



Relationship of External Factor Caused Students' Learning Difficulties and Biology Learning Outcome In Class XI IPA MAN 3 Padang City

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Abstract: This study aims to determine the external factors that cause student learning difficulties and their influence on the biology learning outcomes of class XI IPA MAN 3 Padang City students. In general, students have learning difficulties due to several factors. One of the influencing factors is external factors, where external factors consist of family, school and community factors. These factors are very influential on student learning outcomes. This type of research is descriptive with quantitative research methods. The research was conducted at MAN 3 Padang City. The sample is all students of class XI IPA as many as 33 students. The sampling technique is a random sampling technique. Collecting data using research instruments in the form of a valid questionnaire of 3.38. The results showed that the external factors of students' learning difficulties, family factors, were 2.42, schools were 2.39 and community factors were 1.8. The highest external factor of learning difficulties is the family factor. There is a significant relationship external factors of learning difficulties to learning outcomes on the 0.05 t test. It can be concluded that $t_{table} (3,638 > 2,040)$, where H_1 is accepted, H_0 is rejected, meaning that there is a significant relationship between external factors causing learning difficulties and students' biology learning outcomes. So it is expected for teachers and parents to be able to recognize the learning difficulties that students have, so that learning can run smoothly.

INTRODUCTION

In the Law of the Republic of Indonesia No. 20 of 2003 concerning the National Education System in article 1 paragraph 1 states that 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, as well as the skills needed by himself, society, nation and state. Learning is a process activity and is a fundamental element in the implementation of every type and level of education (Syah, 2011). The process of change is in the form of behavioral changes in individuals which include changes in behavior, attitudes and habits, knowledge, skills and so on (Dalyono, 2005).

According to the Ministry of National Education (2006), the purpose of learning is that students get direct experience in both process, mental, and physical. Through interactions between students, students and teachers, the environment and other

learning resources in order to achieve basic competencies. The role of science, especially Biology, for future life is very strategic, especially in preparing future students who are critical, creative, competitive, able to solve problems and dare to make decisions quickly and accurately, so that they are able to survive productively in the midst of the swift wave of competition in the global digital era. full of opportunities and challenges (Sudarisman, 2015).

Biology is part of the Natural Sciences (IPA) which studies about living things and where there is a reciprocal relationship between living things and their environment. In line with that, Nurlatifah (2015) states that biology is one part of natural science that examines life, the surrounding environment, the interaction between life and the surrounding environment and phenomena related to it. The basic principle of learning is to develop the potential of students (cognitive, affective, psychomotor or in the new paradigm known as intellectual, emotional, spiritual and skill intelligence) optimally. Biology learning means to develop the potential of students in the class both their cognitive, affective and psychomotor potential optimally in biology learning (Deswati, 2015). In general, there are two factors that cause students to experience learning difficulties, namely factors that come from within the students themselves (internal) and factors that come from outside of students (external).

Factors that come from within students include interests, motivation, attitudes, and physical and mental health. While factors that come from outside the students include the school environment, family environment and society. Factors from schools include factors originating from teachers, school facilities and infrastructure. Factors from the family environment, for example, the way parents educate their children, the relationship between parents and children, and the family economy. While factors from the community environment include friends to hang out with and activities or busyness in society and the mass media. These factors have an impact on students who have problems or difficulties in learning so that it will cause low student learning outcomes.

THEORETICAL SUPPORT

Learning is a process, an activity and not a result or goal. Learning is not just remembering, but broader than that, namely experiencing. Learning outcomes are not a mastery of the results of the exercise, but a change in behavior (Hamalik, 2019). Learning can also be interpreted as a process marked by a change in a person. Changes as a result of the learning process can be shown in various forms such as changes in knowledge, understanding, attitudes and behavior, abilities, reaction power and distinguishing power.

Maryam (2016), said that learning outcomes can be known after students get learning experiences and experience changes in behavior. In connection with that, the learning outcomes are as a change that occurs in students after experiencing the learning experience. Learning difficulties if not addressed immediately will continue to interfere with students in receiving new knowledge. If learning difficulties are not noticed by educators, it will result in increasing material that cannot be fully understood (Alawiyah, et al. 2016).

Basically, everyone has differences in intellectual, physical abilities, family background, habits and approaches to learning that can affect their ability to receive

lessons, there are people who feel that learning is easy, some are ordinary and some even feel that learning is easy. difficult. We can see this from the value or achievement they get. Students who have difficulty in learning will get less satisfactory grades than other students.

Psychomotor domain is a knowledge process that emphasizes students' motor skills. This is in line with the opinion of Sari (2014) that the psychomotor domain is related to the development of muscle abilities ranging from simple reflex movements to recession and creativity in the appearance of skills. The affective domain emphasizes more on attitudes and values, while the learning process that measures the level of students' ability in mastering the material is the cognitive domain. The purpose of the assessment of the cognitive domain is oriented to simpler intellectual thinking abilities, starting at the level of knowledge to the ability to analyze a problem to get an answer to an idea or ideas through procedures to solve problems (Sari, 2014).

Factors Affecting Learning Factors. The factors that affect learning are of many kinds, but can be classified into two, namely internal and external factors (Slameto, 2015). External factors, including:

1. *Family Factor*

Family education is part of the out-of-school education pathway that is held within the family and which provides religious beliefs, cultural values, moral values, and skills. The family aspect consists of:

a. *How parents educate their children*

The way parents educate their children has a big influence on their children's learning. Parents who do not pay attention to their children's education can cause children to be less successful in learning. Children who have difficulties can be helped with the best learning guidance that is supported by their parents.

b. *Relationships Between Family Members*

For example, parents with their children, or children with siblings or other family members. The form of the relationship, for example, the relationship is full of love and understanding or vice versa which will cause problems for the child which can later interfere with the child's success in learning.

c. *Home Atmosphere*

The atmosphere of the house is meant as situations or events that often occur in the family where the child is and is studying. The atmosphere of the house is also an important factor that is not an intentional factor. To make children learn well, it is necessary to create a calm and peaceful home atmosphere. If the atmosphere at home is calm, a child will feel at home and the child can study well.

d. *Family Economic Situation*

The family's economic situation also greatly affects children's learning. Children who are studying in addition to having their basic needs met, such as food, clothing, health protection and others, also need learning facilities such as study rooms, tables, chairs, lighting, writing utensils, books and others. Learning facilities can only be met if the family has enough money.

e. Understanding Parents

The understanding of parents in the success of children's learning, for example reminding children to study at home and providing understanding and encouragement for enthusiasm in learning.

2. *School Factor*

School factors that affect learning outcomes consist of:

a. Teaching method

The teaching method is a way / path that must be passed in teaching. Poor teaching methods will affect student learning. So that students can learn well, the teaching method is attempted as attractive as possible.

b. Teacher-student relationship

The teaching and learning process occurs between teachers and students. The process is also influenced by the relationships that exist in the process itself. So the way students learn is also influenced by their relationship with the teacher. Teachers who do not interact with students, can cause the teaching and learning process to be less smooth. Also, students feel distant from the teacher, so they are reluctant to actively participate in learning.

c. Discipline

School discipline is closely related to the craft of students going to school and learning. School discipline includes teacher discipline in teaching by implementing rules and regulations.

d. State of the building

The number of students who are many and the characteristics of each vary, they demand that the condition of the building must be adequate in each class.

e. Lesson tools

Strive for good and complete learning tools is necessary so that students can learn and receive lessons well.

3. *Community Factor*

a. Community factors consist of: Forms of community life

The life of the surrounding community can also affect children's learning. This influence can encourage the enthusiasm of children or students to study harder or vice versa.

b. Friends hanging out

So that students can study well, it is strived for students to have good friends and supervision from parents and education must be wise enough. The influences of students' associates enter their souls faster than we think. Good associates will have a good effect on students, and vice versa.

METHOD

This research is a descriptive research with quantitative research methods. This study aims to determine the external factors that cause learning difficulties and their effects on student learning outcomes in class XI IPA MAN 3 Padang City in Biology Subjects. The population of this study were all students of class XI MAN 3 Padang,

totaling 165 students consisting of 5 classes. List of student population for class XI MAN 3 Padang City in the academic year 2021/2022 with the following numbers:

Table 1. List of the population of class XI MAN 3 students in Padang City for the 2021/2022 academic year

No	Class	The number of students
1.	XI IPA 1	30
2.	XI IPA 2	36
3.	XI IPA 3	34
4.	XI IPA 4	35
5.	XI IPA 5	30
	Amount	165

The research procedure carried out in this study was preceded by the Preparatory Stage, namely making observations to request data on Mid Semester Examination Scores (UTS) for all students in class XI IPA as well as the number of student data per class. Then proceed with compiling a grid of questionnaire validation instrument questions by the validator, conducting validation tests and obtaining research permits. In the Research Implementation Phase the researcher asks for free time before/after the teaching and learning process is carried out, then proceeds to explain the aims and objectives and explain the filling instructions. questionnaire, and distributed questionnaires to students and asked students to fill out the questionnaire. then proceed with the Completion Stage. data collection process, data from students were collected in a questionnaire and analyzed, which was then used to draw conclusions after being analyzed with predetermined criteria and ending with compiling a final research report.

Data collection technique. Data collection is done by 3 methods including the following: Observation Observation is a data collection technique. Data collection in This study uses unstructured observation techniques, namely observations that are not prepared stematically about what will be observed. (Sugiyono, 2009;146) interview. Interview is a way of collecting data used to obtain information directly from the source. The interviews used in this study were unstructured interviews, only in the form of outlines of the problems asked (Sugiyono, 2015). The researcher conducted interviews with the biology teacher of class XI IPA MAN Padang City. Questionnaire. According to Sukardi, (2003) a questionnaire (questionnaire) is one of the media to collect data in research. This study uses closed items, researchers in this case provide several alternative answers that are suitable for respondents.

Research Instruments. Questionnaire compiler. The questionnaire in this study is a Likert scale whose preparation goes through several stages: Determining the indicators of the variables regarding student learning difficulties caused by external factors in biology subjects at MAN 3 Padang City. Describe the indicators into items that are closed in nature. Each item item is provided with alternative answers very often, often, sometimes, and never. Each answer is given a value of 4, 3, 2 and 1

Table 2. Description of indicators into question items

Variable	Indicator	Sub Variable	No. Items
Factors that cause learning difficulties	1. Family	How parents educate their children	1-2
		Relationships between family members	3-4
		Home atmosphere	5-6
	2. School	Economic Situation	7-8
		Understanding parents	9-10
		Teaching method	11-12
		Teacher-student relationship	13-14
	3. Public	Discipline State of the building	15-16
		Lesson tools	17-18
		Forms of community life	19-20
		Friends hanging out	21-25
			25-30

Student learning outcome. Data collection was carried out by analyzing the results of learning biology, UTS 1(Odd) scores for the 2021/2022 academic year

RESULT AND DISCUSSION

The results of the analysis of the data obtained were as many as 33 respondents from MAN 3 Padang City students who had more dominant family and school difficulties than community factors, as previously explained that this happened because students in class XI IPA MAN 3 Padang City were due to a lack of attention and direction from other people. parents and teachers, the teacher only gives and explains a lot in learning and in terms of inadequate facilities and infrastructure such as inadequate books and inadequate laboratories and tools, only doing learning with theories alone is not introduced to practicum.

Table 3. The results of the descriptive analysis of learning difficulties

	N	Mean	Mean Score	Category
Family	33	24,2424	2,42	Tall
School	33	23,9394	2,39	Tall
Public	33	18,0000	1,8	Law
Valid N (Listwise)	33			

Based on the results of the study, the authors obtained external factors that caused students' learning difficulties with the learning outcomes of biology students at MAN 3 Padang City. Dominant students have learning difficulties with family factors with a score of 2.42, school factors with a score of 2.39 while community factors with a score of 1.8. Dominant students have learning difficulties due to family factors due to lack of attention and support from the family itself. While the school factor is because students get bored quickly when the teacher explains only using the lecture method. And the

community factor is because the surrounding environment does not provide a place to study together.

Table 4. Correlation Coefficient Test Results

		DIFFICULTY X	RESULTS Y
DIFFICULTY X	Pearson Correlation	1	,547**
	Sig. (2-tailed)		,001
	N	33	33
RESULTS Y	Pearson Correlation	,547**	1
	Sig. (2-tailed)	,001	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

From the table it can be seen that the correlation coefficient of the variable X (learning difficulties) is greater than the r table, namely $0.547 > 0.344$, therefore in this study it can be stated that H_1 is accepted and H_0 is rejected. This means that there is a relationship between external factors that cause student learning difficulties and Biology Study Results for Class XI IPA MAN 3 Padang City with a low correlation coefficient criterion of only 0.547.

The Effect of completion of Learning on Student Learning Outcomes. On the results of the t test, it is useful to see the significance of the influence between variable X (learning difficulties) obtained t count 3.638 with table 2.040 meaning that tcount is greater than ttable ($3.638 > 2.040$) meaning that there is a significant influence between students' learning difficulties and class student biology learning outcomes XI IPA at MAN 3 Padang City. This shows that if students already know the factors of learning difficulties, their learning outcomes will also be high, conversely if students do not know the factors of learning difficulties, their learning outcomes will be low. According to Ibid (2011), once someone has identified their learning difficulties, they can apply the best learning methods that suit learning difficulties to maximize educational achievement. In line with the research conducted by Santo Sianturi is to find out the difficulties experienced by students, to find out the factors of student learning difficulties, and their influence on student learning outcomes. It can be concluded that the difficulties experienced by students in biology lessons which are included in the inhibiting category are shown in intelligence indicators 64.21%, parents indicators 67.89%, home atmosphere indicators 67.46%, teacher indicators 64.33%, school environment indicators 68 .87%, and subject indicators 75.55%.

CONCLUSION

Based on the analysis of data from the results of research on external factors that cause learning difficulties to the learning outcomes of biology students in class XI IPA MAN 3 Padang City which has been carried out, it can be concluded that Factors that cause learning difficulties are family and school factors that score 2.42 and 2.39 with high interpretations, while students' learning difficulties, community factors, score 1.8 with low interpretations. So that the dominant learning difficulty factor owned by class XI IPA MAN 3 Padang City is learning difficulties due to family and community factors. There is a significant relationship between learning difficulties and biology learning

outcomes for students of class XI IPA MAN 3 Padang City. With the results of the t test, the result is $t_{count} 3.638 > t_{table} 2.040$ with a level of influence or contribution of 54.7%. This means that H_1 is accepted, H_0 is rejected.

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