaller. This means that what he sees may only be understood after a while when confronted with a new object. This is because the person has never seen the object shown or has not had experience with the object he is facing. So that negative perceptions will arise as a rejection of the object. This is added by Sonmezer et al., (2022). Negative attitudes and perceptions are a weakness of knowledge and an increase in doubt. A lack of understanding based on knowledge and experience makes a person dissatisfied with the perceived object.

Based on the results of the analysis of the perception of the use of the Duolingo application on students' English Skill, namely positive perceptions and negative perceptions. Researchers then developed

Irwanto's theory (2002) from positive perceptions and negative perceptions into Capability and Linguistics.

Capability perception is based on the ability of students to understand or interpret an object through the senses and then processed based on cognitive abilities, namely knowledge and experience, so as to produce capability perception.

Next, provide an overview of capability perception in data 20 Informant 7 "Reading skills may be more improved because I often see text, then writing I think is also helps when using the Duolingo application, there is English and Indonesian questions version. Therefore when we are given English questions we can quickly remember the vocabulary that we have learned before. So it's easy to just arrange the words. Therefore my vocabulary increases" or from the data 21 Informant 4 on the phrase "I think the problem is about writing and listening skills because I can't distinguish different words with the similar pronunciation". In this case, it is described as capability perception. Producing capability perception involves the senses of sight and hearing to capture objects visually and audibly, which are then cognitively processed based on knowledge or experience. This is in line with the research of Loomis et al., (2012) although there is great potential for sensory substitution; there are obstacles that come from perceptual and cognitive processing. In the process of perception, the senses take the most important role in capturing objects before going through a cognitive process. Then the perception is associated based on the knowledge and experience that a person has previously experienced. So that a person's perceptual ability is said to be maximized or not, it all depends on the knowledge and experience that has been passed. This is added according to research. Trani et al., (2011) deliberate practice will lead to neural changes that support new abilities. This shows that the senses are the main requirement to then substitute objects with knowledge and experience in perceiving new abilities. Furthermore, Cornsweet (2012) states that visual data derived from scenes in the outside world implicitly contain information about the physical structure and events contained in the scene and some of its properties. From this research, it indirectly explains that the senses are the first part in capturing objects before being processed through the cognitive stage.

Furthermore, Linguistic perception is formed on students' ability to recognize or analyse words, phrases or language units that play a role in remembering or describing understanding based on speakers' instructions. For example in data 22 Informant 8 "There are many texts that we are instructed to read and re-write so it helps with my writing skills as well, so it's quite helpful" in the data 23 Informant 10 such as

"Yes, this listening section on Duolingo application helps me to understand the listening skill because it can be accelerated or slowed down what is said by native speaker". The response is given based on



the use of the Duolingo application concerning working on questions about English Skill in the form of analyzing words or sentences of writing, sign, or spoken language obtained through understanding in working on instructions for English questions. In this case, it is supported by research by Lupyan et al., (2020) that experience with language affects language perception. One of the things that shape perception is experience, and one of these experiences includes experience in knowing language. In other words, through language experience, a person represents the concepts contained in his mind as a reference through grammatical and semantic categories.

## 6. Conclusion

The results of research analyzing perceptions using Irwanto's theory (2002) show that there are two types of perceptions about using Duolingo applications on students' English skills, namely positive and negative perceptions. Positive perception is an individual's positive assessment or interpretation of an object. Based on the results of the review of the findings, this positive interpretation arises based on individual satisfaction from observations of the knowledge and experience they have to accept and support the object they perceive. In contrast, negative perception is a person's negative assessment or interpretation of an object. The emergence of this negative interpretation is based on individual dissatisfaction, knowledge, and experience in observing the object. In this case, when the individual is faced with the object, he will reject or deny what is perceived.

Furthermore, the researcher developed a conception according to Positive Perception, which is a perception that describes all knowledge and responses that are in line with the object of perception, which is continued with efforts to utilize it. In contrast, negative perception describes all knowledge but does not feel dissatisfied with something. From Irwanto's concept of perception, the researcher analyzes the perception of the data evidence that has been collected from students' perceptions of the Duolingo application so that it is formed into capability perception and Linguistics Perception.

Capability perception understands or interpreting an object based on the cognitive abilities received. In this case, to interpret the perception of an object, the senses are needed to introduce the stimulus to be processed cognitively. The cognitive process is divided into two, namely based on knowledge and experience, which then results in capability perception, while Linguistic perception is the result of understanding that arises from the ability to recognize or analyze words, phrases or language units that play a role for a person in remembering and describing understanding based on speaker instructions. Linguistic perception is developed based on George Yule theory that language

components consist of 3 kinds, namely written language, spoken language and sign language. So that in practice in analyzing language skills, it is necessary to adjust the capability perception and language components to be analyzed according to the speaker's instructions.

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