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Unraveling Learning Difficulties in Biology Among Class VIII Students at SMP Negeri 19 Palu

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ABSTRACT

This research aims to identify the learning difficulties of 8th-grade students in Science (Biology) at SMP Negeri 19 Palu. This type of research is descriptive. The subjects in this research were all students of classes VIII A and VIII B, consisting of 46 students. The data collection technique used was a questionnaire on factors influencing students' learning difficulties. The results of the study showed that the average internal difficulty factor for the "agree" response was 27%, while "disagree" was 73%. For the external difficulty factor, the "agree" response was 31%, while "disagree" was 69%. These results indicate that students' learning difficulties are classified as high in both internal and external factors. Therefore, it can be concluded that both external and internal factors significantly contribute to the high level of learning difficulties in the Science subject at SMP Negeri 19 Palu.

INTRODUCTION

Education is obtained through a series of good learning processes which include interaction between students and teachers by providing learning experiences so as to achieve the nature of learning (Muaziyah et al., 2023). The success or failure of achieving educational goals is highly dependent on the learning process (Nurharini et al., 2024). Learning activities do not always run as they should so that they trigger learning difficulties in students (Djamarah, 2011).

Learning for students should create excitement and interest, but some students do it under duress (Desi et al., 2023). Biology is one of the complex subjects, because it includes all living things (humans, animals, and plants). The discussion of biology can produce knowledge, skills, and attitudes in students through the process, namely, classifying, measuring, observing, using tools, assuming the results of various ways both written, oral, diagrams, interpretation, predicting, and conducting experiments. The character of Biology subjects is a challenge for students and teachers who teach, causing students to experience learning difficulties and obstacles, with inadequate facilities and infrastructure in carrying out the learning process resulting in low student willingness to learn (Sianturi, 2016).

Each student has experiences different difficulties in the learning process. Differences in terms of student learning difficulties include intellectual abilities, physical abilities, family background, learning habits and approaches. From here, learning difficulties arise that not only afflict low-ability students, but are also experienced by high-ability students (Syah, 2011).

Low learning outcomes in Biology subjects indicate the existence of biology learning difficulties. This can be influenced by several factors. Factors that affect learning difficulties can be grouped into two categories, namely internal factors, namely factors from within the student and external factors from outside the student (Dimayanti, 2013).

Internal learning factors, namely attitude towards learning, motivation to learn, concentration on learning, processing learning materials, storing learning outcomes, exploring learning outcomes, ability to achieve or demonstrate learning outcomes, student self-confidence, intelligence and learning success, learning habits, student aspirations (Almagfira et al., 2024). External learning factors are divided into 3, namely teachers as coaches for learning students, learning infrastructure and facilities, assessment policies, students' social environment at school, school curriculum (Nurharini et al., 2024).

The impact of learning difficulties can lead to decreased achievement and low student grades. One of the problems faced by students is the method that tends to be monotonous, namely using the lecture method and rarely using tools such as projectors and other tools for the teaching and learning process in class. In addition, the lack of practicum in the laboratory, and outside the laboratory such as around the school that has a connection with the subject matter.

Based on the results of observations that have been made, it can be obtained that the Biology teacher said that students at SMP Negeri 19 Palu still get scores below the KKM (75) in biology subjects. This shows that there are factors that affect student learning outcomes. The success of a student in learning can be influenced by several factors that are interrelated with each other, namely in the form of a family environment, school environment and community environment. So it is necessary to conduct research on student learning difficulties that have an impact on student learning outcomes, if this is not anticipated it will have a negative impact on improving the quality of education at SMP Negeri 19 Palu. Based on the description above, the researcher tried to examine the causes of learning difficulties included in the title "Learning Difficulties in Biology Science Subjects Class VIII at SMP Negeri 19 Palu".

METHOD

The type of research used in this research is descriptive research. Descriptive research is a form of research that aims to describe phenomena that occur, both natural phenomena and man-made phenomena. These phenomena can be in the form of forms, activities, characteristics, changes, relationships, similarities, and differences between one phenomenon and another (Linarwati, 2016).

The formula for percentage according to Sujidono (2018) is:

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

Where:

P is the percentage of the frequency of respondent answers.

F is the frequency of the respondent's answer.

N is the total number of respondents or sample size.

According to Arikunto (2016). The criteria for the level of student difficulty can be seen in Table 1. These criteria are used to determine the level of difficulty experienced by students, namely:

Table 1. Likert Scale Assessment Weights	
Difficulty Percentage (P) (%)	Criteria
0-20	Very Low Difficulty
21-40	Low Difficulty
41-60	Moderate Difficulty
61-80	High Difficulty
81-100	Very High Difficulty

RESULTS AND DISCUSSIONS

The factors that influence the occurrence of learning difficulties are internal (within the student) and external (outside environment) factors.

Table 2. Data Analysis of The Percentage of Learning Difficulties of Internal Factors

Learning difficulty factors	Question number and indicator	Presentage (%)		Description
		Agree (+)	Disagree (-)	
1.) Physical Factors	1. Health	15	85	Very high
2.) Psychological Factors	2. Intelligence	37	63	High
	3. Motivation	33	67	High
	4. Interest	26	74	High
	5. Talent	27	73	High
	Total	138	362	

Based on Table 2, the average student learning difficulties in internal factors include the criteria for high learning difficulties of students of SMP Negeri 19 Palu.

Table 3. Data Analysis of The Percentage of Learning Difficulties of External Factors

Learning difficulty factors	Question number and indicator	Presentage (%)		Description
		Agree (+)	Disagree (-)	
1. Family Factors	1. The role of parents/guardians in educating.	24	76	High
	2. The relationship between parents/guardians and children (students).	24	76	High
	3. Parent/guardian guidance to the child (student).	33	67	High

Learning difficulty factors	Question number and indicator	Presentage (%)		Description
		Agree (+)	Desagree (-)	
2. School Factors	4. The economic situation of the family.	57	43	Low
	1. Teacher	18	82	Very High
	2. Teacher's learning method	18	82	Very High
	3. Learning environment conditions.	40	60	High
	4.availability of learning tools.	28	72	High
3. Environment Factors	1. Social media and electronic media.	31	69	High
	2. Social environment	37	63	High
Total		310	690	

Based on Table 3, the average student learning difficulties in external factors include the criteria for high learning difficulties of students of SMP Negeri 19 Palu.

Table 4. Average result data of learning difficulties in general

Indicator	Average		Description
	Agree (+)	Disagree (-)	
Internal Factor	28	72	High
External Factor	31	69	High
Amount	58	142	High

Based on Table 4, The average learning difficulties in each factor include high student learning difficulty criteria.

Table 65 Average Result Data of Learning Difficulties in General

Indicator	Average		Description
	Agree (+)	Disagree (-)	
Learning Difficulty	29	71	High

Based on Table 5, the average learning difficulty is generally included in the criteria for high student learning difficulties.

Analysis of Factors Affecting Student Learning Difficulties

Internal and external factors play a crucial role in determining the level of learning difficulties students face. Among internal factors, health is a key aspect that influences learning ability. Poor physical condition, such as weakness, lack of enthusiasm, or difficulty concentrating due to illness, can reduce students' attention to lessons and impair their thinking abilities.

In addition, intelligence also contributes to the learning difficulties experienced by students. Students with relatively low intelligence levels find it harder to understand the lessons being taught. This aligns with Partowisastro's (1986) statement that the difficulties children experience can be reflected in their intelligence levels. Students with low IQs tend to absorb subject matter less effectively.

Motivation is another important factor in the learning process (Mahardika et al., 2024). Highly motivated students tend to be more enthusiastic and persistent compared to those who lack motivation. This factor directly affects academic achievement. Hamdu (2011) stated that motivation encourages students to study harder, be more resilient, persistent, and maintain full concentration during the learning process.

Interest in learning also determines the level of student engagement in teaching and learning activities (Pratama et al., 2024). Students with a high level of interest become more active and find it easier to understand the material presented. Slameto (2015) states that interest is a constant tendency to pay attention to and recall specific influences. Therefore, engaging subject matter is easier for students to grasp.

Furthermore, talent plays a role in students' academic success. Not all students possess talent in every subject, but if a student has a talent in a particular area, they are more likely to enjoy and persist in learning it. This is evident in how students show enthusiasm for a subject and do not easily become discouraged or bored.

Among external factors, the family environment significantly influences students' learning. The relationship between parents and children is crucial for academic development. When parents provide motivation, encouragement, and attention, it helps build a child's mental resilience. Rumbewes et al. (2018) stated that parents must be able to provide motivation to children, as doing so helps them learn better. When children experience discouragement, parents must guide and support them.

School-related factors also significantly impact learning. According to Dimiyati & Mudjiono (2013), the physical condition of the school, such as building structure, classroom layout, and availability of learning tools, influences students' learning experiences. Additionally, teachers play a vital role in creating an engaging learning environment. Ineffective teaching methods can cause students to lose interest in learning. Aisyah et al. (2017) emphasized that poor teaching methods make it difficult for students to grasp lessons, ultimately leading to disinterest in learning.

Lastly, students' social environment, both in school and in the community, can affect their academic performance. If students have friends who are dedicated to learning, it will positively influence them. Conversely, if they associate with peers who lack academic focus, it may negatively impact their learning achievements. Moreover, extracurricular activities and outside-school engagements also affect students' study time. If students prioritize these activities over their academic responsibilities, they may neglect their primary duty—learning.

By understanding these internal and external factors, educators, parents, and students can work together to create a more conducive learning environment. This collaborative effort can help reduce learning difficulties and improve students' academic performance.

CONCLUSION AND SUGGESTION

The results showed that the average internal difficulty factor in the frequency of agreeing with a value of 28% while disagreeing 72% and the external difficulty factor in the frequency of agreeing with a value of 31% while disagreeing 69% which shows the criteria for student learning difficulties including high internal and external factors, so it can be concluded that there are factors that influence high learning difficulties in science subjects at SMP Negeri 19 Palu, namely external and internal factors.

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