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What Affects Students' Academic Performance and Soft Skills Based on the Community of Inquiry (CoI) Theory?

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Abstract

Students with academic performance and soft skills should be concerned with the learning process because it is a learning achievement. This research aims to find the factors affecting academic performance and soft skills. In this pandemic, learning is done online, so interaction between students and lecturers becomes limited. The quantitative data are collected by distributing the questionnaires. The population of this study is 2nd-semester students of the Faculty of Economics, *Universitas Negeri Semarang* (UNNES), who use online learning from the beginning of the lecture. The population were 900 students, with a sample of 276 students. Data were tabulated and analyzed using SEM-PLS. The results showed that cognitive presence, teaching presence, and social presence positively and significantly (57.9%) affect students' academic performance, and 49.1% affect students' soft skills. The order of factors that most affect academic performance is teaching presence (41.4%), social presence (31.1%), and cognitive presence (11.7%) whereas the order of factors that most affect soft skills is social presence (48.9%), cognitive presence (11.7%), and teaching presence (11.1%). It means that the Community of Inquiry (CoI) theory can explain the magnitude of the factors on academic performance and soft skills in the good category. It is suggested that the related parties to support students to achieve better academic performance and soft skills.

Introduction

The quality of a nation depends on the quality of its education. According to Malik (2018), quality education is the engine for modern economies. Based on the educational objectives in Indonesia as stated in Law on the National Education System (No. 20/2003), National education aims to develop capabilities and to shape the character and civilization of a dignified nation in the context of educating the nation's life. Indonesian students need to become human beings who believe and fear God Almighty and have a noble character, i.e., healthy, knowledgeable, capable, creative, independent, democratic, and responsible citizens.

The young generation plays an essential role in the efforts to progress a nation in the future. Khalik et al. (2020) state that human resource management is needed to produce quality youth. Human resource development aims to improve the quality of professionalism and skills.

National Education is organized to improve human resources in Indonesia, especially in science and technology. Education development is significant in social development efforts to increase human resources. The learning that is now carried out is adjusted to the conditions of the post- COVID-19 pandemic. Learning now utilizes technology in the learning process, such as Zoom Meeting, Google Meet, Video, and other apps to limit the spread of the COVID-19 virus.

The ubiquity of information technology and communication has significantly reshaped the structure of learning in higher education (Albrahim, 2020). It is the era of online learning; many new teaching methods, learning skills, and assessment methods have emerged to adapt to these changes. These changes represent challenges for the lecturers and students. They need to adapt to the new approaches. Students with academic performance and soft skills should be concerned with the learning process because it is a learning achievement. Learning is interacting with educators and learning resources in a learning environment that includes teachers and students exchanging information.

Based on the Community of Inquiry (CoI) theory developed by Garrison, Anderson, & Archer in 2000, there are three main elements: social presence, cognitive presence, and teaching presence affecting students' learning outcomes. Social presence is the ability of each member to learn to feel the presence of each other through social interactions that are carried out. Cognitive presence is the ability of learners to build meaningful learning through continuous communication. Then, teaching presence is the ability of a student to feel the presence of the designs of learning provided by the teachers/ lecturers.

This research aims to find the magnitude of those three (3) factors affecting academic performance and soft skills. It needs to measure academic performance and soft skills to know the achievement of the teaching-learning process.

Review of Related Literature

Community of Inquiry Theory (CoI)

The Community of Inquiry (CoI) theory was developed by Garrison, Anderson, & Archer in 2000 and derived from the work of John Dewey, which is based on a constructivist (experiential) learning approach in higher education. It has three main elements: social presence, cognitive presence, and teaching presence. The purpose of the CoI is to create a collaborative learning process; each member can be actively involved and achieve personally meaningful learning and understanding of each other (Lansangan et al., 2022).

CoI theory provides a theoretical framework for online learning to support thinking, inquiry, and discourse between educators and learners in the context of higher education. CoI theory states that developing three interrelated elements can create a deep and meaningful learning experience (constructivist collaborative). Cleveland-Innes et al. (2018:6872) describe a social, cognitive, and teaching presence framework.

The explanations of those three elements are (1) Social presence, defined as the ability of each member in online

learning to feel the presence of each other through social interactions that are carried out. The perceived presence manifests an interrelated emotional connection so all members can feel part of the learning process. Students can achieve social presence through three processes: effective communication, open communication, and group cohesion, and (2) cognitive presence, defined as the ability of learners to build meaningful learning through continuous communication. Cognitive presence can be achieved through four phases, including triggering events (stimulus), exploration, integration, and resolution, and (3) teaching presence; interpreted as a function of the design, facilities, and social-cognitive processes to achieve meaningful learning in learners characterized by learning outcomes and academic abilities. The teaching presence is achieved through three aspects: content, cognitive, and context.

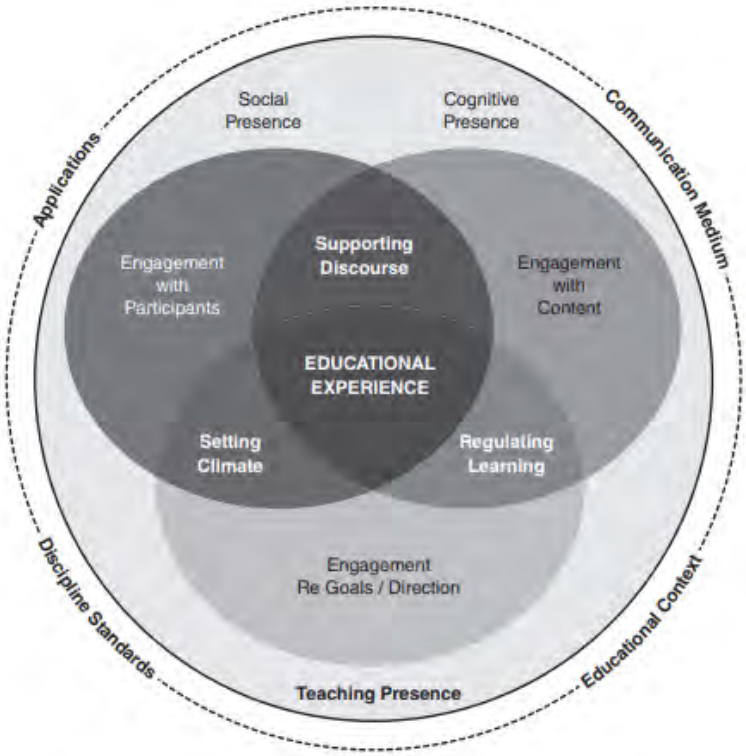

Figure 1. The Framework of Community of Inquiry
Source: Garrison, Anderson, & Archer (2000)

Shea and Bidjerano (2010:1721) criticized CoI developed by Garrison, Anderson, & Archer (2000) and included a new element in the CoI framework, learning presence. The emergence of this new element represents students' self-efficacy abilities, including metacognitive skills, motivation, and active student behavior that support student self-regulation or self-regulation in online learning.

Academic Performance

According to Suryabrata (2006), academic performance is an assessment of educational outcomes to determine how far the students' abilities are after learning and practicing. According to Bloom (Hipjillah, 2015), academic achievement is a process experienced by students to produce changes in knowledge, understanding, application, analytical power, synthesis, and evaluation.

Hipjillah (2015) argues that academic achievement is an assessment of educational outcomes through knowledge, understanding, application, analytical power, synthesis, and evaluation changes. The assessment results are based on the tests or examinations from each subject. The results are interpreted objectively and applied in the form of numbers and sentences following a specific period.

According to Kuh, Kinzie, and Buckley (Metriyana, 2014), students' academic performance can be assessed using measurements of academic achievement. There are two kinds of student learning outcomes: academic achievement as indicated by the Grade Point Average (GPA) and the development of quality of life after graduating from college or university. Following Hammond's in Metriyana (2014), GPA is the main factor determining student academic performance. Kuh, Kinzie, and Buckley in Metriyana (2014) also said that GPA scores indicate academic achievement. Thus, academic achievement is often measured by GPA.

In achieving academic performance, students are heavily affected by factors that affect them directly or indirectly. According to Ahmadi and Supriyono (2004), internal factors or factors from within the individual and external factors or factors originating from outside the individual affect academic performance. The factors consist of

a. Internal factors (physiological factors and psychological factors). Physiological factors are body health and the functioning of the five senses, especially sight, hearing, and mental health, while; psychological factors are potential factors that include intellectual and talent, as well as fundamental everyday skills.
b. External factors that affect individuals include the family environment, educational environment, community environment, group or community environment, and friends.

Soft Skills

Soft skills are also called non-technical abilities that are essential to academic abilities. According to Elfindri (2011: 67), soft skills are defined as skills and life skills, both for yourself, in groups, in society, and with the Creator. Soft skills make a person's presence more felt in the community—communication, emotion, language, group, ethics, morals, manners, and spiritual skills. Mulyono (2011: 99) states that soft skills complement hard skills. This skill is part of a person's intellectual intelligence and is often used as a condition for obtaining certain positions or jobs.

In Kusmiran (2015), Wallace stated that soft skills refer to personality traits and behavioral habits that include communication skills and knowledge of each individual. Soft skills are part of personal qualities in the form of interpersonal skills. Soft skills are very influential on one's success. Soft skills attributes or elements that need to be implemented in education include communication skills, thinking and problem-solving skills, teamwork strength, information management, lifelong learning skills, entrepreneurship skills, ethics, morals, professionalism, and leadership abilities. (Sharma, 2009).

In the world of education, soft skills are essential to be instilled in students as a provision for them to enter the world of work and society. Aribowo divides soft skills into two parts, i.e., intrapersonal and interpersonal skills (Sailah, 2008: 18); intrapersonal skills are a person's skills in self-regulation. Students should first address

intrapersonal skills before starting to relate to others. Several instruments that can measure soft skills include the Likert model, Guttman, or differential semantics by modifying the number of responses or the number of alternative answers (Widhiarso, 2009).

Table 1. The Previous Studies

No	Researchers	Titles	The Study Results
1.	Joksimović et al. (2015)	Social presence in online discussions as a process predictor of academic performance	Social presence and teaching presence are essential in improving student academic performance.
2.	Picciano (2002)	Beyond student perceptions: Issues of Interaction, Presence, and performance in an online course	Social presence affects positively and significantly academic performance.
3.	Law et al. (2019)	Student enrollment, motivation and academic performance in a blended learning environment: The mediating effects of social, teaching, and cognitive presence	Cognitive presence affects academic performance by 0.718, while social presence negatively affects academic performance by 0.212.
4.	Almasi et al. (2018)	Teaching, social, and cognitive presences and their relations to students' characteristics and academic performance in blended learning courses in a Tanzanian university	Cognitive presence, social presence, and teaching presence did not affect academic performance.
5.	Cooper et al. (2020)	Leveraging the community of inquiry framework to support web-based simulations in disaster studies	Students need to achieve soft skills and provide opportunities to reflect and discuss theory and practice in communication, situational awareness, coordination, decision making, negotiation, leadership, team building, and stress management.
6.	Li (2015)	Learning styles and perceptions of student teachers of computer-supported collaborative learning strategy using wikis	Cognitive presence addresses the acquisition of hard and soft skills, while Social Presence provides an environment that supports self-confidence and acquisition.

Method

This quantitative data were collected by distributing the questionnaires. The population of this study is a 2nd-semester student of the Faculty of Economics UNNES, who uses online learning from the beginning of the lecture. The population were 900 students, with a sample of 276 students. Data were tabulated and analyzed using SEM-PLS.

Table 2. Academic Performance and Soft Skills

No	Variable	Indicators	Statements
1.	Academic Performance (Y1) (Hattie & Anderman, 2020:2-3)	1. Cognitive 2. Affective 3. Psychomotor	1a. I read and studied the material before being taught by the teacher 1b. I am happy to re-learn the material that the teacher has taught 1c. I collected the assigned task before the collection deadline 2a. I ask questions and respond politely 2b. I enjoy receiving lessons from the teacher, and I pay close attention 2c. I am diligent in studying related learning materials 3a. I follow the practicum procedure carefully even though it is online 3b. I got skills as expected despite online learning 3c. The practice that I do can support my skills
2.	Soft Skills (Y2) (Ramesh & Ramesh, 2010:5)	1. Attitude/ ethics	1a. I solve problems based on data and facts in the field calmly 1b. I do not feel pressured when I get a larger portion of the task than others 1c. I accept criticism and suggestions from others before making a decision
		2. Communication	2a. When in a new environment, I initiate conversation with other people 2b. I dare to appear in public to express my opinion 2c. I dare to ask if I do not understand what other people say 2d. I will advise other people who do not want to cooperate.
		3. Etiquette	3a. I behave politely to everyone regardless of age 3b. I speak kind words and try not to offend others 3c. I never brag about the advantages that I have 3d. I sympathize with people because of their authority and good deeds.
3.	Teaching presence (X2) (Akyol, Zehra., & Garrison, 2016)	1. Setting Curriculum & 2. Methods Shaping 3. Constructive Exchange Focusing and	1a. I am motivated to explore more deeply related to the content of the study. 1b. The topics taught always interest me to find out 2a. Learning activities help me to find solutions to every problem 2b. I can appreciate every difference in online learning 2c. Studying relevant material helps me solve problems

			Resolving Issues	3a. I can provide solutions to every topic/problem 3b. Learning reflections and discussions help me understand the basic concepts of a lesson.
4.	Cognitive Presence (X1) (Akyol, Zehra., & Garrison, 2016)	1. 2. 3. 4.	Sense of Puzzlement Information Exchange Connecting Ideas Applying new Ideas	1a. My lecturer always communicates/explains the learning topic. 1b. Lecturers always share learning objectives. 2a. My lecturer always conveys the due date/time for submission of assignments 2b. My lecturer guides me until I understand a subject matter. 2c. My lecturers try to involve students in active discussions 3a. Lecturers encourage to explore new things in a learning material 3b. My lecturers always focus the discussion on relevant issues in the learning material. 4a. My lecturers always provide feedback promptly (responsive) 4b. My lecturers provide helpful input to understand my weaknesses and strengths.
5.	Social Presence (X3) (Yen & Tu, 2008)	1. 2. 3. 4.	Social Context Privacy Interactivity Online Communication	1a. Messages sent through online learning media are a form of social communication 1b. Messages sent through online learning media can represent feelings or emotions 1c. I can build social relationships and care more about others in technology-mediated learning 1d. I can build trust with others in technology-mediated learning 2a. I use online learning media to protect my personal information. 2b. It is unlikely that other people can get personal information about my data through the online learning media that I use 2c. It is impossible for other people to divert (fake) the messages I send through the online learning media I use. 3a. My friends usually respond to messages I send through online learning media immediately 3b. I am happy to participate, even though I am unfamiliar with the discussion topic.

	3c. I feel comfortable with other members' communication styles in technology-mediated communication. 4a. It is effortless to express what I want to communicate through online learning media 4b. I have good keyboard skills that allow me to feel comfortable when participating in sending online learning media messages

Results

The data were tabulated and analyzed with SEM-PLS (PLS) 3.0 program. There are 2 (two) stages of the analysis, i.e., the outer model and the inner model.

Outer Model Test (Measurement Model)

Structural Equation Modeling (SEM) analysis with Smart PLS has three criteria for assessing the outer model: convergent validity, discriminant validity, and reliability testing.

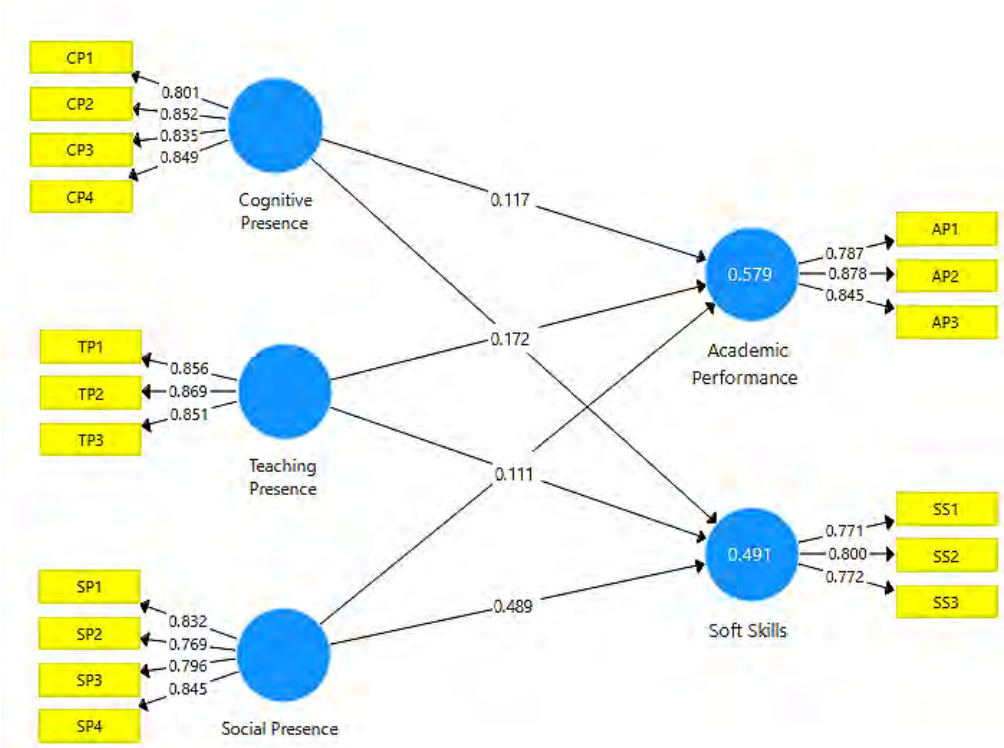

Figure 2. Outer Model (Measurement Model)

Convergent Validity

The outer loading and the Average Variance Extracted (AVE) test the convergent validity. An indicator in the construct is considered to meet convergent validity, categorized as good if the outer loading value is > 0.7 and the

AVE value is > 0.5 (Abdillah & Hartono, 2015:196). It is in line with the opinion of Henseler et al. (2009: 299), which explains that the AVE value must be > 0.5. Thus, this study uses a minimum limit of 0.7 for the outer loading value.

Table 3. Outer Loading of Each Indicator of the Variables

Variables	Indicators	Outer Loadings	Level of Convergent Validity	Notes
Academic	AP1	0.787	0.7	Valid
Performance (Y_1)	AP2	0.878	0.7	Valid
	AP3	0.845	0.7	Valid
	SS1	0.771	0.7	Valid
Soft Skills (Y_2)	SS2	0.800	0.7	Valid
	SS3	0.772	0.7	Valid
Cognitive Presence	CP1	0.801	0.7	Valid
(X_1)	CP2	0.852	0.7	Valid
	CP3	0.835	0.7	Valid
	CP4	0.849	0.7	Valid
Teaching Presence	TP1	0.856	0.7	Valid
(X_2)	TP2	0.869	0.7	Valid
	TP3	0.851	0.7	Valid
Social Presence (X_3)	SP1	0.832	0.7	Valid
	SP2	0.769	0.7	Valid
	SP3	0.796	0.7	Valid
	SP4	0.845	0.7	Valid

Source: Processed Primary Data, 2021

Table 3 states that the outer loading on each research variable indicator shows that the outer loading value is above 0.7. It means that the indicators in the research construct are valid or meet the assumption of convergent validity to measure the research variables. Furthermore, to assess convergent validity, it can also be seen in the Average Variance Extracted (AVE) value for each research variable. The researcher used the AVE value > 0.5 as the minimum limit. Table 4 presents the results of the AVE on the research variables.

Table 4. Result Average Variance Extracted (AVE)

Variable	Nilai AVE	Taraf AVE	Notes
Academic Performance (Y_1)	0.701	0.5	Valid
Soft Skills (Y_2)	0.611	0.5	Valid
Cognitive Presence (X_1)	0.696	0.5	Valid
Teaching Presence (X_2)	0.737	0.5	Valid
Social Presence (X_3)	0.658	0.5	Valid

Source: Processed Primary Data, 2021

Table 4 shows that the AVE value of each research variable is > 0.5. It means that the research variable meets the rule of thumb AVE > 0.5; it is stated that the research variable can become a good research construct.

Discriminant Validity

Besides convergent validity, construct validity is also equipped with discriminant validity tests. The discriminant validity test can be seen from the cross-loading value. An indicator is to meet discriminant validity if the value of the cross-loading indicator in one variable is > 0.7 (Abdillah & Hartono, 2015:196). It utilizes a minimum limit of 0.7 for the value of cross-loading. Table 5 shows that the value of the cross-loading indicator for each variable is > 0.7. It means that the cross-loading value meets the rule of thumb and the assumption of discriminant validity > 0.7; it means the statements of the variables can be used as a good research instrument.

Table 5. Result Cross Loading

Indicator	Variables				
	Academic Performance	**Cognitive Presence**	**Social Presence**	**Soft Skills**	**Teaching Presence**
AP1	0.787	0.434	0.475	0.474	0.530
AP2	0.878	0.550	0.600	0.553	0.624
AP3	0.845	0.624	0.582	0.520	0.637
CP1	0.563	0.801	0.502	0.475	0.680
CP2	0.512	0.852	0.507	0.446	0.656
CP3	0.511	0.835	0.540	0.466	0.668
CP4	0.565	0.849	0.578	0.517	0.659
SP1	0.549	0.605	0.832	0.571	0.606
SP2	0.518	0.495	0.769	0.479	0.539
SP3	0.467	0.462	0.796	0.500	0.475
SP4	0.607	0.505	0.845	0.618	0.552
SS1	0.505	0.449	0.482	0.771	0.445
SS2	0.463	0.380	0.604	0.800	0.402
SS3	0.482	0.518	0.484	0.772	0.507
TP1	0.683	0.675	0.646	0.545	0.856
TP2	0.605	0.666	0.544	0.508	0.869
TP3	0.540	0.723	0.526	0.415	0.851

Source: Primer Data Processed, 2021

Reliability Test

Structural Equation Modeling (SEM) with Smart PLS also requires reliability assumptions to measure the internal consistency of the measuring instrument. The reliability test in Smart PLS uses two methods, i.e., Cronbach's Alpha and composite reliability. Cronbach's Alpha measures the lower limit of the reliability value of a construct.

Meanwhile, composite reliability measures the actual value of the reliability of a construct. The rule of thumb of Cronbach's Alpha and composite reliability values > 0.7 (Abdillah & Hartono, 2015:196). However, Hair et al. (2011:145) stated that the value of 0.6 is still acceptable, so this study used a minimum limit of 0.6 to test Cronbach's Alpha. Table 4. presents the results of Cronbach's Alpha of each research variable.

Table 6. Cronbach's Alpha Research Variable

Variable	Cronbach's Alpha	Tarraf of Cronbach's Alpha	Notes
Academic Performance (Y_1)	0.787	0.6	Reliable
Soft Skills (Y_2)	0.681	0.6	Reliable
Cognitive Presence (X_1)	0.854	0.6	Reliable
Teaching Presence (X_2)	0.823	0.6	Reliable
Social Presence (X_3)	0.827	0.6	Reliable

Source: Processed Primary Data, 2021

Table 6 shows that each variable's Cronbach's Alpha value is > 0.6, which means the research variable is feasible as a consistent measuring tool for the study. These results indicate that each variable has good composite reliability. The research variables are declared reliable and have a consistent construct.

Inner Model Test (Structural Model)

The inner model or structural model test is used to determine the effect of the construct. The inner model test was analyzed using R-Square, Q-Square, and t-test for the significance value.

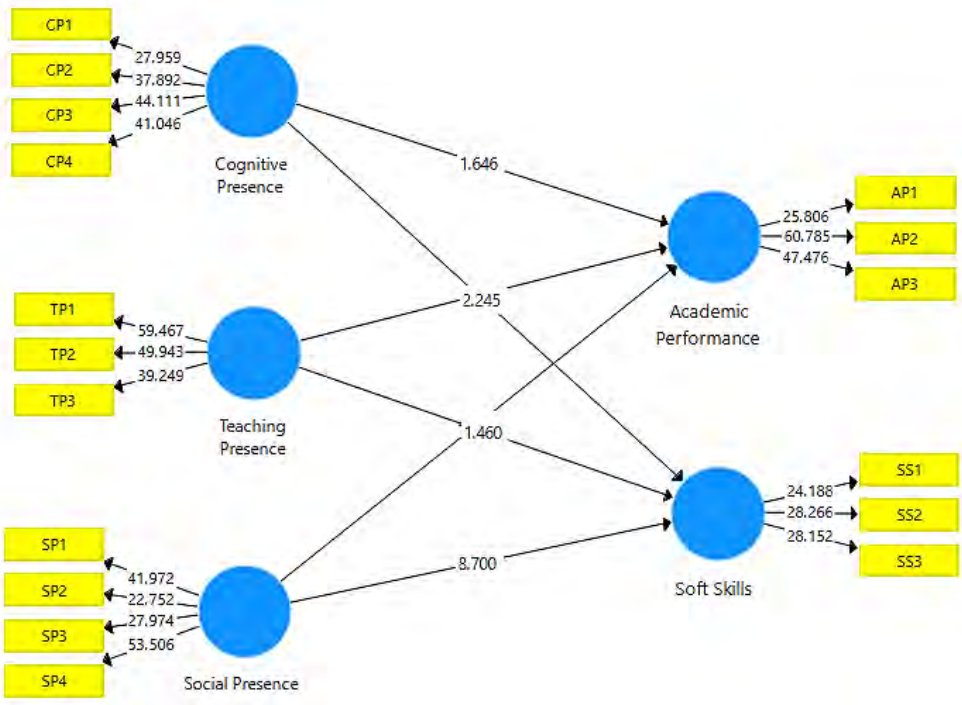

Figure 3. Inner Model (Model Measurement)

R-Square (R^2) Test

R-Square describes the relationship between latent variables based on the theory evaluated by the dependent construct. The value of R^2 indicates the goodness of fit. The higher the R^2 value, the better the construct (Abdillah & Hartono, 2015: 197). R-Square with a value > 0.67 is considered good, and R-Square with a value > 0.33 is moderate or sufficient. Meanwhile, R-Square with a value of < 0.19 is deemed weak (Ghozali, 2014:41). Table 6. presents the results of the R-Square (R^2) test as follows:

Table 7. Result of R-Square Test (R^2)

Variable	R-Square	Adjusted R-Square	Criteria
Academic Performance	0.579	0.574	Good
Soft Skills	0.491	0.485	Good

Source: Processed Primary Data, 2021

Table 7 shows that the R^2 of the academic performance construct is 0.579, which means that the percentage of the academic performance described by other constructs is 42.1, explained by other variables outside the research model. It shows that R^2 is considered a good category because it has values of > 0.33 and < 0.67. Furthermore, the value of R^2 on the soft skills construct is 0.491, which means that the percentage of the number of soft skills explained by other variables outside the study is 50.9%. R^2 is considered a good category because it has values of > 0.33 and < 0.67

Q-Square Test

Q-Square, or predictive relevance, measures how well the model and its parameter estimates generate the observed values. A Q-Square value above zero indicates that the model has good predictive relevance and vice versa (Abdillah & Hartono, 2015:201). The results of the Q-Square test on the academic performance variable can be seen as follows:

Q^2 Academic Performance $= 1\ (1 \times 1^2)\ (1x\ R^2)$

$= 1\ (1 \times 0.579)\ (1 \times 0.574)$

$= 1\ (0.421)\ (0.426)$

$= 1\ (0.179346) = 0.820654$

Based on the calculation, we know that the value of the Q^2 academic performance variable is 0,820654. The number > 0 (now), so the research model of academic performance has a good predictive relevance:

Q^2 Soft Skills $= 1\ (1 \times R1^2)\ (1 \times R^2)$

$= 1\ (1 \times 0.491)\ (1 \times 0.485)$

$= 1\ (0.509)\ (0.515)$

$= 1\ (0.262135) = 0.737865$

Based on the calculation, we know that the value of Q^2 soft skills is 0.737865. This number is > 0 (now), so this research model has an excellent predictive relevance.

Hypotheses Testing

Hypotheses testing in this research can be seen based on p-value and total effect to know the impact of a variable.

Table 8. Total Effect

Variable	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic	P Values	H	Notes
Cognitive Presence -> Academic Performance	0.117	0.119	0.071	1.646	0.100	H1	Rejected
Cognitive presence -> Soft Skills	0.172	0.172	0.077	2.245	0.025	H2	Accepted
Social Presence -> Academic Performance	0.311	0.310	0.062	4.982	0.000	H3	Accepted
Social presence -> Soft Skills	0.489	0.486	0.056	8.700	0.000	H4	Accepted
Teaching Presence -> Academic Performance	0.414	0.416	0.080	5.168	0.000	H5	Accepted
Teaching presence -> Soft Skills	0.111	0.117	0.076	1.460	0.145	H6	Rejected

Source: Processed Primary Data, 2021

Table 8 shows the total effect of the effect between research variables, and it can be explained as follows:

H1: Cognitive Presence has a positive and insignificant effect on academic performance.

The total effect table shows that P-value is 0.100 > 0.05 with a significance level of 0.05. The original sample value (estimate) is 0.117, which means a positive effect of 11.7% cognitive presence on academic performance. It implies that hypothesis H1 is rejected.

H2: Cognitive Presence has a positive and significant effect on soft skills.

The total effect table shows that the P-value is 0.025 < 0.05 with a significance level of 0.05. The original sample value (estimate) is 0.172, which means a positive effect of 17.2% cognitive presence on soft skills. It implies that hypothesis H2 is accepted.

H3: Social Presence has a positive and significant effect on academic performance.

The total effect table shows that the P-value is 0.000 <0.05 with a significance level of 0.05. The original sample value (estimate) is 0.311, which means a positive effect of 31.1% social presence on academic performance. It implies that hypothesis H3 is accepted.

H4: Social Presence has a positive and significant effect on soft skills.

The total effect table shows that the P-value is 0.000 <0.05 with a significance level of 0.05. The original sample value (estimate) is 0.489, which means a positive effect of 48.9% social presence on soft skills. It implies that hypothesis H4 is accepted.

H5: Teaching presence has a positive and significant effect on academic performance.

The total effect table shows that the P-value is 0.000 <0.05 with a significance level of 0.05. The original sample value (estimate) is 0.414, which means a positive effect of the teaching presence of 41.4% on academic performance. It implies that hypothesis H5 is accepted.

H6: Teaching presence has a positive and insignificant effect on soft skills.

The total effect table shows that P-value is 0.145 > 0.05 with a significance level of 0.05. The original sample value (estimate) is 0.111, which means a positive effect of 11.1% teaching presence on soft skills. It implies that hypothesis H6 is rejected.

Discussion

Students' academic performance and soft skills must be a concern in learning because they are learning outcomes. As expressed by R-Square and Q-Square above, the study results are empirical evidence that this research model is good in measuring the research themes. The study results indicate that from six (6) proposed hypotheses, four (4) are accepted, and two (2) are rejected.

The Effect of Teaching Presence, Social Presence, and Cognitive Presence on Academic Performance

Based on the research results shown in table 8, the order of constructs that have the most significant direct effect on academic performance is:

1. Teaching presence of 41.4%
2. The social presence of 31.1%
3. Cognitive presence of 11.7%

The constructs of cognitive presence, teaching presence, and social presence can examine academic performance in students. Kuh, Kinzie, and Buckley (Metriyana, 2014) suggest that student academic performance can be assessed using measurements of academic achievement. There are two types of student learning outcomes; academic achievement as indicated by the Grade Point Average (GPA) and the development of quality of life after graduating from college. The most influential factor on academic performance is the teaching presence of 41.4%. Teaching presence is a driving factor in improving students' academic performance. Teaching presence is directly related to the design, facilitator, and director in the learning process (Anderson et al., 2001). If the teaching presence improves, it will increase academic performance in students positively and significantly.

The study results follow research conducted by Ke (2010), which suggests that teaching presence makes students more active in thinking about learning content and involvement in student learning discussions to increase the learning effectiveness and learning achievement directly. Joksimović et al. (2015) also support the research results, which state that teaching presence has an essential role in improving student academic performance.

The study result also follows the Community of Inquiry (CoI) theory proposed by Garrison, Anderson, and Archer (2000). It states that the main element of this theory is teaching presence which is interpreted as a function of design, facilities, and social-cognitive processes to achieve Meaningful learning in students is marked by learning

outcomes and academic abilities, so it is directly related to the academic performance variable which is the criterion variable in this study. The second most significant factor is social presence, which means individual perceptions of the quantity and quality of interpersonal communication in an online learning environment (Reio & Crim, 2013:122). Social presence affects students' academic performance when learning online because the individual's ability to communicate interpersonally with lecturers and friends increases students' academic knowledge. When students have good social presence skills, they can work together with friends when getting assignments and can communicate with lecturers when there are academic difficulties when learning online.; it means if the social presence improves, it will increase academic performance in students positively and significantly.

The study results follow the research by Richardson et al. (2017), which found a positive average correlation between social presence and satisfaction and between social presence and perceived learning. They also stated that there were a significant and positive effect of social presence on academic performance. Academic performance can form from perceived learning and learning satisfaction.

Furthermore, this study also supports the results of Joksimović et al. (2015), which state that social presence has a vital role in improving student academic performance. Then, research by Picciano (2002) also suggests that social presence is positively and significantly related to academic performance. The study follows the Community of Inquiry (CoI) theory by Garrison, Anderson, & Archer (2000), which states that one of the main elements of this theory is social presence. Students with excellent social presence can interact more quickly when learning online, directly affecting the academic performance variable. Then the third is the cognitive presence which is the ability of students to build meaningful learning through continuous communication. Students can achieve cognitive presence through four phases: triggering events (stimulus), exploration, integration, and resolution (Cleveland-Innes et al., 2018: 6872).

The study results show that cognitive presence has a positive effect of 11.7%, occupying the lowest effect on academic performance. Furthermore, the effect of cognitive presence on academic performance can be seen from the P-value of 0.100 > 0.05 and the t statistic of 1.646 < 2,000, which indicates that this hypothesis has no significant effect. Cognitive presence has a positive but insignificant effect on academic performance.

The study results support the research conducted by Almasi et al. (2018), which suggests that cognitive presence does not affect academic performance. However, the study results contradict the research conducted by Galikyan & Admiraal (2019), which stated that a certain level of cognitive presence was related to student academic performance, as well as research conducted by Law et al. (2019), which noted that cognitive presence affected students' academic performance for 0.718. Based on the explanation above, it can be concluded that, in online learning, the lecturer plays an active role and monitors students' academic development by providing optimal teaching presence. Students can interact and communicate interpersonally well, and it will affect learning outcomes in the form of increased student academic performance and otherwise.

The research model of Academic Performance formed an R-square of 0.579 or 57.9% (Good Category); which

means that the research model is good in measuring online learning achievement for FE UNNES students. The study results support the research conducted by Almasi et al. (2018), which suggests that cognitive presence does not affect academic performance. However, the study results contradict the research conducted by Galikyan & Admiraal (2019), which stated that a certain level of cognitive presence was related to student academic performance, as well as research conducted by Law et al. (2019), which noted that cognitive presence affected students' academic performance. Academic performance of 0.718. Based on the explanation above, it can be concluded that, in online learning, the lecturer plays an active role and monitors students' academic development by providing optimal teaching presence. Students can interact and communicate interpersonally well. It will affect learning outcomes in the form of increased student academic performance, as well as otherwise. Overall, the Integrated Model of Academic Performance formed an R-square of 0.579 or 57.9% (Good Category). It means that the research model is good in measuring online learning achievement for FE UNNES students.

Furthermore, to measure academic achievement, the constructs of this study, i.e., cognitive attendance, teaching attendance, and Social Presence, were also used to measure soft skills in FE UNNES students. Soft skills are critical to be instilled in students as a provision for them to enter the world of work and society, where the individual can measure soft skills through communication skills, thinking and problem-solving skills, teamwork strength, information management, and lifelong learning skills, entrepreneurial skills, ethics, morals, and professionalism and leadership abilities (Sharma, 2009).

The Effects of Teaching Presence, Social Presence, and Cognitive Presence on Soft Skills

Based on Table 8, the order of constructs that have the most significant direct effect on soft skills are:

1. Social presence of 48.9%
2. Cognitive presence of 11.7%
3. Teaching presence of 11.1%

In this study, the most influential factor in students' soft skills was the social presence of 48.9%. Social Presence is an individual's ability to perceive closeness, intimacy, and group cohesion in the online space (Sung & Mayer, 2012:1739). Social Presence affects soft skills in online learning students. When individuals dare to communicate interpersonally with lecturers and friends in online learning rooms, it indirectly increases students' soft skills in speaking, thinking, and solving problems.

It is by the research grand theory, i.e., the Community of Inquiry (CoI) theory by Garrison, Anderson, & Archer (2000), which states that one of the main elements of this theory is a social presence which is defined as the ability of each member in online learning to feel the real presence of each other through social interactions carried out. When students can interact socially with lecturers and friends when learning online, it can improve their soft skills. If the social presence improves, it will positively and significantly increase students' soft skills.

The second biggest factor that affects soft skills is the cognitive presence of 11.7%. Cognitive presence is the ability of students to build meaningful learning through continuous communication (Cleveland-Innes et al., 2018:

6872). It follows the research grand theory, i.e., the CoI theory by Garrison, Anderson, & Archer (2000), which has several main elements, one of which is a cognitive presence that can be formed through continuous communication and can be achieved through four phases including triggering events (stimulus), exploration, integration, and resolution. ; it means if students can build meaningful learning through continuous communication with lecturers, friends, and their relationships in learning, it will indirectly improve students' soft skills in communicating, working in teams, and adapting to various environments. If the cognitive presence improves, it will positively and significantly increase students' soft skills.

Then, the last construct that affects soft skills is teaching presence. Garrison (2019) suggests that teaching presence begins when the teacher designs, plans, prepares and facilitates learning before and until learning continues. The study results show that teaching presence has a positive effect of 11.1%, so it occupies the lowest effect on soft skills. Furthermore, the effect of teaching presence on soft skills can be seen from the P-value of $0.100 > 0.145$ and the t statistic of $1.460 < 2.000$, which indicates that this hypothesis has no significant effect. These results show that teaching presence has a positive but insignificant effect on soft skills.

The research is consistent with the study results by Cooper et al. (2020), which suggests that the needs of students who can help life later are to achieve soft skills and provide opportunities to reflect and discuss theory and practice in communication, situational awareness, coordination, decision making, negotiation, leadership, team building, and stress management. These results are also supported by research by Li K. M (2015), which suggests that cognitive presence discusses the acquisition of hard and soft skills, while social presence provides an environment that supports the development of self-confidence and gains it. Based on the explanation, it can be concluded that there is no previous research that explicitly discusses the effect of the variables of cognitive cognitive presence, teaching presence, and social presence on soft skills. So, this is one of the novelties of this research.

The research model of Soft Skills can form an R-square of 0.491 or 49.1% (Good Category). The research model is good in measuring students' soft skills when learning online for FE UNNES students. However, the overall effect of the construct on the soft skills criterion variable has a lower effect than the overall effect on the academic performance variable. However, the difference in magnitude is only 8.2%. Implementing online learning and students' academic performance can be easier to improve, but improving students' soft skills become more difficult because online implementation hinders interaction and makes it challenging to build interactions and communication in groups.

Conclusion

Based on the study results, the results conclude that

1) Teaching presence becomes a driving factor (41.4%) in improving academic performance in students. A better teaching presence will increase academic performance in students positively and significantly.
2) Social presence affects soft skills in students (48.9%). The ability of individuals to communicate interpersonally with lecturers and friends improves students' soft skills. A better social presence will improve soft skills in students positively and significantly.

It is suggested that lecturers should vary teaching and learning to make students understand the materials easily. Then, students should communicate and interact well to reach optimal learning and teaching activities.

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