



## Analysis of Wetland Sign Language Ability in Students with Hearing Impairments

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### ABSTRACT

South Kalimantan is an area that has wetlands which support student learning. The wetland ecosystem is an environment close to students' daily lives in Kalimantan South. Students with hearing impairments experience problems in language development, both receptive language (understanding spoken language) and expressive language (expressing verbally and verbally). This condition affects the ability of students with hearing impairments to acquire, understand, and use language. Regarding language acquisition, students with disabilities are not taught meaningful words but learn to connect experiences and language symbols obtained through various things they see. Therefore, this study aimed to describe wetland sign vocabulary abilities for students with hearing impairments. The research method used is a descriptive research method with a qualitative approach. The subjects in this research were 19 students with hearing impairments. The research location is at SLB Negeri 2 Martapura. Data collection techniques include questionnaires, observation, and interviews. The study results showed that students with hearing impairments still lacked a vocabulary of wetland signs for animals, fruit, plants, and land.

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## 1. INTRODUCTION

Humans are social creatures that cannot live alone because they need other people. As social creatures, humans are required to have various skills, one of which is verbal or non-verbal. Language as a communication tool helps humans communicate, socialize with their environment, interact, study, and do other language-related activities (Abidin, 2022; Fauziah et al., 2022).

Utomo et al. (2023) explained that hearing is difficult, causing problems in language development, both receptive language (understanding language verbally) and expressive language (expressing verbally and verbally). This condition affects the ability of students with hearing impairments to acquire, understand, and use language. In the aspect of language acquisition, students with The obstacle are not being taught about meaningful words but learning to make connections between experiences and language symbols obtained through various things seen (Dini, 2021; Rosalianisa et al., 2023). After that, students with hearing impairments will begin to understand the relationships between language symbols and objects or events that occur and receptive language will be formed.

Hearing impairments affect special developmental needs and communication skills that depend on writing and sign language (Hall et al., 2019; Setyawan et al., 2017). Learning aspects must prioritize visual orientation over other aspects for students with hearing impairments. This is because the visual side of students with hearing impairments plays a role in communication (Nanda, 2022; Sulistyawati & Kurnia, 2018). Developing communication skills of students with hearing impairments must be carried out as early as possible in order to obtain effective results (Fernández-Gavira et al., 2021; Lemido, 2018; Rusmini & Khoeriah, 2020).

Vocabulary and vocabulary are essential in language communication with other people. The language ability a person uses is also related to a lot the small amount of vocabulary and vocabulary he has. Someone who does not If you have a sufficient vocabulary, it will not be easy to communicate or talk. The relationship between language skills and vocabulary mastery has a very important role. The more vocabulary a person has, the better their language skills are (Hikmayana, 2013; Nirwanawati et al., 2015; Susilana et al., 2022). Thus, mastery of Good vocabulary can facilitate communication. This is different from what was experienced by deaf children; the existence of obstacles in hearing in deaf children has an impact on language barriers. As a result, deaf children cannot communicate well.

Based on the explanation above, this research was conducted to describe wetland sign vocabulary abilities in students with hearing impairments. This is supported by the statement of Sulistyawati (2018) and Shofa et al. (2016) that other benefits will be obtained through The sign language application to make things easier for students with hearing impairments to learn vocabulary in sign language.

## 2. METHODOLOGY

This research uses a descriptive qualitative approach with percentages obtained from the Collected data and then classified according to a predetermined formulation. Furthermore, qualitative data is described using words or sentence descriptions based on predetermined categories to conclude (Azwar, 2004; Sari & Subrata, 2018). The results or conclusions of this data analysis are made in sentence form. The subjects of this research were students with hearing impairments at SLBN 2 Martapura at the junior and senior high school levels. This research was carried out at SLBN 2 Martapura with a sample of 19 students with hearing impairments at SLBN 2 Martapura at the junior

and senior high school levels. The data collection techniques used in this research are survey, observation, and literature study. Survey techniques are used as instruments for questionnaires. The questionnaire was used to measure students' knowledge of hearing impairments at SLMN 2 Martapura middle and high school levels regarding sign vocabulary related to animals, fruit plants, and land in South Kalimantan. Observations, tests, and field notes are instruments for collecting additional data. Then, the literature study is the instrument used in the form of notes. The data analysis used by the author is a qualitative descriptive technique with percentages. After the required data has been collected, it will be classified according to a predetermined formulation. Then, describe it with descriptive words or sentences according to predetermined categories to conclude. Data analysis conclusions or research results are made in sentence form with the following formula:

$$P = \frac{F}{N} \times 100\%$$

Information:

P = Percentage Number

N = The number of individuals

F = Frequency to searched

The results of the percentage will describe the initial knowledge of students with hearing impairments at SLBN 2 Martapura for middle and high school levels regarding plants, animals, fruit and land typical of South Kalimantan, which can be determined based on the following classification:

76% -100% = Knowing

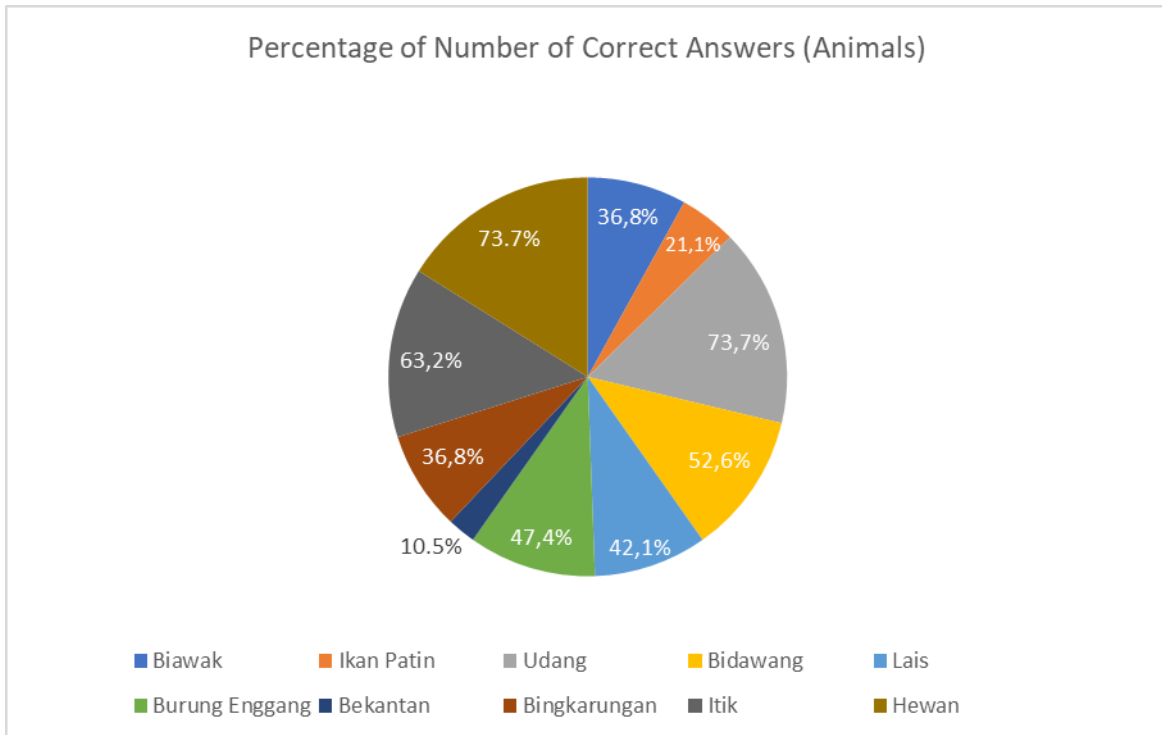
51% - 75% = Fairly Knowing

25% - 20% = Less Knowing

0% - 100% = Don't Know

### 3. RESULT AND DISCUSSION

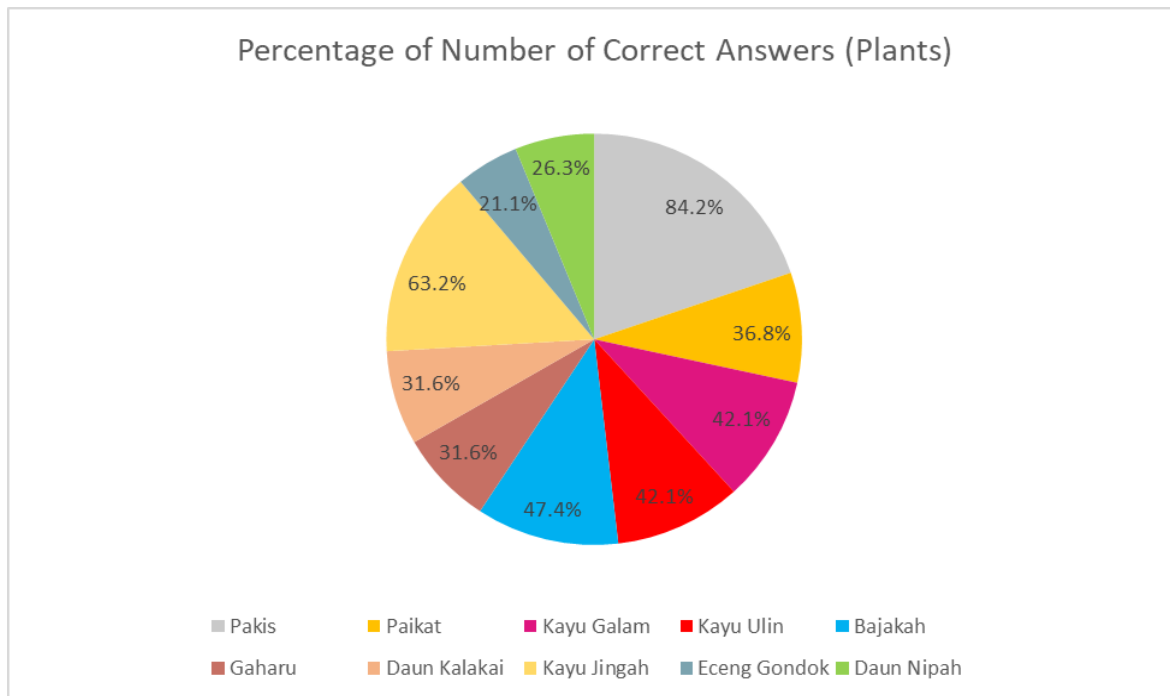
Based on the results of questionnaires carried out by students with hearing impairments at SLBN 2 Martapura at the middle school and high school levels, it is known that the students' initial abilities regarding knowledge of animal sign vocabulary typical of South Kalimantan are as follows:



**Figure 1.** Percentage of Number of Correct Answers (Animals) sign vocabulary typical of South Kalimantan

Based on the results of the research that has been carried out, it can be seen that the sign vocabulary knowledge that is less known by students with hearing impairments at SLBN 2 Martapura at the middle and high school levels is the sign vocabulary of Biawak Lais, Hornbill, and Bingkarungan, where each gets the percentage as follows. following: Monitor lizards (36.6%), Lais (42.1%), Hornbills (47.4%), and Bingkarungan (36.8%). Meanwhile, the vocabulary for animal signs that is well known to students with hearing impairments at SLBN 2 Martapura at the junior and senior high school levels is the vocabulary for shrimp, Bidawang, ducks, and animal signs, where each gets a percentage, namely: Shrimp (73.7%), Bidawang ( 52.6%), and Ducks (63.2%), Animal signals (73.7%). For animal sign vocabulary that is not known to students with hearing impairments at SLBN 2 Martapura at the middle and high school levels is the vocabulary for Patin Fish and Proboscis Monkey, where Patin Fish and Proboscis Monkey get the following percentages: Patin Fish (21.1%), and Proboscis Monkey (10.5%). %).

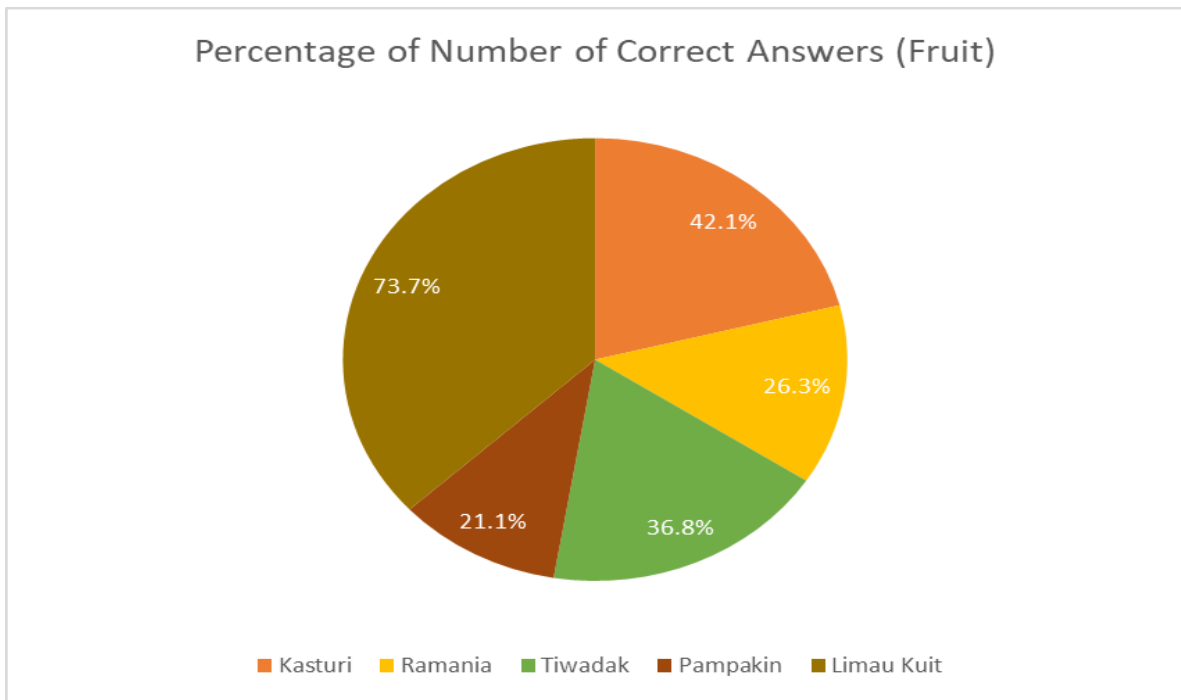
Apart from that, the questionnaire completed by the students also contained sign vocabulary regarding typical plants of South Kalimantan. The results of the questionnaire carried out by students with hearing impairments at SLBN 2 Martapura at the middle school and high school levels show that the student's initial abilities regarding knowledge of the vocabulary of typical plants of South Kalimantan are as follows:



**Figure 2.** Percentage of Number of Correct Answers (Plants) Sign Vocabulary Typical of South Kalimantan

Based on the results of the research that has been carried out, it can be seen that the knowledge of sign vocabulary that is less known by students with hearing impairments at SLBN 2 Martapura at the middle and high school levels regarding plant sign vocabulary is sign vocabulary from the plants Paikat, Galam wood, Kayu Ulin, Bajakah, Gaharu, Daun Kalakai, Daun Nipah, where the respective percentages obtained are as follows: Paikat (36.8%), Kayu Galam (42.1%), kayu Ulin (42.1%), Bajakah (47.4%), Gaharu (31.6%), Daun leaves (31.6%), and Daun Nipah (26.3%). Meanwhile, the unknown sign vocabulary is the Eceng Gondok sign vocabulary, with a percentage of 21.1%. For plant sign vocabulary that students widely know is the pakis plant, with a percentage of 84.2%. Kayu Jingah is a plant that is well known to students, with a percentage of 63.2%.

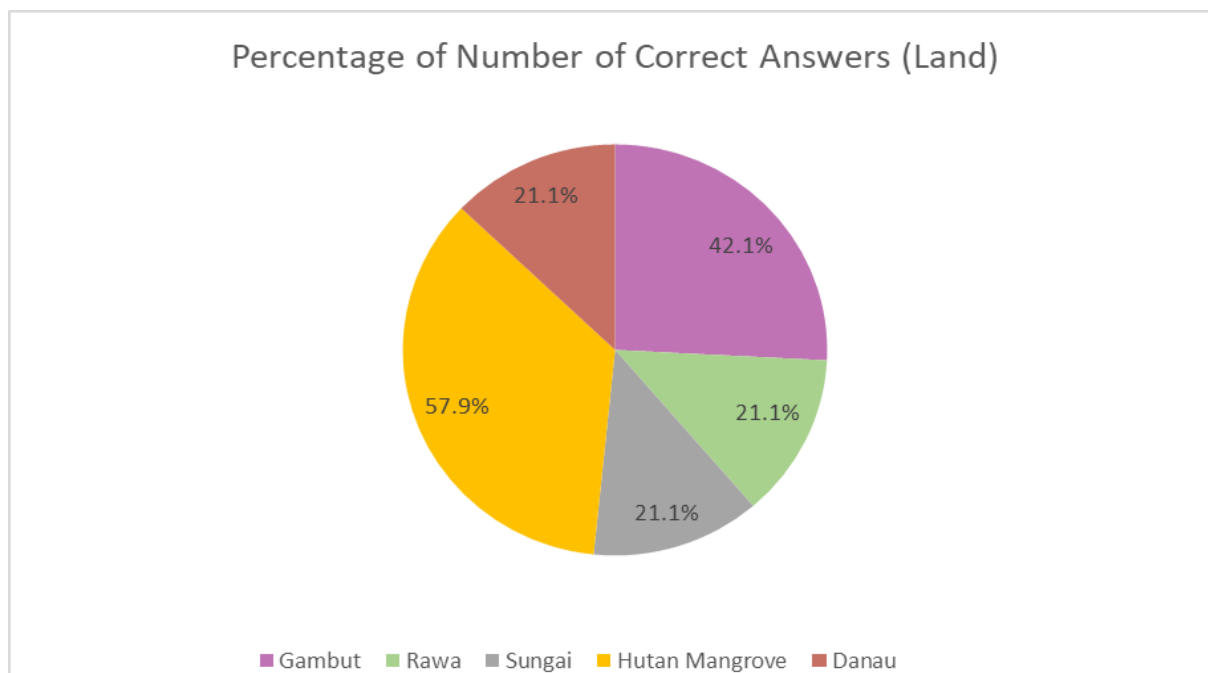
Based on questionnaires completed by students, apart from animals and plants, fruit is also part of measuring the knowledge of students with hearing impairments regarding the typical sign vocabulary of South Kalimantan. The results of the questionnaire carried out by students with hearing impairments at SLBN 2 Martapura at the middle school and high school levels show that the student's initial abilities regarding knowledge of the vocabulary of typical South Kalimantan fruit are as follows:



**Figure 3.** Percentage of Number of Correct Answers (Fruit) Sign Vocabulary Typical of South Kalimantan

Based on the results of the research that has been carried out, it can be seen that the knowledge of sign vocabulary that is less known by students with hearing impairments at SLBN 2 Martapura at the junior and senior high school levels regarding fruit sign vocabulary is Kasturi, Rmania and Tiwadak fruit, with each percentage gain as follows : Kasturi (42.1%), Rmania (26.3%), Tiwadak (36.8%). Apart from that, the fruit that the students did not know was Pampakin fruit with the percentage obtained being 21.1%. Based on several fruits available in the questionnaire questions, only Limau Kuit is well known to students with a percentage of 73.7%.

Apart from animals, plants and fruit, land is also included in the final section to measure the knowledge of students with hearing impairments regarding the typical sign vocabulary of South Kalimantan. The results of the questionnaire carried out by students with hearing impairments at SLBN 2 Martapura at the middle school and high school levels show that the students' initial abilities regarding knowledge of land vocabulary typical of South Kalimantan are as follows:



**Figure 4.** Percentage of Number of Correct Answers (Land) Sign Vocabulary Typical of South Kalimantan

Based on the results of the research that has been carried out, it can be seen that the knowledge of sign vocabulary that is not known by students with hearing impairments at SLBN 2 Martapura at the middle school and high school levels regarding land sign vocabulary is Swamp, river, and lake with each percentage gain being as follows: Rawa (21.1%), Sungai(21.1%) and Danau (21.1%). Meanwhile, the land vocabulary students do not know is the Peat vocabulary, with a percentage gain of 42.1%. Mangrove forests are a typical land category in South Kalimantan that is well known to students, with a percentage of 57.9%. The research results show that the sign vocabulary of students with hearing impairments could be better in terms of the sign vocabulary of animals, plants, fruit, and land. According to [Utomo et al. \(2023\)](#), children with hearing impairments tend to master simple and concrete vocabulary. Meanwhile, in wetland vocabulary, there is a vocabulary for groups of fruit, animals, plants, and land in wetland areas (flora and fauna typical of South Kalimantan) which children with hearing impairments have never encountered, so the vocabulary is abstract for them.

Wuryanti in [Rapisa \(2020\)](#) said that hearing impairment is a condition of an individual who experiences barriers to hearing and verbal language abilities. Therefore, individuals with hearing impairments generally experience difficulty in accessing language sounds because their sense of hearing makes it difficult to access language sounds in their environment ([Nurdina, 2017](#); [Yulia et al., 2023](#)). This condition has an impact on spoken language abilities because the modality for imitating language sound patterns in the environment does not occur, meaning that the hearing ability is not sufficient to access language sound patterns in the environment. Therefore, the language skills barriers experienced by children with hearing impairments give rise to special needs, namely the need to identify how much vocabulary they have and receptive language skills to develop

language and speech skills through various special services and exceptional facilities that suit their needs (Ulfah & Ubaidah, 2023; Utomo et al., 2021).

According to Furt, Gumelar et al. (2018) he added that the cognitive abilities of deaf children do not experience obstacles except for concepts that depend on language experience. Therefore, the existence of sign language cannot be separated from the results of Deaf culture. Sign language is a characteristic of natural interactions between the Deaf and their environment. Sign language is a cultural creation of the Deaf Community (Anggita et al., 2018). Such a work indicates that they can survive. Their way of life is through communication (sign language), behavior, habits, values, history, education, etc. Therefore, BISINDO can be said to be a Deaf identity.

Individuals with severe/very severe/deaf hearing impairments generally have more difficulty accessing language sounds through their sense of hearing and have difficulty producing language sounds (Nurdyansyah & Pujiati, 2023; Setiawati, 2020; Widyastuti & Widiana, 2020). So, it requires other alternative languages that can be used as tools to carry out communication interactions, namely gestures, facial expressions, and sign language. The existence of this condition causes individuals with hearing impairments/deafness to need to learn and have communication media that enable them to interact and communicate with the people around them.

Children with hearing impairments cannot or are less able to speak well (Azizah, 2018; Mirantisa et al., 2021). Talking is not the only way to communicate because talking is one of many ways of communicating; the main problem of children with hearing impairments is not their inability to communicate but the impact of this on the development of their language skills, namely the inability to understand symbols and rules. Language. Several fundamental rights for Deaf people must be fulfilled, namely sign language, bilingualism education, sign language interpreters, and accessibility (Rapisa, 2023)

#### 4. CONCLUSION

Based on the research results, it can be seen that the wetland sign vocabulary skills of students with hearing impairments at SLBN 2 Martapura at the middle and high school levels are still lacking; this is shown as follows: Students with hearing impairments cannot still sign wetland vocabulary about animals, plants, fruit, land. Students with hearing impairments at SLBN 2 Martapura do not need to gain sign-wetland vocabulary. Therefore, based on the results of this research, students with hearing impairments should be taught sign language about wetlands in the South Kalimantan environment so that students with hearing impairments are more familiar with their environment.

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