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Factors Caused Difficulty in Learning IPA for Students

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Abstract

This research is motivated by the problems found in class in terms of internal and external factors. Internal factors include that students are not motivated to learn they prefer to play games than repeat lessons, then many students are not interested in learning science. On external factors, namely learning facilities are not yet complete such as the unavailability of school laboratories so that the learning process is less effective. This results in low learning outcomes obtained by students. This study aimed to determine the factors that cause learning difficulties in science for seventh grade students viewed from internal and external factors. This type of research is descriptive qualitative research. All members of the population were used as research samples using total sampling technique. The instrument used in this study was a questionnaire. From the results of the study it can be concluded that the internal factors that most influence student learning difficulties are physical factors in the difficult category, while the external factors that most influence student learning difficulties are community factors in the difficult category, so that the average class of learning difficulties in science learning is included in difficult category.

Keywords*:* external factors; internal factors; learning difficulties

INTRODUCTION

Learning is a process of effort by a person to obtain a new behavior change as a whole, as a result of his own experience in interaction with his environment (Slameto, 2013; De *et al*., 2013; Tawfik *et al*., 2022). According to Amaliyah (2021) learning is a very important activity and learning is one of the determinants of good or bad quality of education. According to Djamaluddin (2019) learning is a process or effort made by each individual to obtain behavioral changes, both in the form of knowledge, skills, attitudes and positive values as an experience from various materials that have been studied. A teaching and learning process in the world of education is not always smooth. Generally, obstacles that occur such as learning difficulties in students. These learning difficulties will have an impact on the decline in academic achievement of students.

According to Kompri (2017) learning difficulties can be interpreted as a condition in the learning process marked by certain obstacles to achieving learning outcomes. Learning difficulties or learning disorders are a group of disorders that make it difficult for children to master certain skills or complete certain tasks, if they learn in a conventional way. Learning difficulties are indicated by the existence of certain obstacles to achieving learning outcomes and can be psychological, sociological, or psychological,so that in the end it can cause learning achievements to be below what they should be (Simbolon, 2022).

According to Slameto (2013) the factors that influence learning are of many kinds, but can be classified into only two groups, namely internal factors and external factors. Internal factors are factors that exist within the individual who is learning, while external factors are factors that exist outside the individual.

SMP Negeri 15 Solok Selatan is a school that was established in 2006 with an Accreditation of C. This school is located in Tanjung Nan IV, Koto Parik Gadang Diateh District, South Solok Regency, West Sumatra Province. The school has 4 classrooms, 1 library, 1 computer room and 1 teacher's office. In this school there is no internet network so that for internet access this school uses wifi but the network is still not smooth and in this school there is no school laboratory so the learning process is less effective. Based on the results of interviews that the author conducted with the science teacher, Mrs. Oliza Yenti, S. Pd and the results of the interview, the teacher said that many students were lazy to repeat lessons at home, as seen from the results of the Semester 1 Final Examination of students in the 2021/2022 academic year. there is only 1 student whose score reaches the minimum completeness criteria, which is 75 out of 29 class VII students. Science learning occurs due to lack of success in understanding the concepts and skills of scientific work (Fuhrmeister, 2020; Kaya *et al*., 2022; Figueiredo *et al*., 2022).

In addition to interviews with teachers, the author also distributed observation questionnaires to class VII students of SMP N 15 Solok Selatan for the 2021/2022 academic year in April 2022. Based on the questionnaires that had been filled out by students, the results were related to the most influential factors causing learning difficulties, namely the attention factor. with a percentage of 38.75% with this difficult category, it proves that there are still many students who are not interested in learning science so that it does not become the center of attention of students when learning science, the interest factor with a percentage of 37.5% in the difficult category, this proves that students not happy with science lessons.

The motivation factor with a percentage of 43.12% in the difficult category, this is influenced because students are not motivated to learn, the learning method factor with a percentage of 48.75% is in the difficult category, this is influenced by students who like to delay time to study or work assignments, mass media factor with a percentage of 43.12% in the difficult category, this is because students use gadgets to play games/social media more than use them to study, and students prefer to watch television rather than repeat lessons. From the problems that the author has explained above, it can be seen that there are many factors that cause difficulties in learning science for class VII students at SMP N 15 Solok Selatan in the 2021/2022 academic year. Based on the problems that have been described above, the author has conducted a study entitled "Factors Caused Science Learning Difficulties for Students of SMP Negeri 15 Solok Selatan.

METHOD

This research was conducted in July of the Odd Semester of the 2022/2023 Academic Year, at SMP N 15 Solok Selatan. This type of research is a type of qualitative descriptive research. In this study, the phenomenon observed or which will be described is the Difficulty of Students of SMP N 15 Solok Selatan in Science Subjects. The population in this study were seventh grade students at SMP N 15 Solok Selatan. The sampling technique in this study is total sampling. The sample taken is 100% of the students at SMP N 15 Solok Selatan. Data collection was carried out directly in the field with a sample of 28 students. The research instrument used was a modified questionnaire (questionnaire) from Setiawan's (2016) questionnaire. The data obtained in this study will be analyzed. To find out the percentage of each questionnaire indicator using the formula proposed by Purwanto (2013).

$$\text{NP} = \frac{R}{SM} \text{ x } 100\%$$

Information: NP is Percentage value sought, Raw is score obtained, and SM is Maximum score

RESULT AND DISCUSSION

Based on the results of research that has been carried out on class VII students of SMP N 15 South Solok in the 2021/2022 academic year, totaling 28 students, by distributing research questionnaires consisting of 71 statements. From the results of data processing, the percentage of learning difficulties for class VII students in science subjects can be seen in table 1 below.

Table 1. **Percentage of Learning Difficulties in Science for Students**

Sub variable	Indicator	Percentage	Criteria	Average
a. Internal Factor				
1) Physical Factor	a) Health	50,44%	Difficult	
Average		**50,44%**	**Difficult**	
	a) Intelligence	51,48%	Difficult	
	b) Attention	62,5%	Quite Difficult	
2) Psychological Factors	c) Interest	52,67%	Difficult	
	d) Talent	57,14%	Difficult	**55,87%**
	e) Motivation	60%	Quite Difficult	**(Difficult)**
	f) Readiness	53,34%	Difficult	
Average		**56,18%**	**Difficult**	
b. External Factors	a) How parents educate	70,08%	Quite Difficult	
	b) Relationship between family members	63,83%	Quite Difficult	
	c) Home atmosphere	68,30%	Quite Difficult	
	d) Family economic situation	61,83%	Quite Difficult	
	e) Cultural background	57,44%	Difficult	
Average		**64,29%**	**Quite Difficult**	**61,84% (Quite Difficult)**
	a) Teaching method	55,35%	Difficult	
	b) Curriculum	58,48%	Difficult	
	c) Teacher student relationship	58,63%	Difficult	
2) School Factor	d) Student relations with student	52,08%	Difficult	
	e) School discipline	55,35%	Difficult	
	f) Learning tools	47,32%	Difficult	
	g)School time	61,60%	Quite Difficult	
	h) State of the building	62,05%	Quite Difficult	
	i) Study method	51,33%	Difficult	
	j) House work	64,58%	Quite Difficult	
Average		**56,67%**	**Difficult**	
	a) Mass media	57,14%	Difficult	
3) Community Factor	b) Friend to hang out with	53,12%	Difficult	
Average		**55,13%**	**Difficult**	
	Overall Average		**58,85%**	

Based on Table 1, the results show that the internal factors consisting of three factors namely physical factors get a percentage of 50.44% with difficult criteria, psychological factors get a percentage of 56.18% with difficult criteria, and fatigue factors get a percentage of 61.01% with quite difficult criteria, so that the average percentage of students' difficulties on internal factors is 55.87% with difficult criteria. While the external factors consisting of family factors get a percentage of 64.29% with quite difficult criteria, school factors get a percentage of 56.67% with difficult criteria, and community factors get a percentage of 55.13% with difficult criteria, so that we get the average percentage of students' difficulties on external factors is 61.84% with quite difficult criteria. So that the overall average learning difficulty results for class VII students in the 2021/2022 academic year seen from internal and external factors is 58.85% with difficult criteria.

Physical factors consist of one indicator, namely health factors. On the health factor, the percentage is 50.44% with difficult criteria. This is influenced by several factors including that there are still some students who don't have breakfast before going to school, for example from 28 students in class VII there are still 17 students who don't eat breakfast, sleep on time, don't do sports, and don't do sports. eat regularly so that they are less enthusiastic and have difficulty concentrating in carrying out science learning. This is in line with Aisyah's (2017) statement that health will affect a person's learning process, if the body condition is not healthy then it will clearly affect concentration when studying, lack of attention, dizziness, so that there is no enthusiasm for learning. Therefore, it is expected for students to be able to maintain their body health by eating regularly, getting enough sleep by avoiding staying up late and exercising regularly so that they are healthy and can concentrate in carrying out learning.

On psychological factors, there are six indicators, namely intelligence, attention, interest, talent, motivation, and readiness of students in learning. In the intelligence indicator, the percentage is 51.48% with difficult criteria. This is influenced by some students having difficulty learning science, they think that science learning is difficult to understand because of the terms in science learning, and students don't get the best value in science learning. Intelligence as the ability to adapt to the environment or learn from experience, humans live and interact in a complex environment, therefore high intelligence is needed in order to adapt to the environment for the sake of survival. According to Rufaidah (2015) intelligence or the ability to accept and solve problems is a factor that moves students so that they succeed or fail in dealing with the environment where they learn.

In the attention indicator, the percentage is 62.5% with quite difficult criteria. This is influenced by several factors including students not happy to learn science, because they think science learning is not interesting to learn, students are lazy to learn science because the delivery of material from the teacher is less interesting and students are not enthusiastic about learning science, because they learn about living things. So that in the learning process many students do not pay attention to what is taught by the teacher. It can be observed that the students are not able to repeat and conclude the learning that has been explained by the teacher. Thus automatically the learning objectives conveyed by the teacher will not be well received by students which will have a negative impact on student learning outcomes. This is in line with Slameto's (2013) statement that in order to guarantee good learning outcomes, students must have attention to the material they are studying, if the subject matter is not a concern of students, then boredom

arises, so that they no longer like to learn. In the interest indicator, the percentage is 52.67% with difficult criteria. This is influenced by the fact that there are still many students who are lazy in learning because they think learning science is a lot of rote learning and they are not enthusiastic about learning because they don't want to study majors related to science. In the learning process, many students do not like the material taught by the teacher. This can be seen from the lack of participation of students in the learning process and tend to be passive in learning. According to Rahmadani (2017) low interest will cause learning difficulties in a person. Therefore, it is necessary for teachers to be able to foster student interest in learning, so that students can continue to be enthusiastic in carrying out learning and improve learning outcomes.

In the talent indicator, the percentage is 57.14% with difficult criteria. This is influenced by students not enthusiastic about learning science because in their learning they often draw about living things and students do not do science assignments correctly and on time. Each student has different talents in each. The talent of students in learning will affect the difficulty of students in understanding the learning material, because if the learning is not in accordance with their talents, students tend to be lazy to learn it. Therefore, it is necessary for teachers to seek appropriate models and methods according to the abilities of students. According to Khairani (2017) a person will easily learn according to their talents. If a child has to learn material other than his talent, he will get bored quickly, easily discouraged, and not calm. In the motivation indicator, it is obtained a percentage of 60% with quite difficult criteria. This is influenced by several factors including students not happy to learn science because of the lack of motivation given by parents and teachers in achieving their learning achievements, parents never give appreciation when students get good test scores, students are lazy to do science assignments because they rarely assessed by the teacher, and students do not follow the science tutoring. Whereas in learning, students really need encouragement or motivation both from themselves and from others. This is in line with the statement of Aunurrahman (2010) that motivation in learning activities is a force that can be a driving force for students to utilize abilities that exist outside of themselves to realize learning goals. According to Apridani (2022) student motivation can be divided into internal motivation (intrinsic) and external motivation (extrinsic). Intrinsic motivation is motivation that is generated within the individual, for example, students learn because they are driven by their own desires. Extrinsic motivation is motivation from outside oneself. Both intrinsic and extrinsic motivation are very influential on the way, style and learning outcomes.

In the readiness indicator, the percentage is 53.34% with difficult criteria. This is influenced by students who do not study the material that will be taught by the teacher, do not mark material that is difficult to ask the teacher during the learning process in class, cannot answer questions from the teacher regarding the material that has been studied, and students do not study at home. when doing daily tests. According to Audihani (2019), readiness to learn is one of the conditions that must be possessed by students. Readiness to learn needs to be considered in the learning process, because the learning process accompanied by readiness will make it easier for students to be able to accept and understand the subject matter presented by the teacher. So that it makes students give positive responses which will affect their learning outcomes. The condition of students who are ready to accept the lessons delivered by the teacher will have a positive impact on students, this learning condition consists of attention, motivation and development of preparation.

Fatigue will also affect students' learning difficulties. This can be seen from the percentage obtained, which is 61.01% with a fairly difficult category. This is influenced by students not enthusiastic about learning science because of the many tasks given by the teacher, the location of students' homes which are far from school, and students who are tired after the flag ceremony so they are not enthusiastic in the learning process. If students experience fatigue, it will cause difficulty concentrating and absorption of the material received is not optimal. According to Ilhanda (2021) fatigue is a condition or state of the body which is characterized by a reduced capacity to perform an activity resulting in reduced

performance efficiency, and is usually accompanied by feelings of fatigue and weakness. So that students can learn well, it is necessary to strive so that the condition of the body is free from fatigue.

In the family factor, there are 5 indicators, namely the way parents educate, relations between family members, home atmosphere, family economic conditions, and cultural background. In the indicator of how parents educate, the percentage is 70.08% with quite difficult criteria. This is influenced by several factors including parents who often fight at home, lack of guidance from parents at home to help students when experiencing difficulties in learning, not paying attention to the learning needs of students, and parents who do not give the spirit to continue to study hard. to students even though the test scores are not good. This is in line with the results of Rusmawan's (2013) research that interest in learning and parental support affect learning motivation. Parents who do not or do not monitor their children's learning development, will result in children not or less successful in learning. In the indicator of relations between family members, the percentage is 63.83% with quite difficult criteria. This is influenced by parents who do not care about the learning outcomes obtained by students, as well as students' siblings who do not help students when experiencing difficulties in learning. Wiani (2018) says that the family environment is very influential in the development of a child's personality because the family environment is the primary environment which has a strong influence on the individual compared to the secondary environment (society). So it takes support or motivation from the family so that students are enthusiastic to learn and get achievements in their studies.

In the home atmosphere indicator, the percentage is 68.30% with quite difficult criteria. This is influenced by several factors including the loud sound of the music playing so that it interferes with students who are studying at home, the location of the house which is close to the crowd, and the students' siblings who often fight at home, resulting in students being less comfortable studying at home. Students have their own way of learning. There are students who can still concentrate on studying when the atmosphere at home is noisy and there are also students who can only concentrate on studying in a calm state. This is in line with Elkarim's (2017) statement that a busy or noisy family atmosphere is likely to make it difficult for children to concentrate. Therefore, it is necessary for parents and families to create a calm and pleasant home atmosphere for students so that students can study well when they are at home, because otherwise students will be lazy to study at home and will seek peace outside. which will certainly interfere with the success of learning.

In the indicator of family economic condition, the percentage is 61.83% with quite difficult criteria. This is influenced by parents who do not facilitate student learning facilities, for example, tables and chairs for studying and students who are busy working to help parents to meet the needs of daily life. According to Fittari (2020) the family's economic situation is closely related to the career planning of students. Students who have a good economic situation can plan their career direction later, in contrast to students who have a low economic situation, they cannot plan their career direction. In the cultural background indicator, the percentage is 57.44% with difficult criteria. This is influenced by parents and siblings of students who do not understand science lessons so that they cannot help students overcome their learning difficulties, and in the family the habit of studying regularly is not instilled every day. This is in line with Slameto's (2013) statement that the level of parental education and habits in the family affect children's attitudes in learning. Therefore it is necessary to instill good habits, in order to encourage children's enthusiasm to learn.

The school factor is very influential for the success of students, because school is a place where students study formally. On the school factor, there are 10 indicators, namely teaching methods, curriculum, teacher-student relations, student-student relations, school discipline, learning tools, school time, building conditions, learning methods, and homework. In the teaching method indicator, the percentage is 55.35% with difficult criteria. This is influenced by the way in which the material from the teacher is not clear, the learning media used by the teacher is less attractive, and the teacher's learning model for teaching is less varied, tends to use the lecture model only so that students are less interested in the lessons delivered by the teacher. According to Ristiyani (2016) the teacher's method plays a very

important role in achieving learning objectives. Therefore, the teaching method chosen must be adapted to school conditions, student conditions and learning needs.

In the curriculum indicators obtained a percentage of 58.48% with difficult criteria. This is influenced by the teacher providing material to students that is not in accordance with the abilities of students so that students feel that science learning is difficult to learn and students are not enthusiastic about learning because they think the material taught by the teacher is not in accordance with the times. The curriculum is defined as a number of activities provided to students. According to Katuuk (2014) teachers have an important role in curriculum implementation. The teacher's role is mainly in making the curriculum as something actual (actual curriculum) in the activities of the learning process. The development of teachers' abilities for curriculum implementation requires a strong and good management that includes competency development, both professional, pedagogic, personality and social competencies.

In the indicator of teacher-student relations, the percentage is 58.63% with difficult criteria. This is influenced by students who are still lazy to learn because they think teachers only pay attention to smart students so they pay less attention to other students and teachers who do not encourage students who get low test scores. According to Inah (2015) learning can be effective in the world of education if communication and relationships between teachers and students occur intensively. Therefore, the relationship between teachers and students is needed in a lesson in order to form an educative relationship about learning materials. In the indicator of the relationship between students and students, a percentage of 52.08% is obtained with difficult criteria. This is influenced by students' classmates who often invite to chat while studying, do not help students when they have difficulty understanding science material and students who rarely study in groups so that they do not create good relationships. According to Slameto (2013) creating good relations between students is necessary, in order to have a positive influence on student learning.

In the school discipline indicator, the percentage is 55.35% with difficult criteria. This is influenced by teachers who do not come to class on time to teach and the library is often opened late. Puspitasari (2014) said that the application of discipline is not only applied to students, but all school members also have an obligation to implement and comply with the rules and regulations that apply at school. This creates a disciplined school environment. In the indicator of learning tools, the percentage is 47.32% with difficult criteria. This is influenced by the absence of laboratory facilities in schools and incomplete books in the library. This is in line with Puspitasari's (2016) statement that learning facilities affect students' learning achievement, the more complete the learning facilities they have, the students can learn better, simplify, accelerate and deepen the independent learning process of students.

In the school time indicator, the percentage is 61.60% with quite difficult criteria. This is influenced by the determination of the science learning schedule by the school, namely during the day. Students are not enthusiastic about learning during the day. Students who carry out learning in the morning will find it easier to receive subject matter than during the day, this is because during the day students tend to be sleepy and will affect the concentration of students. This is in line with Elkarim's opinion (2017) that school time is not right, science lessons learned in the last hour or during the day will affect the concentration of students. In the indicator of the condition of the building, the percentage is 62.05% with quite difficult criteria. This is influenced by the less spacious classrooms where students study, the number of graffiti on the walls of the school classrooms, and the cracked school classroom floors that make students less comfortable when studying. Khairani (2017) said that school walls should be clean, white and not look dirty. If the walls of the school are dirty, students will definitely feel less comfortable in learning.

Each student has their own method or way of learning. In the learning method indicator, the percentage is 51.33% with difficult criteria. This is influenced by students who only study when they are going for daily tests or when they are going for exams, and students do not study regularly at home every

day, resulting in ineffective grades that students get. This is in line with Aisyah's (2017) statement that the right learning method will produce effective student learning outcomes. In the division of learning time, sometimes students learn irregularly, so it is necessary for students to study regularly every day, with good time division, and choosing the right way of learning and getting enough rest will improve learning outcomes. In the homework indicator, the percentage is 64.58% with quite difficult criteria. This is influenced by the assignments given by the teacher not being assessed and not being discussed again at school and the assignments given by the teacher are not in accordance with the material that has been explained so that students are not enthusiastic to do it. According to Sabriani (2012) that by giving structured assignments accompanied by feedback on learning can increase students' motivation and learning outcomes. Therefore, it would be better for a teacher not to impose too many tasks for students, so that students do not feel bored and have time to do other things when at home.

In the community factor, there are two indicators, namely mass media and friends. In the mass media indicator, the percentage is 57.14% with difficult criteria. This is influenced by students who like to watch television which has nothing to do with learning and students who prefer to play games than study. Mass media has a great influence on the lives of students and will interfere with learning achievement if used negatively. Based on the results of Fauziah's research (2013), it shows that online games cause addiction, so that students are lazy to study, have difficulty concentrating, and are less concerned with the environment. On the indicator of friends getting along with a percentage of 53.12% with difficult criteria. This is influenced by students who prefer to play with their friends rather than repeating science lessons at home, as well as students who are not happy in learning science. This is certainly very influential on student learning because if this is allowed to continue over time, students will get used to it and have a bad impact on learning outcomes. According to Lestari (2020) good friends can also have a good influence on one's learning outcomes. So that students can learn well, it is necessary to strive so that students have good friends to hang out with.

From the results of the study, it can be said that the internal factors that most influence students' learning difficulties are in the physical factor with a percentage of 50.5% with difficult criteria, while the external factors that affect students' learning difficulties are in the community factor with a percentage of 55, 13% with difficult Criteria. The suggestion in this article is for a teacher to be able to use varied teaching strategies and models, further improve the quality of his teaching, pay attention and provide motivation to all his students by approaching them. As well as providing additional/study guidance for students outside of class hours (remedial) for students who have learning difficulties.

CONCLUCION

From the results of the study, it can be said that the internal factors that most influence students' learning difficulties are in the physical factor with a percentage of 50.5% with difficult criteria, while the external factors that affect students' learning difficulties are in the community factor with a percentage of 55, 13% with difficult Criteria. The suggestion in this article is for a teacher to be able to use varied teaching strategies and models, further improve the quality of his teaching, pay attention and provide motivation to all his students by approaching them. As well as providing additional/study guidance for students outside of class hours (remedial) for students who have learning difficulties.

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