



The role of engagement in determining satisfaction: A study on educational organization

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Abstract

The Corona pandemic outbreak has resulted in the need for online learning. The online learning process needs accurate measurement; therefore, the research explores the influence of situational context and self-regulation on student engagement in the learning process and its implications for student satisfaction. This study was conducted at universities in Indonesia involving 134 research respondents. The results show self-regulation and situational context influence student satisfaction through learning engagement. The results demonstrate a direct effect of situational context on student satisfaction. The study's results represent that learning engagement plays an essential role in the learning process. Based on the research result, the interaction between lecturers and students leads to learning satisfaction. The research provides a valuable insight that the learning process needs to involve students. Hence lecturers need to prepare various teaching materials online to motivate students to be continuously involved in the learning process.

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Introduction

Self-regulation is an essential aspect of the learning process to encourage conducive learning. It is an ability to generate thoughts and feelings of planning actions in the learning process with specific goals that encourage

motivation from within students to take action (Drake et al., 2014). Based on the psychology that comes from the inner side, self-regulation is included in internal factors in the student learning process. It affects many aspects; therefore, the success of learning is determined by self-regulation. Previous research has indicated that self-regulation affects the learning process and student involvement in the learning process in the classroom (Doo & Bonk, 2020). Self-regulation is vital in regulating students' self to encourage learning success. The self-regulation process is influenced by various aspects, motivating lecturers through the face-to-face education process. Still, during the current corona pandemic, such motivation and variations in learning programs are difficult to obtain. Not all lecturers use face-to-face meetings, but learning technologies such as

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audiovisual media and online media are used, so a blended learning process cannot be entirely the same as face-to-face learning. The face-to-face learning process requires apperception, lecturers can motivate and provide a clear picture of the material and raise students' self-regulation to learn and focus on obtaining material (Sun & Rueda, 2012). This study analyzes that the online learning process in the self-regulation process has not been explored in-depth and requires further testing.

Situational context is an integral part of the learning process to encourage the study's achievements. Students will be motivated to learn optimally when they well understand the benefits received in the learning process (Sun & Rueda, 2012). The emergence of student self-involvement in the learning process is because students feel the learning is valuable. Conversely, if students do not feel there are benefits in the learning process, they feel lazy to follow the learning process. The implication is that students cannot follow the learning optimally, and the motivation decreases; therefore, the situational context process needs to be well understood by students (Pöysä et al., 2019). The steps for the lecturer are providing apperception and explanations about the benefits of learning and learning objectives (Inkinen et al., 2020).

Several studies state that learning outcomes are assessed from learning performance, learning outcomes, and student performance (Panigrahi et al., 2018; Selzer et al., 2019; Zhai et al., 2019). Student satisfaction is one of the critical indicators of learning success that has not been explored much (Alves & Raposo, 2007; Douglas et al., 2006). Student satisfaction is still not much associated with learning success (Alqurashi, 2019). Student satisfaction in getting material during online learning needs to be explored in depth. Self-regulation and situational context during online learning differ from face-to-face learning (Alqurashi, 2019). This study explores in greater depth the interrelationships of the factors that influence the learning process, situational context, and self-regulation on student learning satisfaction to achieve competence through an online learning process involving technology.

Literature Review

Self-Regulation

Self-regulation is defined as an effort made by students to be active in involving themselves in the learning process (Drake et al., 2014; Lichtinger & Kaplan, 2011; Schraw et al., 2006). There are psychological aspects of students controlling thoughts and behavior in the learning process; self-regulation can help increase understanding (Doo & Bonk, 2020).

Situational Context

Situational context is why something that contains a value happens. Hence students need to study the course in this process. Lecturers can create an exciting value proposition in the learning process so that students are interested in learning the material. Value is created using explanations, and perceptions arise from apperception (Inkinen et al., 2020; Pöysä et al., 2019). Elaboration in the communication of student expected values emphasizes situational context.

Student Engagement

Learning engagement is a process in which students devote their time and efforts to participate in learning activities and participate fully in the process (Doo & Bonk, 2020; Drake et al., 2014). Students show this involvement by doing assignments and participating in active learning and participation. However, the process is not easy because it is influenced by various factors that can create conducive learning.

Student Satisfaction

Satisfaction is a comparison between expectations and the reality of students who feel satisfied, indicating that their expectations are lower than reality (Alves & Raposo, 2007). Therefore, the learning process is carried out efficiently and attractively to participate in learning activities enthusiastically.

Hypothesis Development

Previous research has examined the effect of self-regulation on student engagement (Drake et al., 2014; Perry & Steck, 2015; Sun & Rueda, 2012;). The results of face-to-face research show that self-regulation positively affects learning engagement. Self-regulation is an essential aspect of the learning process, helping students understand the processes that are important in learning activities. It is an internal process found in students to understand that learning activities are important in gaining knowledge -and leads to an activity that focuses on aspects of learning. A student will understand important aspects of learning activities if he understands the benefits provided. Self-regulation provides psychological rules for students to listen when the teacher explains and to focus on learning outcomes. Activities for self-regulation will affect student engagement. Student activity is essential to self-regulation to keep abreast of interactive learning activities. Student engagement is a part of the learning process manifested by student self-regulation, which is a process formed from students' understanding of a useful learning process. When the learning process is implemented,

students will assess the usefulness of learning activities; hence, self-regulation arises. Previous research has shown that the ability to self-regulate has an effect on student engagement. Learning activities are a continuous process; therefore, self-regulation will increase student engagement. When students have divided concentration, student engagement will not be achieved. Self-regulation activities aim to follow the learning process and students understanding the material presented.

Engagement is an achievement that is formed from the process of self-regulation, -which is a psychological process to stay focused on an action to be taken. Self-regulation limits students from engaging in other activities. Another research shows learning engagement is caused by self-regulation in the learning process (Doo & Bonk, 2020). Self-regulation directly affects student learning satisfaction (Wolters & Taylor, 2012). Self-regulation is a process within students to determine the direction of learning activities to achieve satisfaction.

H1: Self-regulation creates student engagement during online learning

H2: Self-regulation creates student satisfaction during online learning

Previous research examined the effect of situational context on learning engagement, the results of which showed a positive influence (Pöysä et al., 2019; Sun & Rueda, 2012). Inkinen et al. (2020) stated that situational context affected learning engagement. Student learning engagement was influenced by the benefits obtained when mastering the material presented by the lecturer (Alqurashi, 2019). Self-regulation is a process to ensure that learning activities can be carried out holistically. Learning activities are a process to convey knowledge cognitively and in other aspects, namely, affective and psychomotor to students. Self-regulation is a process to ensure that students focus on participating in learning activities so that students can understand the material presented. Learning activities cannot be separated from the role of students to ensure that the entire learning process is carried out optimally. Learning activities with students' participation and facilitated by teachers will make the learning process effective. Effective learning activities have implications for the satisfaction of students who gain knowledge and skills. Self-regulation plays a close and important role in the process of improving and obtaining student satisfaction.

The purpose of learning activities is to ensure that students acquire knowledge and skills so that they affect the output in accordance with the learning objectives. Self-regulation has an important role in the learning process, affecting student satisfaction. Learning activities that ensure that all students follow the whole learning holistically affect student satisfaction. When these benefits have a significant impact, students will study hard and be

involved with many contextual, situational learning processes that affect learning satisfaction. Students will obtain the expected competencies when they understand a lot of the material presented. Situational context is when students feel that the material presented has important benefits. Such encourages students to be actively involved in the learning process so that the activities carried out have interactive activities between the teacher as a facilitator and students as learners. Activities carried out in a situational context are activities filled with various methods. The teacher is a facilitator, who plays an important role in bringing up the situational context, and students feel the material being taught will benefit them. Situational context is an activity that contains material and fun learning activities so that students can be actively involved in the learning process. When students are interested in participating in learning and are actively involved in the learning process, it affects student engagement. Based on the description that has been compiled, a situation that increases and stimulates students' pleasure to acquire knowledge and skills has implications for student engagement. Previous research has explored that a situational activity that can stimulate the drive to be actively involved so that there is a discussion between students and teachers related to knowledge and skills will have implications for student engagement. Based on the description that has been compiled, a situation that increases and stimulates students' pleasure to acquire knowledge and skills has implications for student engagement.

Situational context is a situation that increases student interest in participating in the learning process as a whole. Students focus on learning activities that aim to increase knowledge and skills. Situational context cannot be separated from Bloom's taxonomy, which consists of cognitive, affective and psychomotor aspects. Activities carried out in learning based on situational context are oriented to student interest and to create active involvement. Activities carried out actively lead to a process that increases engagement and affects student satisfaction. Situational context increases student enjoyment in the material presented, which is then easy to understand.

The description related to the situational context indicates that when students can be actively involved in the learning process, it affects student satisfaction. Situational context is a situation that requires the active involvement of students; hence, the teacher as a facilitator is encouraged to facilitate fun learning activities. Activities based on students' enjoyment will make it easier to accept the knowledge conveyed by the teacher. The ease in the learning process contained in the situational context affects student satisfaction.

Student engagement is an achievement that indicates that learning activities can be carried out effectively.

Activities carried out effectively will lead to an achievement process that students are actively involved and understand the material presented. Student engagement is a positive achievement so that students can obtain material and other matters related to learning activities and the desired output.

H3: Situational context generates student engagement during online learning

H4: Situational context generates student satisfaction during online learning

Learning engagement is one of the essential aspects to determine learning success. It is when students actively discuss and participate in every learning activity so that there is knowledge acquisition gained through the process. Learning engagement is determined by several aspects, one of which is self-regulation, when students can control themselves in the learning process to focus on understanding the material presented, thus encouraging learning involvement and satisfaction (Sun & Rueda, 2012). Student engagement is a process that aims to instill cognitive, affective and psychomotor aspects so that students can obtain learning outputs following the objectives. The learning activities carried out have an aspect that they want to do, namely, providing a comprehensive understanding to students so that it can create an attachment between students and fun learning activities. Student engagement indicates that students are actively involved in teacher-facilitated learning activities. These learning activities indicate that students have fun activities, and are actively involved in the entire learning process, which aims to provide comprehensive knowledge and skills. Student engagement affects student satisfaction. When students have the desired achievement, it affects satisfaction in the learning process. Learning activities have implications for satisfaction so that students who get aspects of learning in accordance with their goals will bring satisfaction to the learning process. Student engagement has a close relationship with the satisfaction of the learning process, indicating that students acquire knowledge and skills according to expectations. Satisfaction is the difference between expectations and reality in the learning process received by students. Fun learning activities will have a positive implication for students in learning activities. This satisfaction is obtained when students have been able to master the material presented and are following the expected competencies. In addition, learning engagement can be influenced by the situational context at the time. Students feel that the benefits of the material delivered by the lecturer have a vital influence on encouraging the emergence of a positive situational context, create learning engagement and student satisfaction (Pöysä et al., 2019). Therefore, it can be concluded that learning engagement mediates self-regulation, situational context on student satisfaction.

H5: Student engagement mediates self-regulation towards student satisfaction during online learning

H6: Student engagement mediates situational context towards student satisfaction during online learning

Methodology

This research was conducted at several universities in Indonesia that carry out the online learning process. The sampling process was by distributing online questionnaires that students filled out, which as many as 141 students did, and through screening, 134 respondents' data were eligible for testing. Research variables were self-regulation, situational context, student engagement, and student satisfaction. The strategy used in the research was to distribute questionnaires to students who followed the material until the completion of the questionnaire distribution process, which was to measure the level of student satisfaction with the material.

Result

Validity and Reliability

Based on validity and reliability results in [Table 1](#), all indicators and variables meet the criteria (CFA ≥ 0.3 and Cronbach Alpha ≥ 0.7)

[Table 2](#) shows the examination result. All hypotheses are supported except student engagement's influence on student satisfaction.

Model fit in [Table 3](#) depicts reasonable and moderate model fit. Therefore, the model is feasible, as represented in [Figure 1](#).

Table 1 Validity and Reliability Result

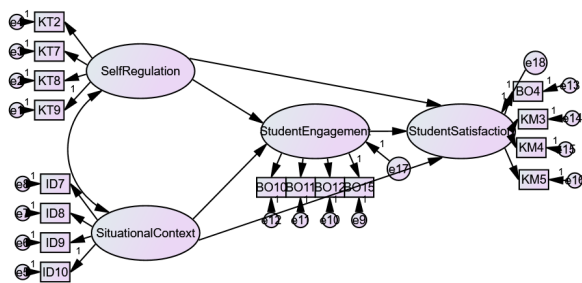
Variable	Indicator	CFA	Cronbach Alpha
Self-Regulation	SR1	.757	0.891
	SR2	.773	
	SR3	.859	
	SR4	.856	
Situational Context	SC1	.673	0.865
	SC2	.845	
	SC3	.829	
	SC4	.737	
Student Engagement	SE1	.691	0.807
	SE2	.728	
	SE3	.787	
	SE4	.632	
Student Satisfaction	SS1	.648	0.722
	SS2	.702	
	SS3	.674	
	SS4	.546	

Table 2 Regression Test Result

Variables	Estimate	S.E.	C.R.	<i>p</i>
Self Regulation → Student Engagement	0.321	0.079	4.063	***
Situational Context → Student Engagement	0.474	0.125	3.784	***
Student Engagement → Student Satisfaction	0.313	0.095	3.304	***
Self Regulation → Student Satisfaction	0.040	0.046	0.875	.382
Situational Context → Student Satisfaction	0.397	0.104	3.805	***

Table 3 Model Fit

Model Fit	Value
Chi-square	190.12
CMIN/DF	1.940
GFI	0.862
AGFI	0.808
CFI	0.924
RMSEA	0.83

**Figure 1** Research Framework

Discussion

The results show self-regulation positively affecting student involvement in the learning process; this indicates that the learning process is carried out due to positive self-regulation from students. Self-regulation can encourage active and participatory involvement and encourages an active learning process. The learning process will provide an understanding of the material and increase competence (Schraw et al., 2006; Wolters & Taylor, 2012). Students understand that self-regulation will provide positive benefits for involvement in the classroom in the online learning process (Lichtinger & Kaplan, 2011). The study proves that self-regulation does not directly affect student satisfaction. Self-regulation needs student engagement to achieve such. The research indicates that student satisfaction can be achieved by obtaining helpful material because the students have been actively involved in the learning process.

The results show that self-regulation is important in making students focus on student engagement. The psychological aspect is an essential aspect of learning activities. Psychological aspects emphasize students participating in learning activities comprehensively. Self-regulation is an aspect that arises from within students to

participate in learning activities as a whole, raising the impetus for student engagement. The results of this study prove that self-regulation affects student engagement, and support previous studies that show when students have self-regulation in the psychological aspect, it affects their involvement in the overall learning process.

Self-regulation is the psychological ability to control the learning process being essential aspect; hence, students can focus on understanding the material presented. It helps students to stay active in learning activities leading to student engagement. Activities in learning are steps taken to help understand the cognitive, affective, and psychomotor aspects and have the expected output. Self-regulation provides a role in helping students understand the material presented. The process to improve the quality of learning is to provide students with an understanding that the material presented is essential so that students can improve their self-regulation. Self-regulation is proven to affect student, which indicates that when students can regulate behavior, they have a role to actively participate in learning.

The results of the study prove that situational context has an effect on student engagement. Situational context is an effort that is built to provide understanding to students that the material being taught has benefits in expertise and skills. It is an effort to help students understand material by placing that students have an interest in the learning process and helps to increase student engagement when there is material that has benefits in improving skills in the learning process. Activities to improve these skills are a form of effort to increase active learning. Activities carried out based on situational context have a role in determining student engagement.

The study's results prove that student engagement mediates the effect of situational context and self-regulation on student satisfaction. Student engagement indicates that students actively participate in the learning process and pay attention to teacher explanations. It indicates that student satisfaction can be achieved when students are actively involved in learning materials to gain comprehensive benefits and understanding. Self-regulation is an effort to help students understand the material so that they focus on explanations and the learning process. When students actively participate in learning, they are also influenced by the situational context built by the teacher. The study's results confirm that student engagement mediates the effect of self-regulation and situational context on student satisfaction.

Based on the study's results, situational context affects student engagement in the learning process. When students feel that the learning process can provide positive benefits for themselves, they will actively participate in online learning. Online learning needs to emphasize students' benefits; therefore, they can create positive situational contexts. Situational contexts have important implications; without a benefits explanation, students will not actively participate in the learning process. This study indicates that situational context has a positive effect on student satisfaction directly and student satisfaction through student involvement. The research result indicates that a partial influence occurs, so student satisfaction is influenced by two factors. Situational context indicates that when students feel that values are useful for them, it directly affects student satisfaction. Students have an important role in creating an activity and satisfaction in learning (Sun & Rueda, 2012). The results of this study indicate that student engagement has positive implications for student satisfaction. Engagement will be able to encourage the creation of satisfaction. Students actively involved in learning activities will obtain competence due to actively participating in discussions and communicating with lecturers. Discussion creates an opportunity to exchange ideas about learning material.

Conclusion

This study has succeeded in finding that self-regulation positively affects student satisfaction through student engagement. In addition, the situational context has a direct effect on student engagement and student satisfaction. The research novelty is found in the online learning process where student engagement plays a vital role; therefore, it needs to be emphasized through self-regulation. Student motivation brings up positive situational contexts, the emergence of self-regulation, and situational contexts emphasized by lecturers through apperception and insertion of material in the learning process. This study proves that student satisfaction is an indicator of learning achievements.

Suggestion

This study focuses on situational context, self-regulation, and student engagement in the learning process. In future research, motivation needs further exploration. Motivation plays an essential role in encouraging the creation of important self-regulation in the learning process. It is vital for self-regulation mechanisms and situational contexts, encouraging student engagement in learning. Motivation is also associated with expectations that will affect student satisfaction. Future research studies can explore motivation and its mechanisms in influencing these variables.

Conflict of Interest

The authors declare that there is no conflict of interest.

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