

## **Identification of Student Learning Difficulties Based on Self, Environment, and Family Aspects in Learning Mathematics at the Elementary School Level**

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### **ABSTRACT**

Basic education is an important foundation for students' academic and social development. Not all students experience ease in obtaining and processing the information taught at school. Education is also the most important factor for the progress of a nation. Student learning difficulties are not only caused by low cognitive factors but are evidenced by deviant behavior or external factors that they experience, such as family and environmental support factors. Family and environmental support can also play an important role in overcoming learning difficulties for elementary school students. This study used a quantitative research design with a cross-sectional approach. This study uses a descriptive approach design that aims to describe and analyze the phenomenon of learning difficulties of elementary school students. The population of this research is the Suradinaya elementary school. Random sampling technique has been used in this study. The instrument used was a learning difficulties questionnaire as a research measurement tool. Based on the diagram above, it can be seen that aspects of the child's self and family aspects have almost the same average percentage, with values of 66% and 65%. Environmental aspects get a higher average percentage, which is equal to 75%. There needs to be cooperation between schools, families, and the surrounding environment in creating a conducive and effective learning environment for students. In conclusion, student learning difficulties are influenced by various factors, both from aspects of the student's self as well as environmental and family factors. Thus, students will be able to achieve maximum academic achievement and achieve success in the future.

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## **1. INTRODUCTION**

Basic education is an important foundation for students' academic and social development. However, not all students experience ease in obtaining and processing the information taught at school. Education is also the most important factor for the progress of a nation. This goal is in the form of a learning process (Harahap, Dimiyati & Purwanta, 2021). Education will continue to be one of the interesting topics of conversation. It is interesting because in the preamble of the 1945 Constitution it is stated that one of Indonesia's national education goals is to educate the nation's life (Novika Auliyana et al., 2018; Salim Nahdi et al., 2018). Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves and society (Robbin, 2007).

Learning is an act of acquiring a skill and experience gained through interaction with the environment (Putra, 2017). The learning process also does not necessarily experience success, but there are times when there are obstacles or difficulties in the learning process (Ismail, 2016). Student learning difficulties are conditions that are in the learning process which are characterized by obstacles to obtaining the expected results. Learning difficulties are a condition of the learning process which is characterized by the presence of certain obstacles to achieving learning outcomes (Husna, 2021). Learning difficulties are challenges faced by some elementary school students, which can hinder students' progress in learning (Umar & Widodo, 2022). This learning difficulty can be related to various aspects both originating from the students themselves and from outside the student's personality (Yuhana & Aminy, 2019). Learning difficulties are experienced not only by students with low abilities but also by students with high abilities, because they are influenced by several factors that can hinder learning objectives. (Wayan, 2022)

Learning difficulties can also occur in children with substandard abilities, not only in students with low abilities (Muhibbin, 2014). Learning difficulties can also befall students and students who have normal or average academic standards. Because it is caused by certain factors that slow down the achievement of academic performance in accordance with expectations. Student learning difficulties are students' inability to learn (Mulyono, et al. 2012). In elementary school students, the difficulties they face through cognitive abilities such as experiencing obstacles in understanding abstract concepts, limited short-term memory, and difficulties in solving math problems. Students may also have difficulty reading, writing, or mastering language skills, which can hinder their ability to follow along in class. Students usually only rely on concrete understanding that is more related to objects or events that can be seen or touched directly. However, some of the students may have difficulty in maintaining attention and concentration during class. Students may become easily distracted or get bored quickly, hindering students' ability to understand course material and maintain effective interactions with teachers and classmates.

From the explanation above, the significance of the problem is that student learning difficulties are not only caused by low cognitive factors, but also evidenced by deviant behavior or external factors that they experience, such as family and environmental support factors. Family and environmental support can also play an important role in overcoming learning difficulties for elementary school students. The reason is that the family is the most important place for developing abilities such as physical, emotional, spiritual and social instability in the family, lack of parental support, or an environment that is not conducive to learning can exacerbate the difficulties faced by students (Juliati, et al. 2022). Parents can create a positive learning environment at home by providing supporting resources such as books, study materials, and relevant tools. Helping students set a structured study schedule, providing a quiet space for study, and eliminating distractions can help elementary students focus and concentrate better on studying. Families who are actively involved in

children's education and provide emotional support and motivation will strengthen students' self-confidence. Trust really helps students to solve learning problems (Udin, Maufur, & Riyanto, 2022).

Teachers also have an important role in reducing the level of student learning difficulties by paying attention to environmental aspects at school. Teachers can ensure that classrooms are designed to support effective learning. Organize appropriate study groups based on the different learning abilities and attitudes of students in order to help reduce learning difficulties. Teachers can consider diverse group compositions to enable collaboration and mutual support between students who have different strengths and weaknesses. Teachers who teach professionally need school evaluators to provide the best knowledge for students (Hartono, Udin & Riyanto, 2021).

Based on the problems that have been described above, the researcher found a problem based on the facts that the researcher had done during his observations at one of the elementary schools in the Cirebon area. Researchers are interested in conducting research with the title "Identification of Student Learning Difficulties Based on Aspects of Self, Environment, and Family in Learning Mathematics at the Elementary School Level".

## 2. METHOD

This research method uses quantitative research. Quantitative research is a research which focuses on numerical data processed by statistical calculations. (Parnawi, 2019). This study used a quantitative research design with a cross-sectional approach. Cross-sectional is a study that collects data using measurements at the same time and only once (Sugiyono, 2019). The cross-sectional approach provides a description of the characteristics between variables at a given moment without involving continuous observation. This study uses a descriptive approach design which aims to describe and analyze the phenomenon of learning difficulties for elementary school students (Rika, 2021). The population of this research is the Suradinaya elementary school. Random sampling technique has been used in this study. The random sampling technique is a sampling method in which each member of the population is given the same opportunity to be selected as a sample (Kamah., et al. 2018). The instrument used is a learning difficulty questionnaire as a research measurement tool. The results of data collection were coded, categorized, and then analyzed to identify characteristics, and relationships that appeared related to students' learning difficulties.

## 3. RESULTS AND DISCUSSION

Data collection was carried out according to the procedure described in the flowchart. The data that has been collected using the instrument will be calculated using statistical software. Furthermore, data testing is carried out according to the selected method. Data analysis was carried out in detail as follows.

Table 1  
Descriptive Student Learning Difficulties

Statistics	Score
Mean	41,2381
Median	41
Mode	46
Standard Deviation	4,504495
Sample Variance	20,29048
Range	19
Minimum	32
Maximum	51
Count	21

The output results of descriptive statistical calculations show that the mean is 41.2 with maximum and minimum values that are not too different and the numbers are not too significant even though they are still below the KKM standard set by the teacher.

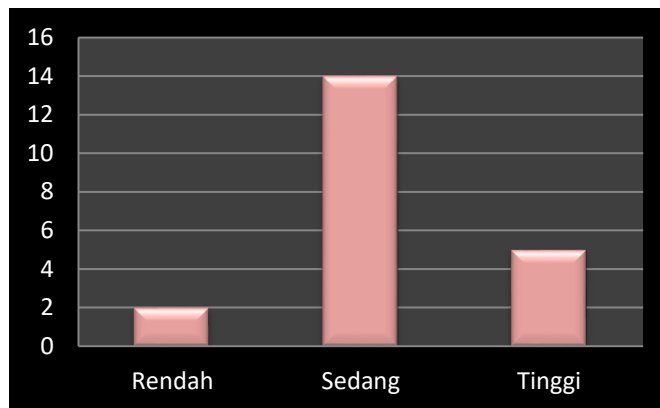


Diagram 1. Categorization of Learning Difficulties

Table 2. Descriptive Aspects of Children's Self

Aspect	Question	Scale				Average
		4	3	2	1	
Aspects of Children's Self	When studying I always memorize the lesson	5	24	71	0	66%
		%	%	%	%	
	I study while listening to music	33	24	14	29	
		%	%	%	%	
	I did the speed system credit system last night when I was going to face the exam	29	57	10	5	
		%	%	%	%	
I feel excited when studying one of the subjects I like	43	38	19	0		
	%	%	%	%		
When I'm having problems I'm lazy to study	5	14	52	29		
	%	%	%	%		

Based on the finding that the average percentage obtained is 66%, it can be interpreted that there is a tendency that students experience learning difficulties in several aspects of themselves. This can be caused by various factors, such as lack of motivation, anxiety, or personal problems experienced by students (Febryliani et al., 2021). In addition, from the diagram of learning difficulties in aspects of children's self, it is found that most students are classified as having learning difficulties. However, there are some students who are classified as low or high, who need to get more attention in learning in order to overcome their learning difficulties.

From the results of the analysis, it was also found that students tend to prefer doing SKS or the Overnight Speeding System when facing exams rather than memorizing while studying (Octavia & Amalia, 2023). This shows that students need to be given more effective and efficient learning strategies in order to optimize their time and effort in learning. In addition, personal learning difficulties can be a supporting factor that influences student learning difficulties (Kurniawan & Liana, 2017). Therefore, there needs to be collaboration between teachers, parents and students to identify personal problems experienced by students and provide appropriate support to help them overcome learning difficulties and improve academic achievement (Primasari & Supena, 2021).

Table 3.  
Environmental Aspect Descriptive

Aspect	Question	Scale				Rata-rata
		4	3	2	1	
Environmental Aspect	I feel comfortable being at school	43%	29%	19%	10%	75%
	The facilities at the school have supported my activities for learning	33%	19%	48%	0%	
	My teacher helps me when I have trouble with lessons	57%	24%	14%	5%	
	I form a study group with my friends to study together	5%	57%	29%	10%	
	Friends I like to invite to play	57%	14%	19%	10%	

Learning difficulties are not only influenced by aspects of the child's self, but are also influenced by environmental factors, such as comfort and completeness of facilities, the teacher's role in helping overcome learning difficulties, school situations, class conditions, and social relations with peers (Diniaty, 2017). Based on the descriptive table above, it can be found that 75% of environmental aspects affect students regarding learning difficulties. The largest scale is obtained from the friendship factor between peers, which can influence students' mindsets and cause them to experience learning difficulties.

In addition, the teacher's role in helping students overcome learning difficulties is also very influential. Teachers can provide appropriate assistance and support, such as providing easy-to-understand learning materials, providing study guidance, and providing motivation to students. In addition, teachers can also create comfortable and conducive learning conditions, such as setting a calm classroom atmosphere, providing adequate learning facilities, and providing appropriate feedback on student achievement. Apart from these factors, school situation factors can also affect student learning difficulties (Salsabila, 2020). For example, an unsafe or uncomfortable school situation can affect students' well-being and affect their concentration in learning. Therefore, the need for attention from the school to create a safe and comfortable situation for students. Learning will feel comfortable for students if the school institution prepares security for students to maintain concentration during learning. In addition, security is an important factor in the implementation of school education.

Table 4. Family Aspect Descriptive.

Aspect	Question	Scale				Average
		4	3	2	1	
Family aspect	My parents asked me about activities at school	43%	10%	48%	0%	65%
	If I have difficulty with homework I ask my parents	43%	29%	14%	14%	
	My father often reads	14%	24%	43%	19%	
	Every day my mother gives pocket money	67%	5%	19%	10%	
	I am late in paying my tuition fee	5%	5%	19%	71%	

The family aspect has an important role in determining the mental and emotional state of students, as well as their mindset and behavior in learning. In the family, it is necessary to have continuous roles so as to produce a conducive and effective family environment for students. Parents can provide support and motivation to children, as well as provide proper direction regarding important goals and values in life (Kamila & Abduh, 2022). Apart from that, parents also need to

pay attention to the health and well-being of their children, such as providing good nutrition and paying attention to their children's sleep patterns. However, there are also several problems that can affect student learning difficulties, such as lack of attention and support from parents, disharmony in the family, or personal problems in the family (Andriyani, 2018). This can affect the mental and emotional state of students, as well as affect their mindset and behavior in learning.

Based on the descriptive table above, it can be found that the family aspect gains an average of 65%, which is almost the same as the student's self or personal aspect. This shows that the role of the family in supporting student success in learning is very important and needs to be taken seriously. Therefore, there is a need for collaboration between families and schools in paying attention to the welfare and development of students as a whole, so as to create a conducive and effective learning environment for students (Haryuni, 2013).

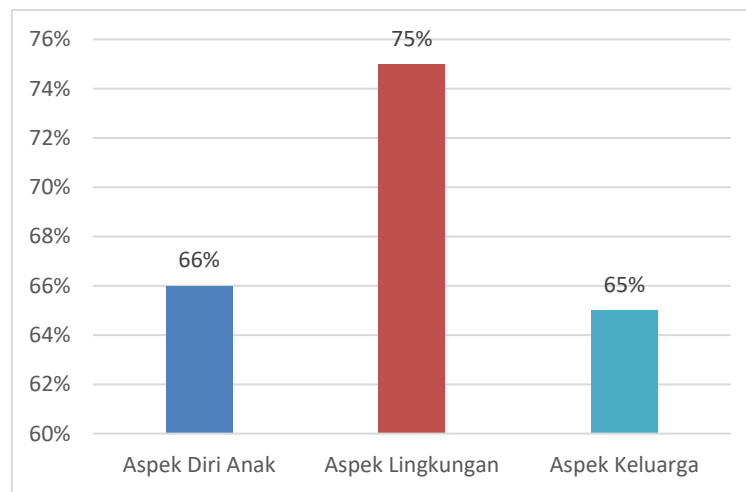


Diagram 1  
Level of learning difficulty based on the aspect being measured

Based on the diagram above, it can be seen that the child's self-aspect and the family's aspect have an average percentage that is almost the same, with a value of 66% and 65% respectively. Aspects of the child's self include factors such as motivation, learning ability, and intelligence, while the family aspect includes factors such as parental support and attention, a conducive family environment, and positive family mindset and behavior. These two aspects have a significant influence on students' learning difficulties, because both are related to the personality and mental state of students. Meanwhile, environmental aspects get a higher average percentage, which is equal to 75%. This shows that environmental factors, such as comfort and completeness of facilities, the teacher's role in helping overcome learning difficulties, school situations, class conditions, and social relations with peers, have a greater influence on student learning difficulties (Widyasari & Widodo, 2022).

Therefore, there needs to be more attention in creating a conducive and effective environment for students. Schools can pay attention to environmental aspects that affect student learning difficulties, such as providing adequate learning facilities, creating a calm and comfortable classroom atmosphere, and providing guidance to students who experience learning difficulties. Parents can also help create a conducive environment at home, such as providing support and attention to children, supporting children's learning activities at home, and guiding children in managing student study time (Harianti, 2016).

#### 4. CONCLUSION

Student learning difficulties are not only caused by low cognitive factors but are evidenced by deviant behavior or external factors that they experience, such as family and environmental support factors. Family and environmental support can also play an important role in overcoming

learning difficulties for elementary school students. This study uses a quantitative research design with a cross-sectional approach. This study uses a descriptive approach design that aims to describe and analyze the phenomenon of learning difficulties of elementary school students. The population of this research is the Suradinaya elementary school. Random sampling technique has been used in this study. The instrument used was a learning difficulties questionnaire as a research measurement tool. Based on the diagram above, it can be seen that aspects of the child's self and family aspects have almost the same average percentage, with scores of 66% and 65% respectively. Meanwhile, environmental aspects get a higher average percentage, which is equal to 75%. Therefore, it is necessary to have cooperation between schools, families and the surrounding environment in creating a conducive and effective learning environment for students. In conclusion, student learning difficulties are influenced by various factors, both from aspects of the student's self as well as environmental and family factors. Thus, students will be able to achieve maximum academic achievement and achieve success in the future.

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