Students Engagement Analysis in Indonesia and Malaysia

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Abstract: This study aims to identify and describe the level of involvement of students in Indonesia and Malaysia in the conditions of the Covid-19 pandemic based on gender, age, educational level, learning facilities, father's and mother's last education. The research design used a descriptive quantitative method, with samples of junior and senior high school students in Indonesia and Malaysia selected using a *convenience sampling technique*. The research samples taken were 979 Indonesian students and 89 Malaysian students. Indonesian students consisted of 399 junior high school students and 578 high school students, while Malaysian students consisted of 48 junior high school students and 41 high school students. Data was collected using the *Student Engagement Instrument*–E (SEI-E) from Appleton, et al (2019) with a reliability of 0.99. The results of the study show that student engagement in Indonesia and Malaysia has the highest percentage in the high category compared to the low. The results of the different test analysis show that there are differences in the level of involvement of junior and senior high school students in Indonesia and Malaysia. The engagement rate of junior high school students is higher than that of senior high school students in Indonesia and Malaysia. Meanwhile, there was no difference between student involvement based on gender, age, learning facilities, father's and mother's last education in Indonesia and Malaysia.

1 INTRODUCTION

The Covid-19 pandemic is known to have an impact on the education sector, one of which is related to student involvement in learning. Involvement is essential in learning because it influences many aspects of learning, one of which is learning achievement. The Covid-19 pandemic has caused learning to turn into distance learning or what is known as learning online, it affects student engagement (Chiu, 2022). The implementation of online learning is considered not as effective as face-to-face learning and creates difficulties, due to the lack of student involvement when learning online (Aminullah et al., 2021). The results of the study by Bray et al. (2021) showed a nearly 40% decrease in student engagement in learning during the distance learning period. In the research of Mac Domhnaill et al. (2021) explains that there is a negative impact of learning changes on student engagement, distance learning is considered less effective than class-based learning among high school students.

It cannot be said that distance learning has been maximally implemented because considering that Indonesia is a country with a diverse geography, the internet network used for learning is not fully accessible to students, especially those in remote areas (Abidah et al., 2020). The problems that arise from this distance-based learning are found to be the inability of teachers to access technology, school facilities that do not yet support online learning, teachers have difficulty explaining material to students, limitations of students in accessing internet connections, families with low economic backgrounds and not there is support from the family for students to study independently at their respective homes (Lestiyanawati, 2020). Similar to previous research, Ahshan's research (2021) explained that teachers and students face many difficulties in carrying out learning, such as disturbances in the learning environment, little social interaction, lack of student involvement and motivation, and lack of skills in using technology.

Student engagement has been the focus of many educational studies because it has a correlation with learning outcomes, students who are more engaged are perceived to have a higher probability of succeeding academically (Bond et al., 2020). Students who are actively involved in learning enable

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them to excel and have good learning outcomes and reduce student apathy (Zepke et al., 2014). Student involvement is the main point in efforts to increase learning including the success of student development, satisfaction, academic achievement, and social involvement (Groccia, 2018). In addition, student involvement can make students willing, independent, motivated, and successful in learning (Kahu, 2013). The results of research by Martin and Bolliger (2018) show that student involvement increases satisfaction and motivation in learning, reduces feelings of alienation, and improves performance in learning.

Student involvement has a positive correlation with well-being, students who are involved tend to improve academic performance and feel more prosperous and happier (Boulton et al., 2019). In addition, student involvement has a positive relationship with *critical thinking*, self-esteem, and persistence in completing assignments (Hampton & Pearce, 2016). According to Finn (1989) student involvement can be assessed as a theoretical model for understanding *school dropout*, because dropout is not an instant event and involvement provides a means for understanding as well as prevention when early signs of student disconnection from school appear. Finn and Zimmer's research (2012) explains that students must do more than just attend school or be present in the classroom, they must be 'involved' in the classroom environment in a way that enhances learning. Student engagement is defined as the time and physical energy spent by students on activities related to their academic experience (Robinson & Hullinger, 2008).

Based on the explanation above, it is known that many factors influence student learning and engagement. Then, based on the current phenomenon, student engagement is seen to have decreased due to distance learning carried out during the Covid-19 pandemic. During the pandemic, student engagement research focused on what is needed in online learning and positive psychology studies to increase student engagement (Baloran et al., 2021; Boulton et al., 2019; Bray et al., 2021; Chiu, 2022; Chu, 2022; Kurt et al., 2022). However, the development of the level of student involvement during this pandemic and other factors related to student involvement still need to be monitored. Therefore, this study aims to determine the level of student engagement and related sociodemographic factors.

2 METHOD

The research design uses a descriptive quantitative method, to categorize the level of student involvement in Indonesia and Malaysia. Respondents in this study were junior and senior high school students aged 11-18 years with an average age of 15.14 in Indonesia and 15.3 in Malaysia. The sample from this study was selected using a *convenience sampling technique*. The research samples taken were 979 Indonesian students and 89 Malaysian students. Indonesian students consisted of 399 junior high school students, 578 high school students and 3 were not identified, while Malaysian students consisted of 48 junior high school students and 41 high school students.

Data was collected using the *Student Engagement Instrument*–E (SEI-E) from Appleton, et al (2019) which was adapted into Indonesian with a reliability of 0.99. The questionnaire was distributed using the *google form*. The results in the form of ordinal data are converted into interval data using the Rasch Model with the Winstep application. Then, the interval data is categorized into three categories, namely high, medium, and low. Data analysis techniques in this study used the *software* SPSS 20.0 *independent sample t-test* and ANOVA to determine differences in the results of student engagement based on sociodemographic status. The significance level for the results of the different test analysis used in this study is if it is significant (α) $\leq$ 0.05, then H0 is rejected and if it is significant (α) > 0.05, then H0 is not rejected.

The detailed sociodemographic description of the respondents is as follows:

Table 1: Sociodemographic

Baseline characteristic	Indonesia		Malaysia	
	Total	Percentage	Total	Percentage
Gender				
Female	359	36.67	38	42.70
Male	618	63.13	51	57.30
Age				
11	2	0.20	-	-
12	97	9.91	-	-
13	114	11.64	11	12.36
14	138	14.10	28	31.46
15	162	16.55	9	10.11
N/A	179	18.28	9	10.11
Level Education				
Junior high school	399	40.76	48	53.93
Senior high school	578	59.04	41	46.07
N/A	2	0.20	-	-
Privately owned gadget facilities used in learning				
1 gadget ownership	885	90	84	94.38
2 gadget ownership	78	7.97	2	2.25
3 gadget ownership	4	0.41	3	3.37
Shared gadget	1	0.10	-	-
N/A	11	1.12	-	-
Father's Last Education				
Elementary school	181	18.49	9	10.11
Junior high school	181	18.49	29	32.58
Early high school	450	45.97	33	37.08
Diploma	52	5.31	9	10.11
Bachelor	101	10.32	6	6.74
Masters	10	1 .02	3	3.37
Doctorate	2	0.20	-	-
N/A	2	0.20	-	-
Mother's Last Education				
Elementary school	202	20.63	9	10.11
Junior high school	218	22.27	16	17.98
Early high school	423	43.21	37	41.57
Diploma	47	4.80	10	11.24
Bachelor	83	8.48	14	15.73
Masters	4	0.41	3	3.37
Doctorate	0	0.00	-	-
N/A	2	0.20	-	-

3 RESULT

After data collection, the data is categorized into three categories (high, medium, and low). As seen in Table 2 the results of this study show that students in Indonesia are 17.06% less involved in learning, 63.02% have moderate involvement, and 19.92% are very involved in learning. Overall it can be seen that student involvement has the largest percentage in the medium category compared to the high and low categories. Meanwhile, students in Malaysia were 13.48% less involved in learning, 71.91% had moderate involvement, and 14.61% were highly involved in learning. The engagement category in Malaysia has the highest percentage in the medium category, while the high and low categories have the same percentage.

Table 2: *Categorization*

Category	Indonesia		Malaysia	
	Total	%	Total	%
Low	167	17.06	12	13.48
Moderate	617	63.02	64	71.91
High	195	19.92	13	14, 61
Total	979	100	89	100

The sociodemographic factors considered include gender, age, education level, gadget facilities used, and the last education of the father and mother. In Table 1, the distribution of all sociodemographics in Indonesia and Malaysia is presented, which consists

of 741 Indonesian students and 52 Malaysian students. In terms of gender, the majority of students are female with a percentage of 63.16% in Indonesia and 59.62% in Malaysia. After conducting a different test using SPSS which can be seen in Table 3, it was found that the significance value obtained was 0.198 for Indonesia and 0.850 for Malaysia, which is > 0.05. Therefore H0 is accepted, so there is no difference in the results of student engagement between male and female students in Indonesia and Malaysia.

Table 3
Difference Test Results

Sociodemographic	Indonesia	Malaysia
	Sig.	Sig.
Gender	0.198	0.850
Age	0.157	0.051
Education Level	0.000	0.027
Facilities used	0.642	0.814
Father's Last Education	0.469	0.281
Mother's Last Education	0.363	0.892

At the education level, it is divided into 2, namely students at the junior high school level and at the high school level. The highest percentage is at the senior high school level (58.30%) in Indonesia, while in Malaysia the highest percentage is at the junior high school level (57.69%). After conducting a different test or *independent sample t-test*, a significance of 0.000 was found in Indonesia and 0.027 in Malaysia, namely <0.05, so H0 was accepted. Therefore, there are differences in student engagement between junior and senior high school education levels in Indonesia and Malaysia. Looking at the average results, the involvement of junior high school students (134.13) is higher than that of high school students (127.43) in Indonesia. Similar to Indonesia, the average engagement of junior high school students (120.69) in Malaysia is higher than that of senior high school students (108.55).

In education that is carried out remotely, it certainly requires facilities to support learning (Cakir, 2013). Facilities *Gadgets* in Indonesia are divided into 5 categories, namely those that use 1 *gadget*, 2 *gadgets*, 3 *gadgets*, *shared gadgets*, and undefined. Meanwhile, *gadgets* in Malaysia are only divided into 3 categories, namely those using 1 *gadget*, 2 *gadgets* and 3 *gadgets*. After conducting a different test on the SPSS application, it was found that a significance value of 0.642 in Indonesia and 0.814 in Malaysia was > 0.05, so H0 was accepted. Therefore, there is no difference in student engagement based on the *gadget* used in Indonesia and Malaysia.

Father's and mother's last education is divided into 7 categories from elementary, junior high, high school, diploma, bachelor, master, and doctoral levels. The highest percentage of father's recent education is at the high school level (44.94%) in Indonesia, while in Malaysia the highest percentage is at the junior high school level (38.46%). After conducting a different test using the SPSS application, it was found that a significance of 0.469 in Indonesia and 0.281 in Malaysia was > 0.05, so H0 was accepted. Therefore, there is no difference in student involvement based on father's last education. Meanwhile, the highest percentage of mothers' last education was at the high school level in Indonesia (42.78%) and Malaysia (36.54%). After different tests were found, a significance value of 0.363 was found in Indonesia and 0.892 in Malaysia, which was >0.05, so H0 was accepted. Therefore, there is no difference in student engagement based on mother's last education.

In terms of age sociodemographic, Indonesian students are aged from 11-18 years and there is 1 student who does not fill in, while Malaysian students are aged from 13-18 years. The highest percentage is at the age of 17 years (23.62%) in Indonesia and is at the age of 14 years (38.46%) in Malaysia. After conducting a different test on the SPSS application, it was found that the significance value was 0.157 for Indonesia and 0.051 for Malaysia, namely > 0.05, then H0 was accepted or there was no difference in student engagement based on sociodemographic age.

4 DISCUSSION

In this study it was found that there was no difference in student involvement based on gender and the last education of the father and mother. This is in line with Cakir's research (2013) which identified the effect of gender, the last education of the father and mother, and access to computers and the internet on student involvement, showing results that this had no effect on student involvement. Meanwhile, in the research conducted by Khalil et al (2021) there were differences in student involvement between boys and girls. This study also looked at the differences between men and women based on the dimension of student involvement, namely the relationship between teacher and student, which resulted in that female students scored higher on this dimension than male student

5 CONCLUSION

The conclusion of this study is that student involvement in Indonesia and Malaysia is in the moderate category. Student engagement in the high category is greater than in the low category for Indonesia and Malaysia. Based on this, it can be seen

that students in Indonesia are still involved even though learning is carried out remotely or *online*. After conducting a different test using the SPSS application, it shows that there are differences in the level of involvement of junior and senior high school students in Indonesia and Malaysia. The engagement rate of junior high school students is higher than that of senior high school students in Indonesia and Malaysia. Meanwhile, there was no difference between student involvement based on gender, age, learning facilities, father's and mother's last education in Indonesia and Malaysia.

SUGGESTION

In this study, the sample distribution in Malaysia was less extensive, only in urban areas and the number of samples was still small compared to Indonesia. It is hoped that in future studies it will be possible to conduct research in Malaysia and Indonesia with a balanced sample size. The sociodemographics studied can cover a wider range, such as the learning system at school or grade level.

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