### Students' Perceptions Toward Humans Reproductive System Material (Case Study of Ninth Grade Students at SMP Negeri 1 Paciran)

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#### **Abstract**

Everyone tends to see and judge the same thing in different ways which are interpreted as perceptions. Differences in perception on a subject matter can lead to misunderstandings and not achieving the expected learning objectives. This study aims to determine what factors influence the perceptions of grade IX students at SMP Negeri 1 Paciran on the material of the reproductive system in humans. The research benefits is to help teacher understands students' perceptions so that they can convey materials in more focused manner. Type of research is a qualitative research with a case study approach. The research method is descriptive qualitative. The research data were analyzed as a percentage. The results showed that the perceptions of students at SMP Negeri 1 Paciran towards the reproductive system material were influenced by internal factors, namely personal feelings and prejudices (60%), the value believed (100%), needs and interests (80%). While the external factors are influenced by knowledge (100%) and experience(80%) This study concludes that the perceptions of grade IX students at SMP Negeri 1 Paciran are influenced by internal and external factors. Internal factors are feelings, values, needs, and interests, while external factors are information or experience and knowledge.

Keywords: Perception: Students: Reproduction system: Human

#### 1. Introduction

Students at the junior high school level in the age range 12-15 years are in transition from children to adolescents (early adolescence stage), often referred to as trial and error and storm and stress. The characteristics of early adolescent development are erratic behavior, tend to be emotional, unstable, many problems, the search for idols or figures as role models, unrealistic, and a critical period. Apart from psychological characteristics, adolescence is also marked by biological characteristics, namely the onset of puberty. There is a high curiosity and willingness to try many teenagers to find information related to their puberty period by searching from various sources that have the potential to plunge adolescents into understanding wrong reproduction (Sasanti, 2018).

One of the teaching materials for biology content in grade 9 semester 1 is the reproductive system in humans. According to research results that the increasing sexual interest in adolescents encourages adolescents themselves to always seek information in various forms. Sources of information can be obtained freely from peers, books, films, videos, and even easily opening sites via the internet. (Ikhwan SD, 2009, Azhar & Indah Sukmawati, 2013), Tirtawati & Ayu, 2005

The results of other studies conducted by Halima et al., 2014. mentions that students at the Manahilil Ulum Hidayah Islamic Boarding School Kaballangang in Pingran Regency get information about reproductive health from friends, parents, the environment, and television media. This means that information about the reproductive system and reproductive health is very easily accessible to students from various sources, especially among adolescents who are very curious and have the desire to try everything.

Everyone tends to see the same object in different ways which are interpreted as perceptions. Perception is defined as an opinion, response, and opinion on an event or relationship obtained by concluding information and interpreting messages. Perception can be said as a process of entering messages or information into the human brain which is integrated with individual thoughts, feelings, and experiences. (Yuli, 2013, Akbar, 2015, Arifin et al., 2017).

Based on the writer's experience and observations while being a teacher of Science at SMP Negeri 1 Paciran, there are always interesting responses from students when they receive an explanation of the material on the human reproductive system in class IX. The interesting responses meant were various forms of verbal and nonverbal expressions that were shown by students as long as the teacher explained the material on the human reproductive system that was not found when the teacher explained other material, meaning that there were differences in perceptions of grade IX students at SMP Negeri 1 Paciran towards the material, the reproductive system in humans is influenced by various factors. Differences in perception on a subject matter can lead to misunderstandings and not achieving the expected learning objectives

The factors that influence a person's perception are 1). Internal factors: feelings, attitudes and individual characteristics, prejudice, desires or expectations, attention (focus), learning processes, physical conditions, mental disorders, values and needs as well as interests, and motivation. 2). External factors: family background, information obtained, knowledge and needs of the surroundings, intensity, size, opposites, repetition of motion, new and familiar things, or the unfamiliarity of an object. These factors make

individual perceptions different from one another and will affect the individual in perceiving an object, a stimulus, even though the object is the same. The perception of a person or group can be much different from the perceptions of other people or groups even if the situation is the same. Differences in perceptions can be traced to differences in individual differences, differences in personality, differences in attitudes, or differences in motivation. The process of the formation of this perception occurs within a person, but perception is also influenced by experience, the learning process, and knowledge (Akbar, 2015, Arifin et al., 2017).

Based on the preliminary description, theory, and results of previous research as well as the observation of various kinds of responses during the delivery of reproductive system material, such as students who are very serious about paying attention, some are ordinary, some are laughing giggling, some are smiling shyly, and some are looking down and don't dare to look at them. In the future that the teacher did not find while explaining other material, the researcher felt the need to dig deeper through this research using a case study approach to find a picture of what factors influenced the perceptions of grade IX students at SMP Negeri 1 Paciran towards the material. reproductive system in humans to help teacher understands students' perceptions so that they can convey materials in more focused manner.

#### 2. Research methods

This type of research is qualitative research with a case study approach to provide an in-depth picture of an event or case that occurred at a certain place and time. The research subjects were 5 class IX respondents who were selected using the purposive sampling technique, 5 respondents selected with the initials BBVP, AKA, CAM, AAWS, and ARRP were students who showed different responses (verbal or non-verbal) when receiving material on the reproductive system in humans. The research was conducted at SMP Negeri 1 Paciran, Lamongan Regency in January 2021(Sudjana, 2006, Satori & Komariah, 2009).

The research data were collected using observation techniques and open interviews (semi-structured). The observation technique aims to make observations of an object under study either directly or indirectly to obtain the data needed in the study. Observations are made directly when the teacher provides material in class and during the interview process. Interviews are used to obtain information from research subjects directly through conversations or in-depth questions and answers to obtain holistic and clear informationSatori & Komariah, 2009. The interview was conducted in 2 sessions. In the process of collecting data, aids in the form of mobile phones were used to record interviews and facilitate the process of observation and data analysis. The research data were processed descriptively qualitatively and analyzed as a percentage(Sudjana, 2006, Satori & Komariah, 2009)

The research indicators used to develop the research instrument (semi-structured interviews) are shown in Table 1 below.

Table 1. Indicators for the development of a research interview instrument.

Factor	Indicator	Interview code
Internal	Personal feelings and prejudices	WI1a
	Believed value	WI1b
	Needs and interests	WI1c
External	Knowledge held	WI2a
	experience	WI2b

#### 3. Research Results and Discussion

#### 3.1 Research Results

From the results of semi-structured interviews conducted with 2 research subjects developed based on 3 internal factor indicators (personal feelings and prejudices, believed values, needs, and interests) and 2 external factor indicators (knowledge and experience), the following results were obtained.

In the internal factor, it was found that the students' perceptions were 60% influenced by personal feelings and prejudices, 100% influenced by the values believed and 80% influenced by the needs and interests. The following is an excerpt of the results of the interviews with the five research subjects

Table 2. Excerpt of Interview Result for WI1 (ac)

Subject	Answers to the results of the interview	Factors that influence
P	How do you feel when you receive material from the reproductive system in humans?	Feeling(-) Believed value
WI1BBVP	Alhamdulillah It's normal, ma'am, back at the beginning of elementary school grade 6, I got puberty material, how come it explains the internal organs of men and women, and I feel taboo, but now it's not, it's normal.	(+) Interests (+)
P	Why don't you feel taboo anymore? I still think this is a science, just like the respiratory system. Just like any other lesson	
WIIAKA	Just ordinary ma'am, because I'm not interested, I'm more interested in other subjects, so it's just like normal.	Feelings (-) Believed value
P	Is there a taste of rishi?  Not at all, scientifically explained ma'am. Like a lesson.	(+) Interests (-)
WIICAM	At first, it was normal, then suddenly I was a bit embarrassed ma'am when it was described the male reproductive organs were also when it was explained about menstruation, I don't know how come I suddenly feel embarrassed, I see.  Are you interested in and feel this material is important?	Feelings (+) Believed value (+) Interests (+)
P	Yes ma'am, let us understand and not think dirty when studying or seeing something like this.	
WIIAAWS	Initially, it was normal, ma'am, but after explaining it a little, I became more interested. Because I already know before, so it's	feeling (+) believed value

	like completing my information, ma'am	(+)
P	Does that mean you feel the material of the reproductive system	interests (+)
	is taboo or not?	
	No, ma'am, what I usually see is a sex video that has a	
	relationship with psychology, you see, what is more about the	
	material what do you think like functions, processes, that's	
	how it is, ma'am.	
WI1ARRP	Happy ma'am, I am so happy because the material is about the	Feelings (+)
	reproductive organs, as well as the pictures, so I like it.	Believed value
	Do you feel this material is taboo or not?	(-)
PP	Yes, ma'am.	Interests (+)

External factors with knowledge indicators, from the results of the interview, it was found that 100% perception was influenced by the level of knowledge of the material to be studied. The following are excerpts from interviews with 5 research subjects describing the influence of knowledge on perceptions of students at SMPN 1 Paciran on the material of the reproductive system in humans.

Table 3. Excerpt of the WI2a1 interview results: knowledge indicators "do students think the content in the reproductive system material given is important or useful? Why?"

Subject	Answers to the results of the interview	Influence	of
		indicators	on
		perception	
WI2a1BBVP	So that it's okay to go the wrong way, later it will be used instead of the wrong way, like looking at sexual harassment, to protect oneself.	Influence	ed
WI2a1AKA	What is it ma'am, I never thought that much, what is it for, at least just for knowledge ma'am. But I don't need it, because I'm safe with my friends.	Influence	ed
WI2a1CAM	Important mom, for education, so we know how to take care of our genitals, how do babies exist, like that ma'am	Influence	ed
WI2a1AAWS	Useful ma'am, to add knowledge, balance what I knew before, ma'am. <i>If the practical benefit is for you?</i>	Influence	ed
P	If you don't know at this time, ma'am, but in the future, it might look like it is going to be like that, ma'am, it's also possible to be able to better understand female friends that menstruation is prone to anger, so you can differentiate more when they menstruate and not.		
WI2a1ARRP1	At most, so you know what the shape is like, ma'am	Influence	ed

External factors with experience indicators from the results of interviews affect students' perceptions by 80%. The following is a snippet of interviews with research subjects.

Table 4. Excerpt of WI2b interview results: experience indicators "Have you ever looked for information related to reproductive systems apart from textbooks and class teachers?"

Subject	Answers to the results of the interview	Influence of
		indicators on

		perception
WI2bBBVP	Ever had a book in grade 6 SD from Google because I was curious about something like I was curious, how did Rahim do that, what is that name, ma'am? So stretchy, can accommodate a baby, I was curious so I searched on google.	Ever
WI2bAKA	Never, ma'am, I'm not interested in this material, I'm more interested in other subjects. But in the past I was given a comic book brother but not only about the reproductive system, mixing.	Never
WI2bCAM	Once, from friends' stories about menstruation, what was it like, when I was in 7th grade when I hadn't had my period.	Ever
WI2bAAWS	Never, see video videos on youtube. Just to increase knowledge ma'am.	Ever
P	What is seen about? you know about fetish fetishes. Fetish?	
P	You know, ma'am about sexual disorders, there are people who, God forbid see chairs, tables, just become lust, aroused, see sandals, some are also aroused.	
WI2bARRP	Honestly, yes, I have. See pictures like that, never do videos.  What do you mean by pornographic images?	Ever
P	Yes	

The results of the study of internal and external factors can be illustrated in a bar chart (Fig. 1).

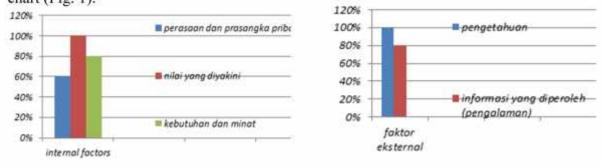


Fig. 1. Bar diagram of the percentage of internal and external factors that affect the perceptions of students of SMP Negeri 1 Paciran on the material of the reproductive system in humans

#### 3.2 Discussion

The results of a study on students at SMP Negeri 1 Paciran related to perceptions of the reproductive system material in humans showed that students' perceptions were influenced by internal and external factors. In table 2, it can be seen that the internal factors that most influence students' perceptions are the believed value, namely 100%, then the needs and interests of 80%, and personal feelings or prejudices by 60%. This data is in line with the results of the study. Arifin et al., 2017about the factors that

influence students' perceptions of the Shari'ah Perda in Serang city, namely that differences in perceptions are influenced by internal factors such as insight and knowledge, assessment (adopted values), and benefits. However, the three indicators that become factors that influence the perceptions of students are interrelated, meaning that the value believed will affect the sense of interest or interest which ultimately impacts feelings and prejudices against a certain object or material.

In data tables 3 and 4 it is known that the external factor that has the greatest influence is knowledge by 100% and experience or information obtained by 80%. This data is also in line with the researchHalima et al., 2014Regarding adolescent perceptions of reproductive health in the boarding school Manahilil Ulum Hidayah, Pinrang Regency, the results show that the students have different perceptions depending on knowledge, benefits, learning resources, and culture (rules in the Islamic Boarding School), the involvement of all parties who can provide experience, correct knowledge that will affect the formation of learners' perceptions. Because junior high school-age adolescents need adult assistance, both teachers and parents in digesting information that is very easily accessible in this all-digital era.

The difference in perceptions due to the influence of internal and external factors is in line with the research of Akbar, 2015 that differences in perceptions are influenced by inequality of absorption or stimuli received lack of understanding, or understanding to determine the assessment or evaluation. Positive perceptions tend to be obtained from good feelings, knowledge, and experiences, while negative perceptions tend to be obtained from poor feelings, knowledge, and experiences, this is in line with the results of interviews with the five research subjects who show different feelings, experiences and knowledge, against the same object or material which is described as follows.

From the research subjects with the BBVP code, they have perceptions that are not influenced by personal feelings, good knowledge, and experiences related to the reproductive system in humans before receiving the subject matter. BBVP has a perception that the reproductive system material is ordinary, no different from other subjects so that BBVP subjects feel there is no special feeling in receiving the material. The feelings and opinions of BBVP are motivated by relevant knowledge, namely that the subject already has an understanding of the benefits and urgency of the material. Relevant knowledge is obtained from the experience of obtaining information from relevant sources such as textbooks and articles on the internet (google).

AKA subjects have perceptions that are influenced by personal feelings, sufficient knowledge and are not supported by experiences related to material reproduction systems in humans in the past. AKA stated that the reproductive system material was only for ordinary humans and stated that they were less interested and more interested in other subject matter, this also had an impact on their knowledge, it appears that the subject never even thought about what benefits could be obtained from studying the material. Subjects seemed to have difficulty answering when asked to express their opinion about the benefits of studying the reproductive system material. Such feelings and knowledge are supported by the subject's minimal experience related to the human reproductive system. From the results of the interview, apart from being less interested in studying.

In CAM research subjects, their perceptions were influenced by personal feelings, knowledge, and experiences. CAM has the perception that the material of the reproductive system is something personal and different from other materials, CAM

expresses feelings of shame when looking at images of human reproductive organs and discussing menstruation, CAM has the relevant knowledge to realize the importance or benefits of this material, but still feels taboo and shame when learning to use pictures. From the experience of the subject, it is known that the subject still has curiosity and tries to find out from friends' stories and also the internet. Because of this perception, the CAM subject feels uncomfortable especially if his friends laugh when there is a term in the reproductive system mentioned by the teacher.

The perception of AAWS subjects is influenced by personal feelings but is supported by good knowledge and experience about the material of the reproductive system in humans in previous times. AAWS has the perception that the material of the reproductive system in humans is very interesting. AAWS has a feeling of great interest because the subject previously had an interest in the human reproductive system although from a different point of view, the subject was more interested in human sexual behavior (sexual psychology) and the subject considered the material given at school to complement what he already knew. The subject's interest is in line with his experience in searching for information on the internet. The subject does not feel the information he is looking for is embarrassing or wrong, all is interpreted as knowledge.

The fifth subject, ARRP has a perception that is formed by the influence of feelings, knowledge, and experience. ARRP has the perception that reproductive system material is fun to study because subjects like to learn things related to the reproductive system. Pleasure ARRP Subjects encouraged subjects to seek such information from various sources, the subject claimed to have experience searching through images on the internet, including having accessed pornographic images. The subject does not understand whether the information he sees is related to the human reproductive system that he learns in school or not. ARRP subjects also admitted that they were happy with the material on the reproductive system in humans because it was accompanied by images.

The existence of differences in perceptions and non-verbal language of each research subject from the data description of the interview results indicated that there were differences in self-concept that impacted their behavioral attitudes. This is also in line with the results of research conducted by Halima et al., 2014, Hairy \* &, Kusmiyati, 2018which states that the difference in perceptions of students will certainly affect the mastery of concepts and attitudes related to the reproductive system in humans, therefore the role of the teacher is important to convey material on human reproductive systems appropriately, with the right method. Research conducted by Fuad et al., 2011 through the application of the CTL learning model was able to improve self-concept and learning outcomes in the reproductive system material.

In addition to an appropriate learning model, the use of relevant media is also important in shaping students' perceptions. From the results of the interview, the selection of media that was considered appropriate by the subject to convey material on the reproductive system in humans was also influenced by their perceptions, those who have positive perceptions will be open to various possible media that can be used, from books, pictures, to videos such as on the subject of AAWS. and ARRP. The urgency of learning media in shaping students' perceptions has been carried out byGusemanto, 2019 using comic as media in reproductive system material, was able to improve students 'mastery of concepts, which of course is expected to have an impact on students' expected self-concepts, perceptions, and attitudes.

### 4. Conclusion

From the results of the study, it was concluded that the perceptions of students at SMP Negeri 1 Paciran towards the reproductive system material were influenced by internal factors, namely 60% influenced by personal feelings and prejudices, 100% influenced by the values believed and 80% influenced by needs and interests. While the external factors are 100% influenced by knowledge and 80% influenced by experience.

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