

Description of student engagement in high school students (case study in man 1 Magelang students)

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Abstract

High student engagement will make students to avoid adolescent delinquency, reduce dropout rates, and play a positive role in student learning achievement, while low student engagement will result in students being less diligent in learning in the classroom, less diligent in doing homework, and have less effort to improve academic performance. So important is student engagement that it needs to be given special attention. The purpose of this study is to obtain preliminary data on the description of student engagement which will then be used to improve student engagement in senior high schools. The subjects of the study were MAN 1 Magelang students totaling 100 students selected using random cluster sampling technique. The findings show that there are 51 students with high engagement level and 49 students with low engagement. In addition, there is a difference in the level of student engagement in the sex of men and women, where women have a higher level of engagement than male students who have a high engagement due to the support of teachers, friends, and assignment characteristics. While students who have an engagement that is because parents do not pay attention to the good development of the child, the teacher is considered favoritism, friendships and engage in behavior that lead to negative side.

Keywords: Student engagement, senior secondary students, Gender, description

Introduction

Schools have a primary function for teaching and learning activities. Learning in schools is important as a means of cultural transformation, creating labor, and being a social control in society (Sujana, 2008). These functions and goals cannot be performed well if students are uncomfortable and bored while at school (Vaughan, 2011). Feeling comfortable will

make students feel happy and also able to create student engagement while learning in school.

Student engagement has the meaning of engagement in school activities (Malindi and Machenjedze, 2012). Student engagement is an engagement to the learning process, both in academic and non-academic activities that can be seen through the behavior, emotions, and cognitive

displayed by students in school or classroom (Fredrick et al., 2004). Student engagement can be characterized by the presence of interest, investment, attention, and effort of students given in the process of learning in school (Dhamaryana et al., 2012).

Student engagement has three underlying components, namely behavior engagement, emotional engagement, and cognitive engagement (Fredrick et al., 2004). Behavioral engagement includes doing work and following rules, Emotional engagement refers to interests, values, and emotions. Students' emotional reactions in the classroom include interest, boredom, happiness, sadness, and anxiety, while cognitive engagement includes motivation, effort, and strategy in learning.

Having a good engagement in school is important for every student. High school students who are notably adolescents have a developmental task to achieve intellectual maturity (Jahja, 2011). Means to achieve such intellectual maturity can be obtained in schools. Therefore, adolescents are expected to be able to have a good engagement so that the development task runs smoothly.

Low engagement will result in students being less diligent in learning in the classroom, less diligent in doing tasks, and have less effort to improve academic performance (Mustika & Kusdiyati, 2015), while high engagement will make students to avoid adolescent delinquency (Jeannefer and Garvin, 2018), reducing dropout rates (Fredrick et al., 2004), and playing a positive role in student learning achievement (Dhamaryana et al., 2012). So important is the student's commitment to learning that it is necessary to get special attention in the world of education.

Data from Education Statistics (2018) states that the dropout rate in Indonesia is 32,127 for elementary students, 51,190 for junior high school, and 104,471 at the senior high school. Based on these data, the level of senior high school students experienced the

most dropout rates so the researchers decided to take the subject of research on senior high school. Such data makes it possible to continue to increase each year if the causative element is not taken seriously. Student engagement is important to note because it can reduce dropout rates (Fredrick et al., 2004).

Based on interviews and observations on five students and one MA State teacher in Magelang, it was found that students are less active in learning in the classroom. Students tend to monotonously respond to learning from teachers. In addition, it is not uncommon for students to neglect their tasks and miss lesson hours. When confirmed to students, they admit to feeling uncomfortable at school, they perceive their teachers to be boring and discriminating against students who are diligent and clever enough to be noticed. Behavioral phenomena such as the above indicate the presence of engagement problems in students in the learning process.

High or low student engagement is influenced by internal and external factors (Fredrick et al., 2004). Internal factors can be supported by meeting the basic psychological needs of the so-called self system model which is then divided into three parts, namely the need of relatedness, need of autonomy, and need of competence. These internal factors are supported by external factors or social contexts such as parents and peers. Such support can be seen from the structure, involvement, and autonomy support (Connel and Wellborn, 1991).

Maximizing student engagement will help in providing a meaningful learning experience among students (Delfino, 2019). Students involved in learning are those who clearly understand the expectations of teachers and they have an engagement to participate in decision making (DeVito, 2016). Based on the above description, the researcher is interested in researching the description of

student engagement in high school students with the aim that the results of this study as preliminary data to improve student engagement in the school.

Materials and methods

This study uses a descriptive statistical study method, by calculating the average value which is then categorized into two categories, namely high and low. High and low categories are obtained from student scores filling the student engagement measurement scale. The scale is based on Fredrick's theory, et al consisting of three components, namely behavior engagement, emotional engagement, and cognitive engagement. Scales are compiled using differential semantic models. The subjects used are MAN 1 Magelang students, a total of 100 students consisting of class XI and XII. Samples were selected using a random sampling cluster technique with a total of 5 classes and then each class was represented by 20-21 students.

Results

The first step that researchers do is to test the validity and reliability of measuring instruments. Testing the validity and reliability of this student engagement component using the confirmatory factor analysis (CFA) approach with the help of software PLS 3.2.9. An item is said to be valid if the value of loading factor > 0.5 and the value of average variance extracted (AVE) > 0.5 (Abdillah & Jogiyanto, 2011), while the expected value of alpha cronbach reliability is > 0.7.

Based on the test of validity and reliability of student engagement variables, the behavior engagement component has a value of AVE 0.582, emotional engagement has a value of AVE 0.514, and cognitive engagement has a value of AVE 0.518 while for reliability test has a cronbach alpha score of 0.753 and a composite reliability value of 0.835. Therefore, the items in the student engagement scale are stated to be valid and reliable and are considered capable of reflecting variable student engagement.

Next, the researcher categorized the results of the distribution of student engagement scale and obtained the following results that can be seen in table 1.

Based on table 1 above, it is known that the majority of student engagement in MAN 1 Magelang students is high. This can be seen from the percentage of high category student engagement has a value of 51%. From the category of high student engagement it is known that the highest component is in emotional engagement which has an average value of 25.0 followed by the component of behavior engagement (23.6) and cognitive engagement (22.5), while in the lower category, the most component low is present in the cognitive engagement component which has an average value of 19.06 followed by behavior engagement (19.53) and emotional engagement (20.87). Next the researchers tried to see the difference in student engagement level of each component reviewed from the gender differences.

Table 1: Categorization of Student engagement Levels

Variable	Categorization	F	%
Student engagement	High	51 students	51%
	Low	49 student	49%

Table 2: Behavior Engagement Differences Based on Gender

Gender	Mean	N	Std. Deviation	Sig.
Female	20,6000	50 students	2,755	0,000
Male	22,7400	50 students	2,776	

Table 3. Emotional Engagement Differences Based on Gender

Gender	Mean	N	Std. Deviation	Sig.
Female	22,300	50 students	2,970	0,020
Male	23,620	50 students	2,702	

Table 4. Cognitive engagement Differences Based on Gender

Gender	Mean	N	Std. Deviation	Sig.
Female	22,300	50 student	2,970	0,947
Male	22,260	50 students	3,049	

Based on the data in table 2, it can be concluded that there is a difference in behavior engagement between female and male sex where statistical calculations show a significance value of 0,000 ($P < 0.050$) where female sex has higher behavior engagement than men can be seen from the mean value.

Based on the data in table 3, it can be concluded that there is a difference in emotional engagement between female and male sex where statistical calculations show a significance value of 0.020 ($P < 0.050$) where female sex has higher emotional engagement than men can be seen from the mean value.

Based on the data in table 4, it can be concluded that there is no difference in behavior engagement between female and male sex where statistical calculations show a significance value of 0.947 ($P > 0.050$) which means that cognitive engagement between the two sexes does not have a difference that is significant.

Discussion and Acknowledge

The value of the emotional engagement component has the highest value compared to other components. It shows that students feel comfortable in school, able to socialize

well, have close friendships, have fun teachers and enjoy the learning process in the classroom. The high behavioral engagement component shows that students concentrate while studying in the classroom, they are able to follow the rules set by the school, feel motivated, and like to discuss doing question and answer in the classroom. The high cognitive behavior component shows that students have the ability to acquire knowledge, they allocate their time to learn, strive to complete difficult tasks, diligently practice questions, and evaluate their mistakes that result in them not being able to solve a problem.

After the interview, students with high engagement turned out to get good attention from their teacher. The students consider their teacher friendly and easy to talk to. This makes students feel familiar and not awkward while at school. Their teachers teach gently and attentively so that the atmosphere in the classroom is enjoyable. This is in line with Research conducted by Kiefer and Florida (2015) which shows that the support of teachers and peers of an academic and social nature has unique implications for supporting student motivation and engagement in high school. Furthermore, the quality of teacher-student

relationships is key to growing or damaging student self-adjustment in school (Wang, 2009).

Students with high engagement claim to have a pleasant range of friendships at school. Friends become one of their reasons for being enthusiastic and comfortable at school. In line with the research of Malindi and Machenjedze (2012) who stated that peers can attract someone who is isolated in the school environment to have an engagement to the school environment. In addition, tasks that are interesting and require group involvement become an attraction for students to give time and thought to the work of their teacher so as to encourage the creation of cognitive engagement. Such an assignment model is considered to lower the level of boredom and saturation because one has to work on one's own in order to complete the task.

The value on the cognitive engagement component is the lowest compared to the other two components. This means that cognitively they do not give special time to do schoolwork and have less effort in acquiring knowledge. In terms of behavior also low means that in learning in the classroom students do not concentrate while learning, break school rules, do not actively participate in class discussions, and are less enthusiastic. On the low emotional component students are less comfortable at school, do not have a close relationship with teachers, friends, or interest in lessons at school.

After conducting an interview with one of the students who have low engagement, it turns out that they also have low encouragement from their parents and teachers. Parents do not pay attention to their learning process, tend to neglect or ignore the process of development, and do not give confidence in their choices. At the teacher factor, they perceive that their teacher is not friendly to him, underestimate him, and also does not give him the

opportunity to first understand the material presented. They consider teachers discriminating against students who have good intelligence. Groves et al (2015) explained that to encourage students to be actively involved then teachers must be enthusiastic, prepare well, be open, discuss student progress, challenge the extent to which students are able to do things related to their academics.

Students with low engagement admit to often skipping and not attending lessons in class with a reason to go to the toilet or to the UKS. He did the behavior with a group of friends. Peer influence is very important to support student engagement. Juvonen and Espinoza, (2012) state that peer support enables students to have an engagement to school. A student who fails to have an engagement with the school will usually seek relief by engaging himself in delinquent friends (Fredrick et al., 2004).

Individual characteristics also affect the level of student engagement. In this study of the three components that make up student engagement two of them have significant differences and in the female gender each component is higher in value than the male. This is in line with research conducted by Hartono (2018) which states that the level of student engagement has differences in male and female gender. Differences in the level of engagement are due to the increasingly challenging academic challenges and gaining social support from the environment (Ratnaningsih et al., 2018). Differences in the level of engagement also occur due to the gap between men and women where men receive less support than women thus causing different levels of engagement (Liaert et al., 2015).

Conclusion

Based on the results of the study, the researcher drew the conclusion:

1. There are 51 out of 100 students surveyed have a high level of engagement. It is

indicated by a high score on filling the student engagement scale. Students who have high engagement have the support and good relationships of teachers and peers. Those who have high engagement are also due to the characteristics of giving interesting and group assignments

2. There are 49 out of 100 students surveyed have low engagement. It is indicated by a low score on filling the student engagement scale. Students with low engagement perceive their teachers to be impartial, do not pay attention to whether the material presented is well received, and have friendships that lead to negative school behavior. In addition, low engagement students are not excluded from the relationship and parenting patterns of parents who pay less attention to their development.

3. There is a difference in the level of behavior engagement based on gender, where the female gender has a higher level of behavior engagement than men.

4. There is a difference in the level of emotional engagement based on gender, where the female gender has a higher level of emotional engagement than men.

5. There is no difference in the level of cognitive engagement based on gender.

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