

Online Learning Quality mediated by Self-efficacy

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Abstract

This research aims to determine the influence of Learning Motivation, Cognitive, and Learning Interest on Online Learning Quality which is mediated by Self-Efficacy. This research uses primary data from a questionnaire totaling 87 students as respondents. The Likert scale is used to measure all variables, and data processing uses SEM-PLS. The research results show that Learning Motivation directly has a positive effect on Online Learning Quality, but when mediated by Self-efficacy it does not affect Online Learning Quality. Learning Motivation also has no positive effect on Self-efficacy. Cognitive, either directly or indirectly, mediated by Self-efficacy, does not affect Online Learning Quality, but Cognitive has a positive effect on Self-efficacy. Learning Interest has a positive effect on Self-efficacy and Online Learning Quality, but it does not affect Online Learning Quality when mediated by Self-efficacy. This research emphasizes the mediating role of Self-efficacy in the influence of Motivation, Cognitive, and Learning interest on Online Learning Quality.

Keywords: *Learning motivation, Cognitive. Learning interest, Self-efficacy, Online learning quality*

INTRODUCTION

The Education style and all shareholders in it have faced many more challenges since the pandemic of COVID-19. In educational institutions, there was a change from face-to-face learning to online learning (Daniel, 2020). A home learning policy was then issued by the Indonesian Government through the Ministry of Education and Culture as stated in Circular Letter Number 15 of 2020. It concerns guidelines for the implementation of home learning, which regulates the implementation of online learning activities for all levels of education as forms of application of physical distancing principles that must be applied.

Learning quality is the main target of the online learning process to increase the competence and expertise of students after the learning process (Sanjaya, 2008). Bakia, et al. (2012) also explained the importance of learning quality of online learning activities carried out via the Internet. Several challenges in online learning must be faced by both students and lecturers, including limited facilities, technical and digital competence, and human resource readiness factors (Issa & Jaaron, 2017). In his research, Elyas (2018) stated that developing e-learning is not just about presenting learning material online, but must also be communicative and interesting to increase students' interest in learning. Learning interest is needed and has an impact on improving the quality of learning. Many factors such as motivation, cognition, and self-efficacy influence the quality of the learning process to maximize the quality of online learning (Putra, B., R, et al, 2019).

Motivation is the energy of change in a person in the form of feelings and responses to a goal (Sardiman, 2012) and is a very important factor in participating in learning in general and online learning in particular. Several conditions related to motivation that cause the online learning system to be less effective are students' lack of activity in discussions, laziness in doing assignments, copying and pasting friends' answers, simple answers, attending just to meet lecture attendance requirements, being lazy about opening the camera and being late for various reasons, including network issues.

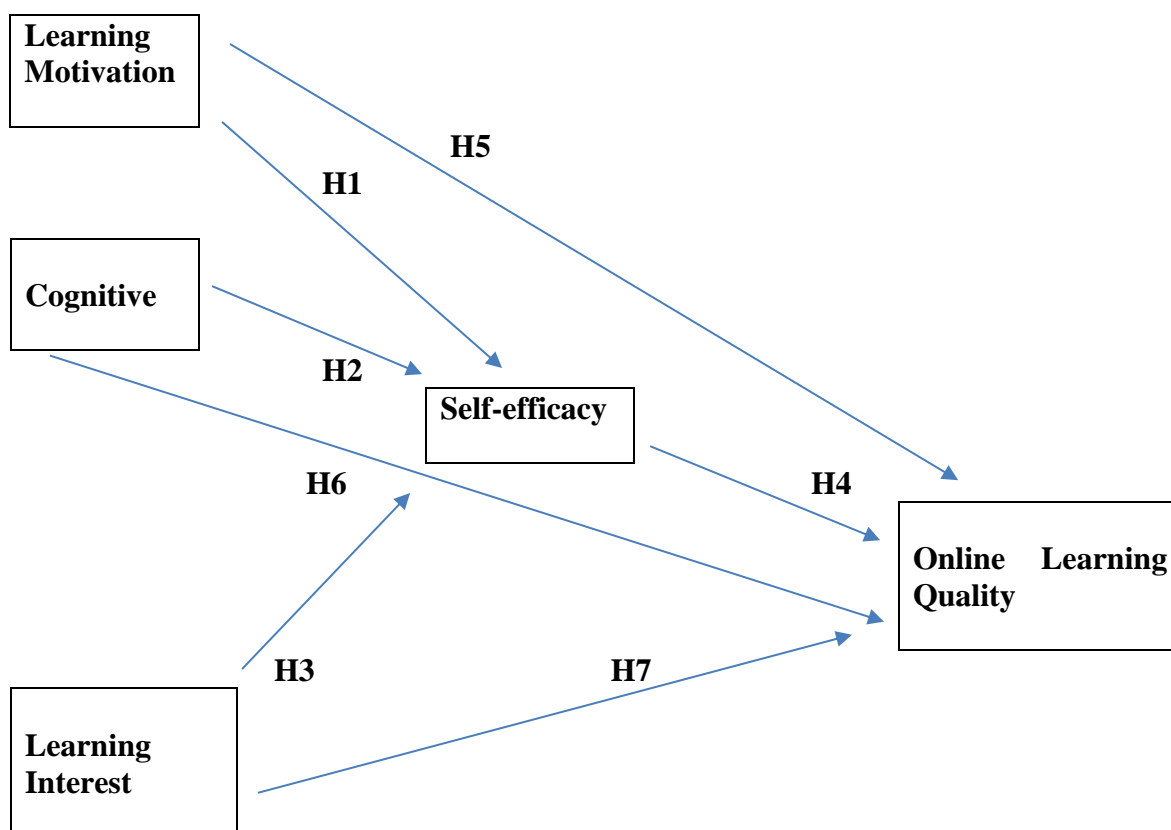
Cognitive is the ability of a person to maximize one's potency in increasing knowledge to study new ways of using information technology, and it is a factor that influences the quality of online learning (Arikunto, 2009).

Interest is a willingness of one's soul to carry out activities happily that make a change in knowledge, skills, and behavior. It is a very important aspect of the learning process which can increase attention in learning (Cheung, 2018; Lin & Huang, 2016). Attention is an important factor that can improve learning outcomes (Isnani, 2017).

Self-efficacy is the belief in abilities and a positive and optimistic attitude that can trigger the achievement of optimal learning outcomes (Hidayat & Sariningsih, 2018). Self-efficacy determines a person's choice of action, the effort expended, persistence in facing difficulties, and a person's emotional or affective experience (Maddux, 2016). With self-efficacy, a person has confidence in finding information and communicating with instructors in the e-learning system (Park, 2009). Self-efficacy is essential and it is needed to build motivation influencing a person's choices, goals, emotional reactions, efforts, and persistence (Sawang et al., 2013). The higher a person's level of self-efficacy, the stronger his confidence and commitment to completing certain tasks to achieve goals. He will see difficulties more as challenges (Bratkovič et al., (2017).

This research is a hypothesis test to know how Learning Motivation, Cognitive, and Learning Interest affect Online Learning Quality mediated by Self-Efficacy.

Research Conceptual Framework



RESEARCH METHODS

The design of this research is hypothesis testing analyzing certain relationships or interdependence of two or more factors in one situation (Hermawan and Kristaung, 2014). The technique used for collecting data is using Google form questionnaires which measure the variables of Learning motivation, Cognitive, Self-efficacy, Learning interest, and Online learning quality. All statement items used in the questionnaire were based on previous research conducted by Putra, et. Al (2019) and were prepared to test the relationship between these five variables.

The 5 Likert scale was used with answer choices that range from strongly disagree to strongly agree. The validity test is used to measure whether the questionnaire used is valid or not (Ghozali, 2011). For data quality tests, validity and reliability tests are carried out indicating that Cronbach's alpha value is declared reliable if it is greater than 0.60 (Sekaran & Bougie, 2016). The measurement results of all questionnaire items are valid because the factor loading is more than 0.35 (Hair et al., 2010). Cronbach's Alpha showed results for Learning motivation 0.804, Cognitive 0.755, Self-efficacy 0.816, Learning interest 0.831, and Online learning quality 0.871.

Validity testing is carried out using Construct Validity and Content Validity. Construct Validity concerns understanding the theoretical arguments that underlie the measurements obtained and shows how well the results obtained from using a measurement are by the theory. Construct Validity testing was carried out using Confirmatory Model Analysis (CFA) with Convergent Validity criteria (Hair et al. 2014). Convergent Validity tests indicators of a latent construct that must converge or share high variance. The factor loading of each construct indicator shows a Convergent Validity assessment (Ghozali and Latan, 2015).

For data analysis, this research uses descriptive statistics and SEM-PLS with AMOS 22. Descriptive statistics are used to analyze all research variables which include Learning motivation, Cognitive, Self-efficacy, Learning interest, and Online learning quality. Meanwhile, SEM-PLS is used to analyze the influence of Learning motivation, Cognitive, and Learning interest on Online learning quality which is mediated by the Self-efficacy variable. The unit of analysis is for undergraduate students of the Economics and Business Faculty, Universitas Trisakti.

RESULT AND DISCUSSION

The number of respondents who participated was 87 people, 51 men (58.6%) and 36 women (41.4%). For age characteristics, 72 students (82.8%) were aged between 18-19 years; 10 students (11.5%) aged between 20-21 years; 4 students (4.6%) aged between 22-23 years; 1 student (1.1%) is > 25 years old. Based on majors, there were 23 students majoring in accounting (26.4%) and 64 students majoring in management (73.6%). Furthermore, based on semester, there were 78 people (89.7%) in semester 1; 3 people (3.4%) in semester 3; 1 person (1.1%) in semester 4; 3 people (3.4%) in semester 7; 2 people (2.3%) in semester >8. Lastly, based on class, there were 2 people (2.3%) of 2017/2018 academic year; 2 people (2.3%) of 2018/2019 academic year; 2 people (2.3%) of 2019/2020 academic year; 11 people (12.6%) of 2020/2021 academic year; and 70 people (80.6%) of 2021/2022 academic year.

The results of the analysis show for the Learning Motivation variable students are always ready and enthusiastic to take part in online lectures as seen from the mean value of 3.8046 where the minimum value is 1.00 and the maximum value is 5.00. With a mean value of 3.8046, it means that the respondent's answer to the question asked is in agreement with the deviation of the respondent's answer from the average value (standard deviation) of 0.84687. Likewise, other question items produce the answers that students always plan well (mean of

3.8391 and standard deviation of 0.71322); that students want to be active in the online learning process (mean of 4.0115 and standard deviation of 0.72327); that students have high creativity for success (mean of 4.2529 and standard deviation of 0.75048); that students are aware of their weaknesses in the learning process (mean of 4.1379 and standard deviation of 0.66774); that students have a strong spirit and are not afraid to face difficulties (mean of 3.8046 and standard deviation of 0.83303); that students have a high sense of responsibility (mean of 4.1494 and standard deviation of 0.70758). Furthermore, for the Cognitive variable, it is known that students feel capable of understanding the learning material and processing existing information (mean of 3.7586 and standard deviation of 0.62813); that Students have enthusiasm for learning new things and high fighting power (mean of 4.0690 and standard deviation of 0.62493); that students have good learning achievements (mean of 3.4483 and standard deviation of 0.64264). The results also show for the online learning quality variable, that according to students, lecturers are skilled in managing classes during online learning (mean of 3.9540 and standard deviation of 0.68042); that lecturers respond quickly to questions, difficulties or learning problems faced by students (mean of 4.0345 and standard deviation of 0.70626); that lecturers master the material taught to students and are fair (mean of 4.1494 and standard deviation of 0.65643); that lecturers motivate students in the online learning process (mean of 4.0115 and standard deviation of 0.73917); that students can communicate with lecturers and friends easily in the online learning process (mean of 3.8736 and standard deviation of 0.71210); that students can access learning materials easily (mean of 4.0460 and standard deviation of 0.68042). Furthermore, for the Self-efficacy variable, it is known that students feel they have high self-confidence in facing difficult tasks and can solve various difficulties in tasks completely (mean of 3.6552 and standard deviation of 0.80446); that students feel confident they can complete all assignments according to their area of ability effectively (mean of 3.8506 and standard deviation of 0.60094); that students feel confident and have hope of being able to overcome various challenges in completing the tasks given (mean of 3.8621 and 0.57410). Finally, for the Learning Interest variable, it is known that students are interested in online learning methods (mean of 3.5517 and standard deviation of 1.00878); that students feel happy with online learning methods (mean of 3.5402 and standard deviation of 0.94996); that students want to actively participate in taking online classes (mean of 3.8161 and standard deviation of 0.78546); that students want to focus on paying attention and understanding the material well (mean of 4.1609 and standard deviation of 0.62643).

The result of testing H1 shows that the Learning Motivation coefficient value is 0.144, which means that if the perception of Learning Motivation increases, the perception of Self-Efficacy increases. The statistical test results show a beta sign by the proposed hypothesis, Learning Motivation has a positive effect on Self-Efficacy. Therefore, significance testing is continued. The test results show that the P-value is $0.114 (0.228/2) > 0.10$ (alpha 10%), so it rejects H1 and it is statistically concluded that learning motivation does not affect Self-Efficacy.

The result of testing H2 shows that the Cognitive coefficient value is 0.430, which means that if Cognitive perception increases, Self-Efficacy perception increases. The statistical test results show a beta sign by the proposed hypothesis, Cognitive has a positive effect on Self-Efficacy, therefore significance testing is continued. The test results show that the P-value is $0.001 (0.001/2) < 0.05$ (alpha 5%), so H2 is accepted and it is statistically concluded at a 95% confidence level that Cognitive positively influences Self-Efficacy.

The result of testing H3 shows that the coefficient value of Learning Interest is 0.142, which means that if the perception of Learning Interest increases, the perception of Self-Efficacy increases. The statistical test results show a beta sign by the proposed hypothesis, Learning Interest has a positive effect on Self-Efficacy, therefore significance testing is continued. The test results show that the P-value is $0.084 (0.167/2) < 0.10$ (alpha 10%), so it accepts H3 and it

is concluded statistically at a 90% confidence level that Learning Interest positively influences Self-Efficacy.

The result of testing H4 shows that the Self-Efficacy coefficient value is 0.034, which means that if the perception of Self-Efficacy increases, the perception of Online Learning Quality increases. The statistical test results show a beta sign by the proposed hypothesis, Self-Efficacy positively affects Online Learning Quality, therefore significance testing is continued. It can be seen from the test results that the P-value is $0.400 (0.800/2) > 0.10$ (alpha 10%), so it rejects H4 and it is statistically concluded that Self-Efficacy does not affect the quality of Online Learning.

The result of testing H5 shows that the Learning Motivation coefficient value is 0.331, which means that if the perception of Learning Motivation increases, the perception of Online Learning Quality increases. The statistical test results show a beta sign by the proposed hypothesis, Learning Motivation positively affects Online Learning Quality, therefore significance testing is continued. The test results show that the P-value is $0.012 (0.024/2) < 0.05$ (alpha 5%) so it accepts H5 and it is concluded statistically at the 95% confidence level that Learning Motivation positively influences Online Learning Quality.

The result of testing H6 shows that the Cognitive coefficient value is 0.055, which means that if Cognitive perception increases, the perception of Online Learning Quality increases. The statistical test results show a beta sign by the proposed hypothesis, Cognitive has a positive effect on Online Learning Quality, therefore significance testing is continued. The test results show that the P-value is $0.333 (0.665/2) < 0.05$ (alpha 5%) so it rejects H6 and it is statistically concluded that Cognitive does not affect Online Learning Quality.

Finally, the result of the H7 test shows that the Learning Interest coefficient value is 0.329, which means that if the perception of Learning Interest increases, the perception of Online Learning Quality increases. The statistical test results show a beta sign by the proposed hypothesis, Learning Interest has a positive effect on Online Learning Quality, therefore significance testing is continued. The test results show that the P-value is $0.005 (0.009/2) < 0.05$ (alpha 5%), so it accepts H7 and it is statistically concluded at a 95% confidence level that Learning Interest positively influences Online Learning Quality.

CONCLUSION

Based on the research results, it can be concluded as follows: (1) Learning motivation directly has a positive effect on online learning quality, but does not have a positive effect on online learning quality when mediated by self-efficacy. (2) Learning motivation has no positive effect on self-efficacy. (3) Cognitive has a positive effect on self-efficacy, but does not have a positive effect on online learning quality either directly or mediated by self-efficacy (4) Learning interest has a positive effect on self-efficacy and online learning quality, but does not have a positive effect on online learning quality when mediated by self-efficacy.

The results of this research have implications for managerial policy as a reference for lecturers and students in participating in the online learning process, namely the need for efforts to increase student motivation and interest in learning to improve the quality of learning with an online system (online learning). Likewise, increasing self-efficacy requires increasing cognitive and learning interest

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