

EXAMINATION OF ECONOMICS ATTITUDES AND ONLINE LEARNING READINESS ON LEARNING OUTCOMES

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ABSTRACT

The study aims to determine the effect of attitudes towards economics and online learning readiness on mediating the effect of attitudes towards economics on learning outcomes. The research population was active students of the Faculty of Economics and Business, Surabaya State University, in 2022/2023, with a sample size of 353 students. Quantitative research using structural equation model analysis. The results showed that attitudes towards economics and learning readiness significantly positively affected learning outcomes. In addition, online learning readiness partially can mediate attitudes towards economics on learning outcomes.

Keywords: *Attitudes towards Economics, Online Learning Readiness, Learning Outcome*

INTRODUCTION

According to Bandura's social cognitive theory, learning effectiveness is influenced by the dynamic interaction between personal, environmental, and behavioral factors known as reciprocal determinism (Bandura, 1986; Schunk & Dibenedetto, 2020; Schunk & Usher, 2019). In the context of social cognitive theory, learning outcomes are interpreted as the acquisition of new behaviors and include the development of competencies and behavioral adjustments based on social and environmental interactions (Husamah et al., 2016; Schunk & Dibenedetto, 2020).

One form of representation of personal factors in social cognitive theory is emotion (Schunk & Usher, 2019). Emotions can influence an individual's reaction to certain situations. Feelings such as happiness, sadness, anger, and fear can affect how individuals behave and interact with the environment (Schunk & Usher, 2019).

In the context of learning, learners' emotions are reflected through their attitudes towards the knowledge they learn. These attitudes can include feelings of happiness, sadness, and fear in the scientific field being learned. Research shows that attitude towards the subject matter affects learning outcomes (Garcia-

Santillan et al., 2012; Gómez-Chacon, 2000; León-Mantero et al., 2020; Veloo et al., 2014).

A positive attitude toward the knowledge learned is essential in learning (Garcia-Santillan et al., 2012; Gómez-Chacon, 2000) and a determining factor in achieving learning outcomes (Veloo et al., 2014). A positive attitude toward the knowledge learned can lead learners to success in learning (Farooq & Shah, 2008; Filade et al., 2020; Yáñez-Marquina & Villardón-Gallego, 2016).

In learning economics, students need understanding economics as a mindset in carrying out daily economic activities (Amri et al., 2020; Sachrir et al., 2023). Despite the usefulness and importance of economics in everyday life, most students find economics difficult to understand in some materials, such as market equilibrium and consumer behavior (Fitrayati et al., 2016; Hussin et al., 2017). This can lead to negative attitudes towards economics. This negative attitude can lead to low interest in learning (Steyn & Maree, 2002) and low learning outcomes (Schreiber, 2002).

Attitude towards the science studied can be measured through five indicators: pleasure, anxiety, usefulness of the knowledge studied, motivation, and confidence (Garcia-Santillan et al., 2012; León-Mantero et al., 2020). The enjoyment indicator refers to the liking of working with the studied knowledge. The anxiety indicator is the fear students manifest towards the science being studied. The confidence indicator is defined as confidence in the skills in the science being learned. The motivation indicator relates to how learners feel about learning and the usefulness of the knowledge learned. The usefulness indicator relates to the value the learned knowledge provides learners for their professional future.

In addition to personal factors, environmental factors also contribute to student learning outcomes. Environmental factors in social cognitive theory include the external social and physical environment around the individual, represented as socially modeled influences (Bandura, 1986). Environmental factors can include people, models, the environment where the individual is located, and technology (Schunk & Usher, 2019). Environmental factors in learning include teachers, friends, and the technological environment.

The Industrial Revolution 4.0 has caused a transition in learning through the application of technology. Nowadays, various educational institutions, including universities, develop online learning platforms or learning management systems in an effort to organize collaborative and participatory learning that is integrated into the development of technology and information (Andayani & Yulianah, 2022; Satyawan & Wahjoedi, 2021; Wahyono, 2019). Even some academic institutions have autonomously used LMS massively in the learning process.

One factor that plays a role in achieving learning outcomes in an online learning environment is online learning readiness (Ibrahim et al., 2002; Kim et al., 2019; Torun, 2020). Online learning readiness reflects the extent to which learners are ready to undertake learning in an online learning environment. Learners must have behavioral attributes, i.e., skills and orientation, that will prepare them to participate in online learning.

According to the law of readiness in Thorndike's Connectionism theory, learners must be ready and in good condition to succeed in learning (Islam, 2015; Rahyubi, 2012). In the context of online learning, a certain level of readiness is

required to optimize the benefits of learning (Rafique et al., 2021). The more prepared learners are to learn, the more influential the learning process will be (Dabbagh, 2007).

Students' online learning readiness level can be measured using the e-learning readiness (ELR) instrument developed by Alem et al., (2016). The developed online learning readiness scale has five indicators, which consist of (1) self-competence, (2) motivation, (3) financial, and (4) usefulness. The following is the explanation for each indicator: (a) Self-competence refers to assessing ability or skill using computer tools and the like; (b) Motivation is a psychological attribute that encourages learners to learn. Motivation is critical to maintaining learner satisfaction in the online learning environment; (c) Financial literacy in online learning is defined as the financial capability and efforts to overcome learners' financial difficulties. Financial difficulties can hinder learners' active involvement in online learning; (d) Usefulness is defined as the level of one's belief that using a particular system can optimize one's performance. In the context of online learning, usability is defined as the level of one's belief that online learning can optimize learning outcomes.

Learning readiness reflects the level of concentration and desire to learn (Shrestha & Dangol, 2019). A positive attitude towards the studied science can encourage better learning readiness, including selecting learning strategies. Negative attitudes tend to lead learners to choose learning strategies that are passive and less effective, such as simply reading notes (Schunk, 2008). A positive attitude towards economics makes learners more confident in evaluating their learning progress (Paris & Paris, 2001). Such self-evaluation can help learners to identify weaknesses and adjust more appropriate learning strategies.

Based on the description above, the hypothesis in this study is formulated as follows: (1) attitudes towards economics have a significant effect on learning outcomes; (2) attitudes towards economics have a significant effect on online learning readiness; (3) online learning readiness has a significant effect on learning outcomes; (4) attitudes towards economics significantly affect learning outcomes through online learning readiness.

RESEARCH METHODS

The research approach used is a confirmatory quantitative to explain the relationship between variables (Creswell & Creswell, 2018). This study involves exogenous and endogenous variables. The exogenous variables consist of attitude towards economics (X1) and online learning readiness (X2), while the endogenous variable is learning outcomes (Y).

The research population is academically active students until 2022/2023 at the Faculty of Economics and Business, Universitas Negeri Surabaya. The sample size was determined using the formula developed by Krejcie and Morgan (1970), and a sample size of 353 was obtained.

The instruments used consisted of tests and questionnaires. The test instrument measures the learning outcomes variable, which contains a set of questions based on economic learning indicators. The questionnaire instrument was used to measure the variables of attitude toward economics and online

learning readiness. The questionnaire instrument uses a Likert scale with a scale of 1 to 5. The questionnaire is described in Table 1.

Table 1. Research Questionnaire

Questionnaire	Indicator	Symbol	Scale
Attitude towards economics (X1) (Leo'n-Mantero et al., 2020)	enjoyment	X ₁₁	Ordinal
	anxiety	X ₁₂	
	utility of economics	X ₁₃	
	motivation	X ₁₄	
	confidence	X ₁₅	
Online learning readiness (X1) (Alem et al., 2016)	self-competence	X ₂₁	Ordinal
	motivation	X ₂₂	
	financial	X ₂₃	
	usefulness	X ₂₄	

Data analysis using Partial least square-structural equation modeling (PLS-SEM). The measurement model formed consists of three variables, namely attitude toward economics (X1), readiness for online learning (X2), and learning outcomes (Y). The stages of PLS-SEM analysis consist of (1) measurement model analysis (outer model), (2) structural model analysis (inner model), (3) goodness of fit model analysis, (4) direct effect hypothesis testing, (5) indirect effect hypothesis testing; and (6) structural model equation.

RESEARCH RESULTS AND DISCUSSION

The measurement model analysis consists of convergent validity, discriminant validity, and reliability. A construct in the measurement model is declared to have convergent validity if the loading factor value is more significant than 0.6 and the average variance extracted (AVE) value is more significant than 0.5 (Hair et al., 2017).

Table 2. Convergent Validity Test Results

Variable	Indicator	Loading Factor	AVE	Cornbach's Alpha	Composite Reliability
Attitude towards economics (X1)	X11	0.839	0.495	0.621	0.772
	X12	0.194			
	X13	0.672			
	X14	0.805			
	X15	0.797			
Online learning readiness (X2)	X21	0.874	0.608	0.780	0.858
	X22	0.792			
	X23	0.544			
	X24	0.863			

Source: data processed (2024)

The results of the convergent validity test, as presented in Table 2, show that the anxiety indicator (X12) on the attitude towards economics variable (X1) and

the financial indicator (X23) on the online learning readiness variable (X2) has a loading factor value lower than 0.6. Thus, the two indicators do not have convergent validity and are excluded from the measurement model. The convergent validity test results after excluding the anxiety indicator (X12) and financial indicator (X23) from the measurement model are presented in Table 3. Based on the data in Table 3, the loading factor value of all indicators on both variables is more significant than 0.6, and the AVE value is greater than 0.5. This shows that all indicators in the measurement model are declared to have convergent validity.

Table 3. Validity and Reliability Test Results

Variable	Indicator	Loading Factor	AVE	Cornbach's Alpha	Composite Reliability
Attitude towards economics (X1)	X11	0.842	0.612	0.786	0.863
	X13	0.678			
	X14	0.804			
	X15	0.796			
Online learning readiness (X2)	X21	0.890	0.733	0.817	0.891
	X22	0.789			
	X24	0.884			

Source: data processed (2024)

Test discriminant validity on the measurement model using the Fornell-Larcker Criterion technique by comparing the square root of the AVE of each construct with the correlation between constructs. Discriminant validity is achieved if the AVE value is greater than the square correlation of the constructs (Hair et al., 2017). The Fornell-Larcker Criterion value, as presented in Table 4, shows that the AVE value is greater than the construct square correlation. This indicates that the measurement model has discriminant validity.

Table 4. Fornell-Larcker Criterion Score

Variable	X1	X2	Y
X1	0.782		
X2	0.422	1.000	
Y	0.523	0.350	0.856

Source: data processed (2024)

The construct reliability test was conducted using Cronbach's Alpha value and composite reliability. Constructs in the measurement model are deemed reliable if Cronbach's Alpha value is more significant than 0.6 and the composite reliability value is greater than 0.7 (Hair et al., 2017). Based on the data in Table 3, Cronbach's Alpha value is more significant than 0.6, and the composite reliability value is greater than 0.7, meaning that all constructs in the measurement model are declared reliable. The measurement model is declared valid and reliable based on the results of the validity and reliability tests. The measurement model path diagram is presented in Figure 1.

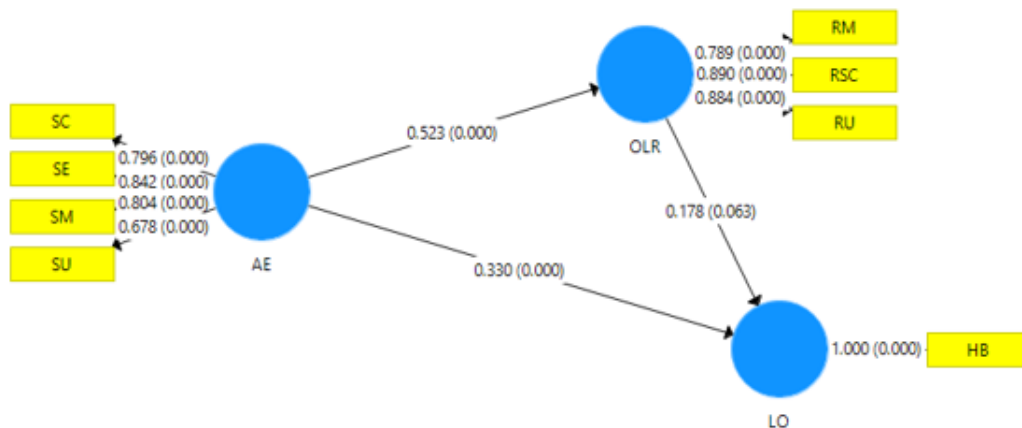


Figure 1. Measurement Model

Measurement of goodness of fit using Q-Square Predictive Relevance (Q²) and Standardized Root Mean Residual (SRMR) values. The analysis results show that the Q² value is 0.7556, meaning that attitudes towards economic science and online learning readiness contribute to overall learning outcomes at 75.56%. The SRMR value shows 0.077, which is lower than the limit of the model fit criteria, namely SRMR ≤ 0.08. Based on these two criteria, the measurement model has a moderate level of fit based on the Q² and SRMR indicators.

Table 5. Hypothesis Testing Results

Exogenous Variables	Mediating Variable	Endogenous Variable	Coefficient	T Stats.	P Values
X1	-	Y	0.330	3.752	0.000
X1	-	X2	0.523	10.554	0.000
X2	-	Y	0.178	1.865	0.063
X1	X2	Y	0.093	1.884	0.066

Source: data processed (2024)

The Effect of Attitude Toward Economics on Learning Outcomes

Hypothesis testing shows that attitude towards economics has a significant positive effect on learning outcomes. This is evidenced by the p values <0.05 and the positive coefficient value. Thus, when students have a positive attitude toward economic science, the learning outcomes are achieved. Social Cognitive Theory suggests learning occurs through dynamic interactions between individuals, the environment, and behavior. A person's attitude towards the science being studied can affect each component of this triadic. A positive attitude towards the science being studied encourages the use of more effective learning strategies, such as monitoring comprehension, managing study time, and using other metacognitive techniques. According to SCT, this attitude helps students better manage their learning process, which improves understanding and retention of the material. Students with a positive attitude are more likely to use these techniques than those with a negative attitude.

The results of previous research also prove empirically that attitudes towards the science being studied play an important role in learning (Garcia-Santillan et al., 2012; Gómez-Chacon, 2000) a determining factor in achieving learning outcomes (Veloo et al., 2014). A positive attitude towards the knowledge learned can lead learners to success in learning (Farooq & Shah, 2008; Filade et al., 2020; Yáñez-Marquina & Villardón-Gallego, 2016). Conversely, negative attitudes can lead to low interest in learning (Steyn & Maree, 2002) and low learning outcomes (Schreiber, 2002).

The Effect of Attitude toward Economics on Online Learning Readiness

Hypothesis testing shows that attitude towards economics has a significant positive effect on online learning readiness. This is evidenced by p values < 0.05 and positive coefficient values; thus when students have a positive attitude toward economic science, they higher their readiness for online learning.

Learning readiness reflects the level of concentration and desire to learn (Shrestha & Dangol, 2019). A positive attitude towards the science studied can encourage better learning readiness, including selecting learning strategies. Negative attitudes tend to lead learners to choose learning strategies that are passive and less effective, such as simply reading notes (Schunk, 2008). A positive attitude towards economics makes learners more confident in evaluating their learning progress (Paris & Paris, 2001). Such self-evaluation can help learners with weaknesses and adjust more appropriate learning strategies (Asri et al., 2017).

The Effect of Online Learning Readiness on Learning Outcomes

Hypothesis testing shows that online learning readiness has no effect on learning outcomes, as evidenced by the p values > 0.05 . This finding contradicts one of the main principles of the theory of connectionism, the law of readiness.

According to the law of readiness, technically, physically, mentally, and psychologically prepared learners will more readily associate the stimulus in online learning with the appropriate response (Shrestha & Dangol, 2019). For example, when learning economics, teachers provide a stimulus in the form of using a learning management system (LMS); students who are ready to use the LMS will provide better and more effective responses during the learning process (Syara & Andayani, 2022).

Based on the observation during the online learning process, the absence of contribution of online learning readiness to learning outcomes can be caused by educators' non-optimal utilization of LMS in the classroom. The observation results show that online learning by educators only replaces the learning mode from face-to-face learning to learning using the Zoom platform or Google Meet. So, what happens is that students only join Zoom, but there is no special treatment that encourages students to utilize the material in the class.

The Effect of Attitude Toward Economics on Learning Outcomes through Online Learning Readiness

Hypothesis testing shows that online learning readiness cannot mediate the effect of attitude toward economics on learning outcomes. This is evidenced by the p values > 0.05 . The results of the path analysis show that attitudes toward

economics affect the formation of online learning readiness. This means that students' positive attitudes can encourage the formation of online learning readiness. However, the readiness of online learning that is formed does not contribute to learning outcomes. This can happen when the online learning process implemented has not been arranged in such a way as to facilitate students' learning by optimizing online learning modes.

CONCLUSION

The findings of this study confirm the following: (1) Attitudes toward economics have a positive and significant effect on learning outcomes; (2) Attitudes toward economics have a positive and significant effect on online learning readiness; (3) Online learning readiness does not have a significant effect on learning outcomes; (4) Online learning readiness cannot mediate the effect of attitudes toward economics on learning outcomes.

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