

## ***E-Learning Supported by Media Social WhatsApp for Student Engagement and Learning Outcomes***

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### ***Abstract***

*This study proposes e-learning supported by WhatsApp social media for student engagement and learning outcomes. Based on literature studies, there are four parameters that can be used in WhatsApp to support e-Learning, namely: get information, learner interaction, instructor presence, and for learning purpose. The impact of e-Learning on student engagement and learning outcomes is carried out at the XYZ Campus, as a business training institution for MSME entrepreneurs in Indonesia. The results showed that most respondents from 4 groups agreed that WhatsApp was appropriate as a learning medium to increase business knowledge to support e-learning that could affect student engagement and learning outcomes.*

**Keywords:** *e-Learning, Social Media, WhatsApp, Student Engagement, Learning Outcomes*

### **1. Introduction**

After Covid-19 in Indonesia which impacted layoffs on Micro, Small and Medium Enterprises (MSMEs). However, Helena Thatcher Pakpahan (2014) states that the role of micro, small and medium enterprises (MSMEs) in the Indonesian economy has been recognized by the wider community. Regions that have a strong network of small businesses will succeed in industrial competition in the Domestic and Global markets.

The role of MSMEs is felt to be very important because this sector is not only a source of livelihood, but also facilitates their business knowledge capabilities. Based on data from the Ministry of Cooperatives and Small and Medium Enterprises (KemenkopUKM) in March 2021, the number of MSMEs reached 64.2 million, and absorbed 97 percent of the total workforce. But not all MSMEs have management capacity, experience, weak financial control, and fail to develop strategic planning. From this reasoning, it can be concluded that in running a business it is very important that the perpetrators understand the science of business strategy to be able to survive and win business competition, especially in the lead-up to the free trade era.

The XYZ Campus, is a business training institution for MSMEs entrepreneurs in Indonesia. XYZ Campus has difficulty providing training to MSMEs that are spread throughout Indonesia. Therefore, this study aims to propose an e-Learning E-Learning Supported by WhatsApp Social Media for XYZ Campus. Then E-Learning needs to know the impact on learning activeness and learning outcomes for trainees in XYZ Campus.

This is in line with previous research which states that strategies using social media can be used to increase student involvement in e-Learning [1]. In addition, it was found that the use of social media in e-Learning as a source of information for academic problems such as carrying out tasks in achieving learning outcomes [2].

## 1.2. Literature Review

The use of e-learning as an effective learning tool has been widely used by various institutions, including MSMEs. In Indonesia, MSMEs are spread throughout Indonesia, e-Learning can be a solution in helping to learn. E-Learning has been used as a learning strategy in developing MSME businesses in Indonesia [3].

One effort to develop e-learning to increase academic success in online learning is to use social media support. The use of social media as a supporter of e-Learning has the aim to improve student activity as a student engagement [4] and learning outcomes [5]. One example is WhatsApp, which has been adopted for e-Learning learning at a university in Ghana with the aim of increasing lecturer-student participation in learning [6].

Based on the results of empirical studies conducted in several studies in the literature study, it was concluded that the parameters used by social media strategies in e-Learning towards student engagement and learning outcomes, namely: Get Information, Learner Interaction, Instructor Presence, and for learning purpose (see Figure 1).

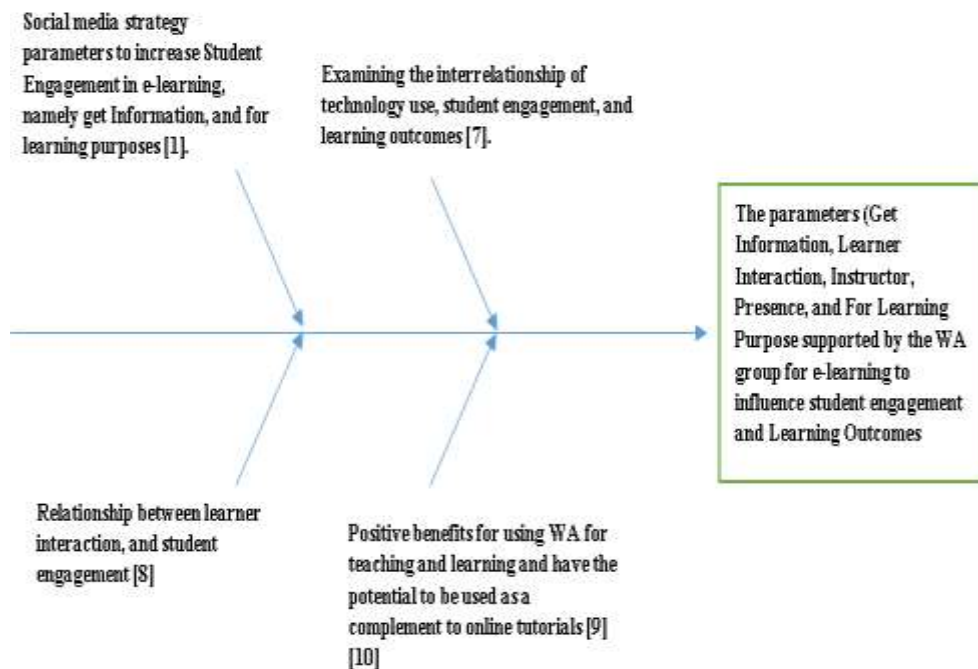


Figure 1. Parameters for E-learning XYZ Campus Support WhatsApp

## 1.3. XYZ Campus E-Learning Supported WhatsApp

The XYZ Campus e-learning with the support of the WhatsApp group is e-learning that is collected into the Business Mentoring group to carry out various activities such as sharing learning information, discussions, a forum for interaction between participants and instructors as well as fellow participants. Figure 2 shows the XYZ Campus e-learning web.

Meanwhile, WhatsApp to support XYZ Campus e-Learning has been used to help learning activities, such as get information, learner interaction, instructor presence, and for learning purpose. The following WhatsApp displays show some of the activities that have been carried out to support the XYZ Campus e-Learning.

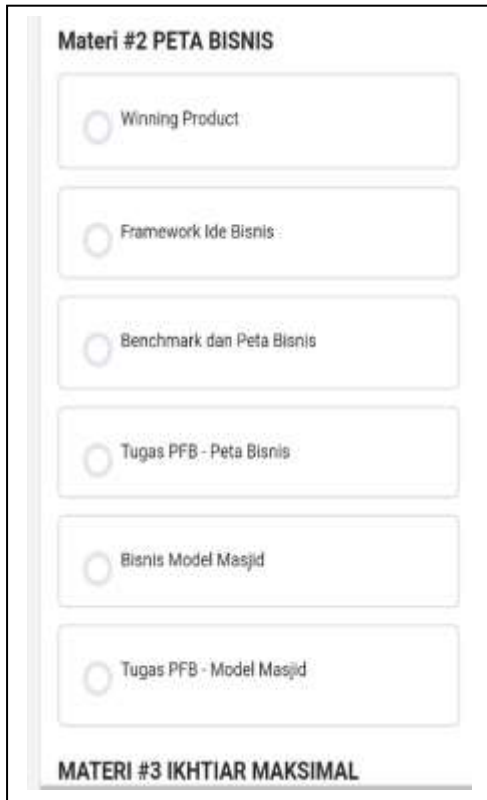


Figure 2. E-learning XYZ Campus



Figure 3. Get Information Activity

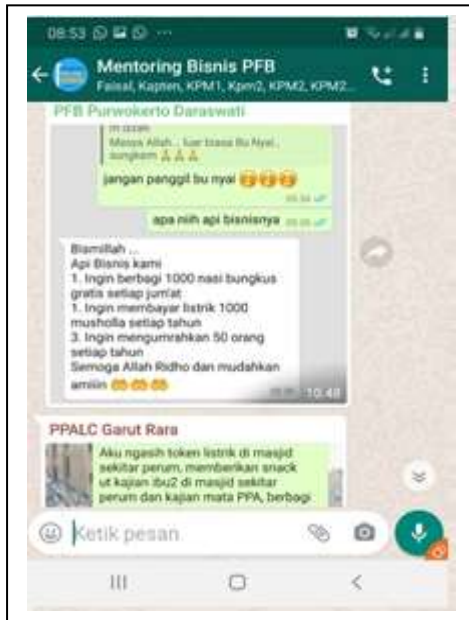


Figure 4. Learner Interaction Activity



Figure 5. Instructor Presence Activity



**Figure 6. For Learning Purpose Activity**

## 2. Research Method

To find out student involvement and learning outcome, a data collection method was used. The method used in this study is to use a questionnaire. The questionnaire was distributed online from 1 to 6 May 2020 with a minimum expectation of 308 respondents. The distribution of the questionnaire was done by sending a link via WhatsApp to various parties included in the research object, namely participants of the XYZ Campus training both who had never attended e-learning training as group 1, had attended e-learning training without the support of the WhatsApp group as group 2, as well as those who have participated in e-learning with the support of the WhatsApp group as group 3. The questionnaire is also distributed to those who have attended business training through e-learning outside of XYZ Campus, both those supported by WhatsApp and those not (group 4).

Literature studies are also conducted to obtain data and information about determining the questionnaire of student involvement and learning outcomes in an e-learning supported by social media.

The results of the questionnaire can be used as an evaluation of how students respond and prove the influence of using WhatsApp social media on students who take part in learning. Then an analysis of the influence of WhatsApp social media factors on student engagement and learning outcomes was applied to the XYZ Campus.

### 3. Result and Discussion

WhatsApp social media according to the results of this study is very suitable to be used as a supporting e-learning media. The potential is also evident from some of the perceptions given by respondents in the statements regarding WhatsApp's influence on Student engagement and Learning outcomes.

#### 3.1. Engagement (EG1)

With the WhatsApp group as a supporter of e-learning, I am more motivated to be active in discussions.

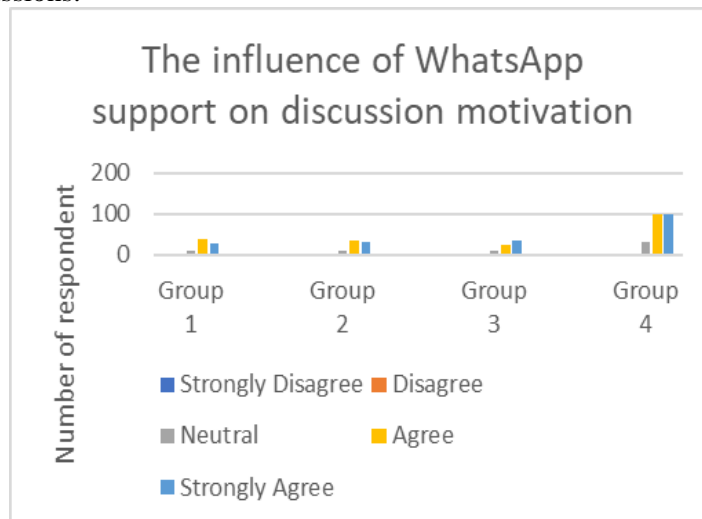
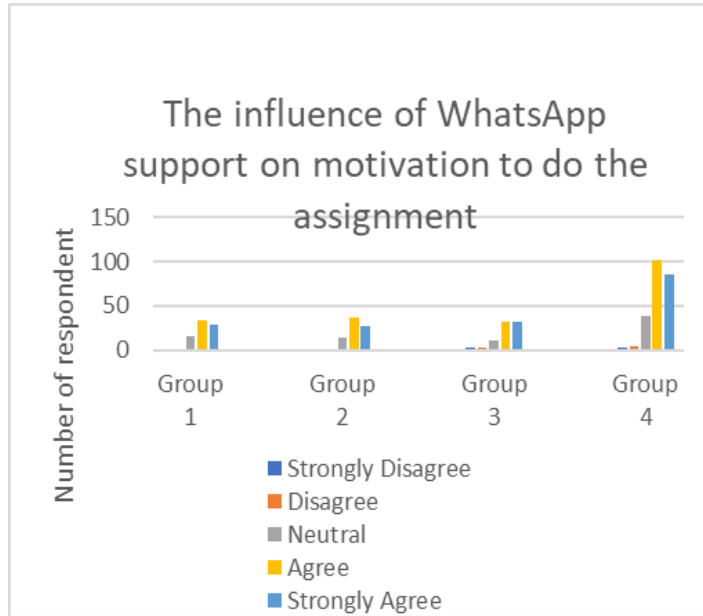


Figure 7. Graph of EG1 Engagement

Based on Figure 7, most respondents agree and strongly agree that the existence of the WhatsApp group as a supporter of e-learning can influence student engagement in terms of motivation to be active in discussions.

#### 3.2. Engagement (EG2)

With the WhatsApp group supporting e-learning, I am more motivated to do my assignment.

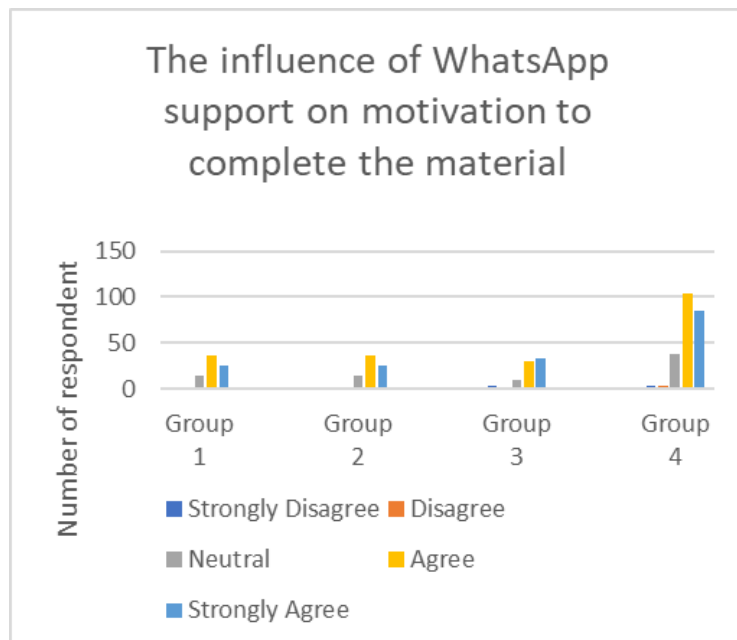


**Figure 8. Graph of EG2 Engagement**

Based on Figure 8, most respondents Agree and Strongly Agree that the existence of the WhatsApp group as a supporter of e-learning can influence student engagement in terms of motivation to do assignments.

### 3.3. Engagement (EG3)

With the WhatsApp group as a supporter of e-learning, I became more motivated to complete the material to completion.

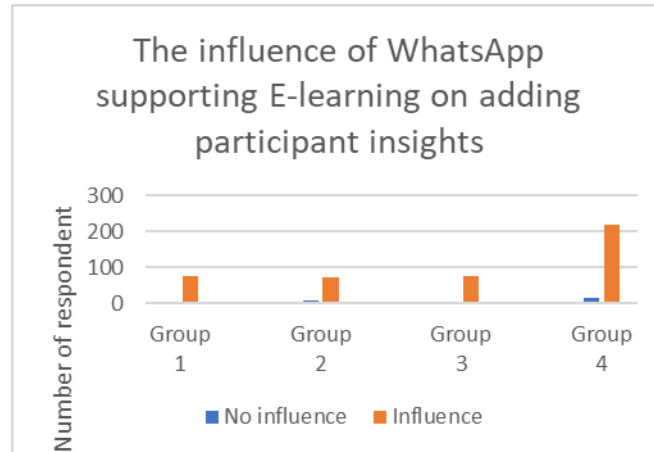


**Figure 9. Graph of EG3 Engagement**

Based on Figure 9, most respondents Agree and Strongly Agree that the existence of the WhatsApp group as a supporter of e-learning can influence student engagement in terms of motivation to complete the material to completion.

### 3.4. Learning Outcome (LO1)

Is it influential or does the WhatsApp Group support e-learning to adding your insight?.

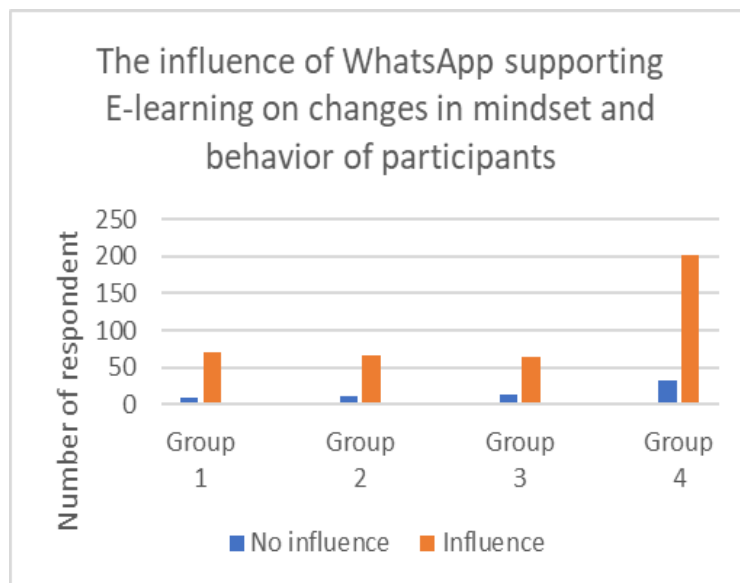


**Figure 10. Graph of LO1 Learning Outcome**

Based on Figure 10, it appears that most respondents stated that the existence of the WhatsApp group as a supporter of e-learning can influence learning outcomes in terms of adding their insights.

### 3.5. Learning Outcome (LO2)

Is it influential or doesn't the WhatsApp Group support e-learning for changes in your mindset and behavior?.



**Figure 11. Graph of LO2 Learning Outcome**

Based on Figure 11, it appears that most respondents stated that the existence of the WhatsApp group as a supporter of e-learning can influence learning outcomes in terms of changing their mindset and behavior.

#### 4. Conclusion

There are several parameters such as Get Information, Learner Interaction, Instructor Presence, and for learning purpose used on e-learning supported by WhatsApp social media on Muslim Entrepreneurs Campus towards student engagement and learning outcomes. Then in testing the impact of e-Learning on x and y, it has produced that respondent's perception data from the Engagement (EG1, EG2, and EG3) and Learning Outcome (LO1 and LO2), strengthen the evidence that the use of WhatsApp as a supporter of e-learning can influence student engagement and learning outcomes.

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