

Student engagement during pandemic COVID-19 and its implications for guidance and counseling

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Abstract: Student engagement is a condition of the extent to which students play an active role in the learning process by focusing on time, energy, mind, effort, feelings and making it happen in action to complete their academic tasks completely. This study aims to explore and find out the level of student engagement in the Covid-19 pandemic period seen from gender differences and the school level. Quantitative descriptive research with this survey design involves 469 students, 245 students of the junior high school, and 224 senior high school students chosen using a stratified random sampling proportionate cluster. The results showed that secondary school students in the Covid-19 pandemic period had an average level of student engagement in the medium category. This study found, there was no different level of student engagement based on gender ($t(467) = -1.86$). But specifically, the participation has a significant difference, while the skill, emotion, and performance do not have a significant difference. At the school level, indicate that there are significant differences in the level of student engagement ($t(467) = -3.39$). Furthermore, it can be seen from every indicator of student engagement skills, participation and performance have a significant difference and only an emotion that does not have it. The results of this study have implications for the planning of guidance and counseling programs in schools during the Covid-19 pandemic period, which is important to see the level of student engagement, especially in the emotional indicator. Further discussion is discussed in this article.

Keywords: Covid-19; Secondary School Students; Student Engagement

Introduction

The Covid-19 Pandemic that is happening today in all parts of the world, influences and changes various fields of life including the education field (Abdusshomad, 2020; Firmansyah & Kardina, 2020; Toquero, 2020; Upoalkpajor & Upoalkpajor, 2020), that changing the system and the pattern of school learning. The changing from face-to-face meeting and practice in a class to online learning and the existence of lockdown or quarantine causes problems for students, especially regarding its psychological conditions (Aqeel et al., 2020; Baloch et al., 2021; Lukong et al., 2020; Mahmudah, 2020). One of the students' psychological conditions that need attention is the level of student engagement.

Student engagement is defined as the psychological condition of students in completing school assignments by mobilizing attention, time, energy, and seriousness (Virtanen et al., 2016). It is a multi-aspect of students that can be seen from the integration between thoughts, feelings, and actions that can be observed through various indicators to complete their academic tasks completely (Appleton et al., 2008; Eccles & Wang, 2012; Fredricks et al., 2019; Kuh, 2009; Skinner & Pitzer, 2012). Student engagement in the effort and sincerity of students in group learning and the learning process can be observed through behavioral, cognitive, and affective indicators and is influenced by learning activities and the learning environment (Bond et al., 2020).

Further engagement of students is defined as the degree of effort, the interaction between time and learning processes that develop learning outcomes and student learning experience (Lewis et al., 2011). Student attachment is generally understood as the extent to which students are actively involved in the learning process through thinking activities, arguing, and interacting fully with other students and teachers when discussing learning material. This shows that in student arrangement, they will focus on time, energy, mind, effort, and feelings in the learning process to some extent (Dixson, 2015). The various

definitions above refer to the conclusion that no definition definitively explains student engagement so that each study explains a different definition according to the focus of the research. This study defines student engagement as a condition of the extent to which students play an active role in the learning process by focusing time, energy, thought, effort, feelings, and bringing it into action to accomplish academic tasks completed in online learning during the pandemic covid-19.

Student attachment is a key element in keeping students actively engaged during the learning process (Dennen et al., 2007; Kehrwald, 2008; Robinson & Hullinger, 2008; Shea et al., 2006; Swan et al., 2000) so that students can improve academic achievement, critical thinking and assessing competence (Carini et al., 2006). Furthermore, student arrangement is an indicator of the education quality and the activeness of the learning process in the classroom (Robinson & Hullinger, 2008), at the higher education level, student engagement is the most important factor in supporting student learning success (Murray, 2018).

In addition, it is also an indicator in increasing student achievement, persistence, and retention in schools (Holt et al., 2008; Kuh et al., 2012), affect student learning outcomes and cognitive development (Ma et al., 2015), and be a predictor of the occurrence of dropout in high school and college students (Christenson et al., 2012). Protective factors that help students face difficulties and obstacles in the learning environment and increase the resilience of academic failure so that they can face higher academic challenges in the next learning process (Fredricks et al., 2019; Skinner & Pitzer, 2012).

In more detail (Vytasek et al., 2020) explained the importance of student engagement in academic activities at school, as a strong predictor of student academic outcomes, because it can improve the learning process, build understanding, and improve academic performance, so students will feel more interested and more active in learning and participating in-class activities, feel more satisfied and more useful because of the full engagement of teachers and friends. Seeing the importance of student engagement for a student, this research is interesting and can have a positive impact in efforts to improve educational services in schools, especially during the current Covid-19 pandemic and in the field of guidance and counseling.

Guidance and counseling is important components in the educational process. It is necessary to know the condition of students in schools, especially at the level of student engagement. This is in line with the tasks and functions of teacher guidance and counseling where they help students to develop the potential they have and face various obstacles in students' development in the personal, social, learning, and career fields (American School Counselor Association, 2012; H. Martin, 2010; Nurihsan, J. & Yusuf, 2010; Susanto, 2018). Teachers need to know students' ailment, especially in terms of psychology as a basis for making guidance and counseling service programs in schools and for providing services quickly, precisely, and by the needs of students. Thus, the learning process in schools will be maximized, especially during the Covid-19 pandemic.

Based on the results of the research described above, it shows that the engagement of students studying in schools during the Covid-19 pandemic and the duties and functions of guidance and counseling teachers are vital. So, this study focuses on exploring and knowing the level of student engagement during the pandemic in Indonesia as seen from differences in gender and school level. It is a fundamental thing to do as an effort to see the psychological condition of students, specifically in student interactions during the pandemic. Because the government still prohibits the implementation of face-to-face learning coupled with the enactment of restrictions on human resources, educational facilities, and infrastructure including the internet network to access online classes. In addition, this research can be used as the basis for making guidance and counseling teacher service programs in schools during the Covid-19 pandemic.

Methods

This is a quantitative descriptive study with a survey design to describe or provide an overview of high school students' engagement during the Covid-19. The subjects of this study were students from junior high school and senior high school in Surakarta city. The sampling technique used was clustered proportionate stratified random sampling with a total sample size of 469 people consisting of 245 junior high school students and 224 senior high school students.

The research data was collected using the online student engagement scale (Dixon, 2015) which is shared online via the google form application. It has four aspects of student engagement, which include the Skills "Make sure to study regularly", Emotions "Making effort", Participation "Getting to know other students in class", Performance "Doing well on tests/quizzes". Spread over 19 favorable statement items. The assessment technique uses a Likert scale with five answer choices, not at all characteristic of me, not characteristic of me, moderately characteristic of me, characteristic of me, very characteristic of me. The assessment of items starting from number 1 means "not at all like me" to number 5 which means "very much like me".

The validity of the instrument ranges from 0.423 to 0.700 obtained from the product-moment value, while the instrument reliability is 0.910 obtained from the Cronbach alpha value. While the data analysis technique used is descriptive analysis technique and t-test with the help of the statistical package for the social sciences application version 23 (SPSS 23 version) to determine the level of student engagement and differences in student engagement based on differences in gender and school level.

Results and Discussion

Based on the results of data analysis, the average level of student engagement in junior high school is in the medium category ($M = 2.29$, $SD = 0.46$). In more detail, it can be seen that the level of student engagement is 4% low, 69.7% medium, and 29.9% high. Based on gender differences, it shows that 76.1% medium and 23.9% high women, while for men 0.6% low, 67.1% medium, 32.3% high. The difference in school level shows that junior high school students are 0.4% low, 75.1% medium, 24.5% high, senior high school students 0.4% low, 63.8% medium, 35.7% high. An illustration of the level of student engagement can be seen in figure 1.

Figure 1. Level Of Student Engagement

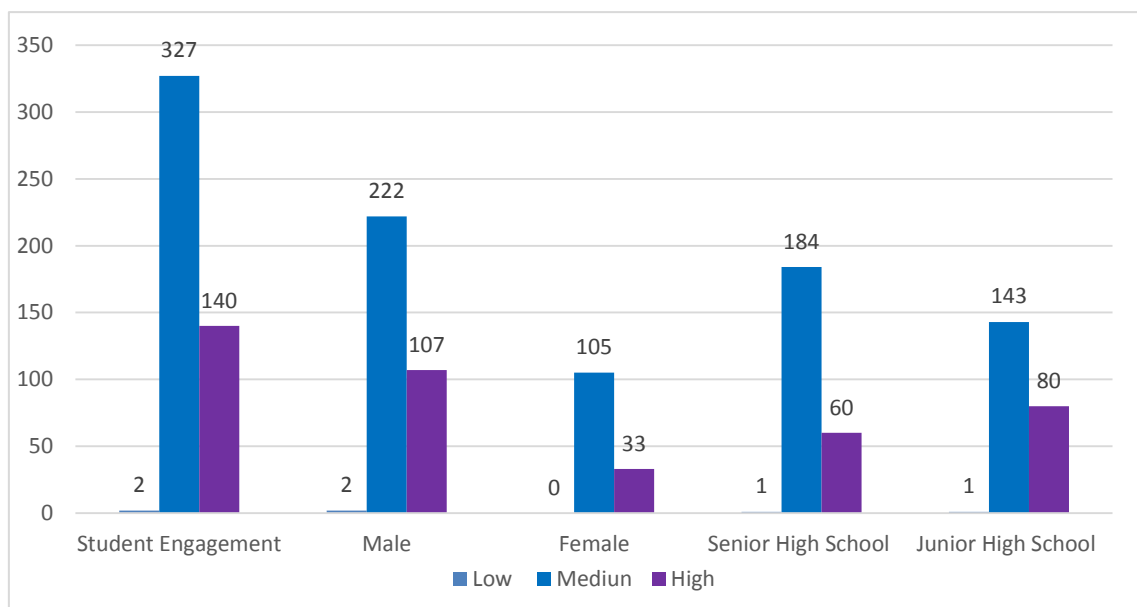


Table 1. Level Of Student Engagement

Group	Indicator	Differences	N	M	SD	t-Test	
Gender	Student Engagement	Male	331	66.81	5.47	t(467) = -1.86	
		Female	138	65.79	5.36		
	Skill	Male	331	21.27	2.69	t(467) = -1.01	
		Female	138	20.99	2.69		
	Emotion	Male	331	17.59	1.87	t(467) = 0.13	
		Female	138	17.61	1.82		
	Participation	Male	331	20.77	2.30	t(467) = -2.81*	
		Female	138	20.12	2.26		
	Performance	Male	331	7.18	1.18	t(467) = -1.03	
		Female	138	7.06	1.14		
	School-level	Student Engagement	Junior High School	245	65.71	5.65	t(467) = -3.39**
			Senior High School	224	67.40	5.11	
Skill		Junior High School	245	20.91	2.69	t(467) = -2.21**	
		Senior High School	224	21.47	2.66		
Emotion		Junior High School	245	17.55	1.90	t(467) = -0.54	
		Senior High School	224	17.64	1.80		
Participation		Junior High School	245	20.21	2.30	t(467) = -3.73**	
		Senior High School	224	20.99	2.23		
Performance		Junior High School	245	7.02	1.22	t(467) = -2.50**	
		Senior High School	224	7.28	1.10		

Information: * $p < 0.05$, ** $p < 0.01$

If it is perceived from each indicator, the difference in gender and school level shows that there is no significant difference in the level of student engagement in terms of gender. Even though male students ($M = 66.81$, $SD = 5.47$) have a higher level of engagement, higher students. Height of the female ($M = 65.79$, $SD = 5.36$, $t(467) = -1.86$, $p > 0.05$). Furthermore, in gender only participation indicators have a significant difference in the level of student engagement, where male students ($M = 20.77$, $SD = 2.30$) have a higher level of participation than women ($M = 20.12$, $SD = 2.26$, $t(467) = -2.81$, $p < 0.05$). Meanwhile, on the indicators of skill, emotion, and performance there is no significant difference in the level of student engagement (see table 1).

Furthermore, at the school level it shows that there is a significant difference in the level of student engagement, where senior high school students ($M = 67.40$, $SD = 5.11$) have a higher level than junior high school students ($M = 65.71$, $SD = 5.65$, $t(467) = -3.39$, $p < 0.01$). Meanwhile, at the school level, in skills indicator, it has a significant difference where senior high school students ($M = 21.47$, $SD = 2.66$) have a higher level of student engagement than junior high school students ($M = 20.91$, $SD = 2.69$, $t(467) = -2.21$, $p < 0.01$). In the participation indicator there is a significant difference where senior high school students ($M = 20.99$, $SD = 2.23$) have a higher level of student engagement than junior high school students ($M = 20.21$, $SD = 2.30$, $t(467) = -3.73$, $p < 0.01$). In the performance indicator there is a significant difference where senior high school students ($M = 7.28$, $SD = 1.10$) have a higher level of student engagement than junior high school students ($M = 7.02$, $SD = 1.22$, $t(467) = -2.50$, $p < 0.01$). Whereas on the emotion indicator there is no significant difference in the level of student engagement (see table 1).

The results of this study indicate that the average level of student engagement is in the medium category. The results of this study indicate that during the Covid-19 pandemic junior high school students were less active in participating in the learning process. This can happen because, during the pandemic, they are limited to communicating and socializing with peers

and teachers at school. This limitation occurs because of the prohibition against face-to-face learning at school and the existence of quarantine or prohibition on meeting other people. This is by the research results of F. Martin & Bolliger, (2018); Strati et al., (2017); Xerri et al., (2018), which states that the relationship between peers and the relationship between teachers and students has a positive correlation with the level of student engagement. In addition, the family environment and socio-culture of students affect the level of student engagement (Allen et al., 2018).

Besides that, the lack of student engagement level also occurs due to the limitations of learning activities and student learning resources. Where during the pandemic, learning activities were more towards online learning where teachers gave more tasks such as doing subject assignments or reading subject matter. This makes students feel bored which in turn also reduces the level of student engagement. Learning materials or resources have a positive relationship with learning activities mediated by the level of student engagement, the presence of teachers, learning materials, and the school system affect the level of student engagement (Allen et al., 2018), Graphic design or display of online-based learning media affects the level of student engagement (Hussain et al., 2018).

In more detail, seen from the gender differences, this study managed to find that overall male and female students did not have different levels of student engagement. This is in contrast with the results of research Heffner & Antaramian, (2016); Korobova & Starobin, (2015); Lietaert et al., (2015); Shu & Liu, (2019), which shows that male students have a lower level of student engagement than female students. The results of the research of Schreiber & Yu, (2016) show that male students have a higher level of student engagement than female students. Based on the differences in the results of previous studies related to the effect of gender on the level of student engagement, this study found a new fact that there was no difference in the level of student engagement between male students and female students.

Although this research succeeded in finding new facts regarding the influence of gender on the level of student engagement, we must emphasize that this research was carried out during the Covid-19 pandemic that hit the whole world. This research is an initial study that focuses on the level of student engagement during the Covid-19 pandemic. In addition, learning conditions such as this pandemic have never happened in the previous time. Thus, the difference between the results of this study and previous studies was due to the COVID-19 pandemic, which overall affected aspects of students' lives, especially in the field of education.

Furthermore, the gender differences seen from each indicator of student engagement are only indicators of participation that have significant differences, where male students have a higher level of participation than female students. This is by the results of research which states that male students have a higher level of participation than female students in learning participation (Aguillon et al., 2020; Aziz et al., 2018), the high level of male student participation can be understood because male students tend to have higher self-esteem (Aguillon et al., 2020), where self-esteem has five dimensions, namely academic, social, emotional, family, and physical dimensions. Men's higher self-esteem than women makes men always want to stand out, become leaders, and want to get more praise (Aziz et al., 2018).

Likewise, the indicators of skills, emotions, and performance showed that there was no significant difference between male and female students. It can be understood because during the pandemic, male and female students experienced online learning and there were restrictions on carrying out activities. These two conditions make the development of skills and student performance in learning experience obstacles and tend to be stagnant so that there is no difference between boys and girls. The situations and conditions of learning during the

Covid-19 pandemic were relatively the same, scilicet learning carried out online and in their respective homes also made students experience the same emotions or feelings, such as boredom, anxiety, and frustration (Zhang et al., 2020).

At school level differences, this study found that there were significant differences between students at the level of senior high school and junior high school. This research shows that senior high school students have a higher level of student engagement than junior high school students. Middle and high school students have different levels of engagement in classroom learning, and this can be understood from the point of view of developmental psychology. Hurlock, (2003) states that at the age of 12 to 21 years an individual will reach adolescence, which at that time is divided into 3 age groups, i.e early adolescents aged 12-15 years, middle adolescents aged 15-18 years, and late teens, 18-21 years. Based on the theory of adolescent development according to Hurlock, it can be explained that junior high school students are in the early and middle adolescent development phase, while senior high school students are in the late adolescent development phase. So that high school students have a higher level of engagement because their behavior, cognitive and affective are more psychologically stable, and they can already understand the direction and purpose of life (Bond et al., 2020; Hurlock, 2003). The results of this study are in line with the results of research by Van Uden et al., (2014) which stated that the higher the school level, the higher the level of student engagement. This happens because the ability of adolescent cognitive control will increase with increasing age which affects student behavior control (Crone & Dahl, 2012). In addition, senior high school students do more learning or activities that lead to practice or field study activities, so that this requires higher student engagement (Van Uden et al., 2014).

Besides, from each indicator scale, it was found that the indicators of skills, participation, and performance of high school students were higher and had significant differences with junior high school students. But in the emotional indicator of this study found that high school students and junior high school students did not have a significant difference. It can be understood that the difference in skills, participation, and performance occur because of age differences and by adolescent psychological development phase whereby the age at puberty eat the higher the skill level, participation, and performance of adolescents (Hurlock, 2003).

There are no significant differences in emotional indicators because they have the same conditions. During the Covid-19 pandemic, all students had limitations to study directly and study at home causing many students to experience a tendency to be bored, irritable, restless, nervous, feel lonely, uncomfortable, and worry excessively (Imran et al., 2020; Loades et al., 2020; Orgilés et al., 2020). The results of this study confirm the condition of the students in the pandemic which desperately need the role and assistance of teachers guidance and counseling or school counselors in the face of current conditions and to increase student engagement.

The results of this study have implications for the role and function of school counselors in planning school guidance and counseling programs in the new school year to help students during the Covid-19 pandemic. It is crucial for guidance and counseling teachers or school counselors to determine the level of student engagement in the Covid-19 pandemic period which can be used as the basis for service programs. In addition, the level of student engagement must be seen specifically based on skill, emotional, participation, and performance indicators because each indicator of student engagement increases and develops by the period of student development which is also influenced by gender differences. Furthermore, the emotional conditions of students need to get more attention because during the pandemic psychological conditions of students, especially in emotions, many disorders cause indications of students to experience boredom, irritability, nervousness, feeling lonely,

uncomfortable, and excessive worries (Imran et al., 2020; Loades et al., 2020; Orgilés et al., 2020). Also, guidance and counseling teachers or school counselors need to provide intervention to students to increase student engagement, both in learning online and at school when a face-to-face meeting is allowed.

Conclusions and Suggestions

The results showed that high school students had an average level of engagement that was in the medium category during the Covid-19 pandemic. This further research also found that the differences of male and female gender did not have significant differences in student engagement. While perceived from the indicators of student engagement, only a participation indicator has a significant difference between male students and female students, while the skill indicators, emotion, and performance do not have a significant difference. The differences in school level indicate that there are significant differences between junior high school students and senior high school students at the level of student engagement. Furthermore, the indicators of student engagement, skill indicators, participation, and performance have a significant difference in the level of student engagement and only an emotion indicator that does not have a significant difference. The results of this study have implications for the creation of guidance and counseling programs in schools during the Covid-19 period, to see how students are involved in emotional terms.

This research is limited to the level of student engagement and has not involved other variables that might affect them and the absence of further intervention to increase student engagement in the pandemic Covid 19 and still in a limited four school scope. The next researcher is expected to expand the scope of the place of research, involving other variables that might affect the level of student engagement and certain interventions to increase student engagement, especially in the Covid-19 pandemic period.

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