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Factors Related to Students' Satisfaction with Social Constructivist Learning Environments on the EduNext Platform

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Abstract: The outbreak of the Covid-19 pandemic along with the gradually changing educational trends facilitate the transformation from traditional learning methods to digital learning methods. Besides, student satisfaction is vital in remote education course evaluations because it is associated with the quality of online programs. Recently, the EduNext platform has been created based on Vygotsky's social constructivism (1978), which intends to provide an educational technology for socially constructive learning. The authors tested the correlation between undergraduate students' satisfaction and perceived usefulness, perceived ease of use, and factors related to cognitive presence. The participants included 186 students participating in at least a course on EduNext at a private university in Viet Nam. The instrument employed in the quantitative phase was 22 items from Technology Acceptance Model (TAM) (Davis, 1989), cognitive presence items (Garrison et al., 2010; Shea & Bidjerano, 2008; Swan et al., 2008), and student satisfaction (Ejubović & Puška, 2019). The qualitative phase used semi-structured interviews with 10 students individually to analyze and provide characteristics of the EduNext. The findings revealed that there is a correlation between student satisfaction and perceived usefulness, resolution, and triggering events. The study provides implications for students and curriculum developers. Specifically, students can express their opinions and curriculum developers can review the ideas and improve the platform better.

Keywords: Social constructivist learning, EduNext platform, student satisfaction, TAM, Cognitive presence

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Introduction

The outbreak of the Covid-19 pandemic created a 'chaos', causing activities around the world to slow down or stop altogether. Although protective measures have been implemented, the world is still not immune from the penetration of the virus completely. The education sector is also severely affected when children, students or even staff, teachers and lecturers cannot go to school. Schools at all levels must suspend face-to-face teaching activities (Dinh & Nguyen, 2020; Pokhrel & Chhetri, 2021). Besides, the complicated pandemic situation contributes to accelerating the process of changing the learning trend from traditional (face-to-face) to digital learning (Dhawan, 2020; Dinh & Nguyen, 2020; Pokhrel & Chhetri, 2021). Additionally, the technological revolution has had a great impact on many areas of human life, including education. Therefore, the expectation of implementing courses through technological devices and software is increasing (Schindler et al., 2017). Moreover, because of the overpopulation and the need for more places to study, the trend of learning from the commune has been considered, evaluated and developed for many years. Many schools have implemented online learning methods through technology devices and achieved many positive aspects (Dumford & Miller, 2018). The term online learning is now gradually becoming popular in the field of education (Singh & Thurman, 2019). Because of receiving a lot of attention, this type of education has also continuously developed and divided into many different types such as blended learning, distance education, etc. (Dhawan, 2020). Many online courses are also offered (Dumford & Miller, 2018) and with a variety of distance learning formats, access to technology devices is also widely available.

When carrying out a novel learning and teaching approach, student satisfaction is increasingly emphasized as it contributes to the assessment of the quality of the platform or curriculum. More importantly, this term has been and is a key criterion or measure for schools to assess the quality of a curriculum or learning platform (Bailey & Lee, 2010; Elliott & Shin, 2002). The developers can evaluate and gain a detailed view of improving the curriculum thanks to student satisfaction.

According to Karaksha et al., (2013) study, students grow up in the evolution of technology and are exposed to new technological achievements day by day. Therefore, students are natives of the new digital as well, they need more than traditional teaching methods, and the application of technology tools to learning and teaching brings more advantages to their learning. The study revealed that students have had a positive attitude towards the implementation of application technology into their learning.

Another factor affecting the success of distance learning is tied to the use of technology, and the TAM Model of Davis (1989) is also a typical model for evaluating the success of a technology platform. In particular, perceived usefulness and perceived ease of use are the basic and typical factors to evaluate an initial success of a platform.

The reason is that it opens up a whole new perspective on communicating, using, and learning on a new platform.

In addition to technology, cognitive presence is also a significant determinant of the quality of an online learning experience since it involves authentic methods derived from jointly creating knowledge in an online classroom. More importantly, cognitive presence is known as the key indicator of the Community of Inquiry (CoI) framework in order to support the social constructivist learning approach i.e the pivotal role in enhancing learning effectiveness. In the same vein, in a systematic review of empirical research on 30 articles about cognitive presence in online learning from 2000 to 2019, Sadaf et al., (2021) affirmed that cognitive presence makes a great contribution to the quality of online learning. The findings, however, revealed that the majority of the studies were carried out in tertiary education in the United States and Canada and quantitative research approaches were used in over half of the studies.

Recent advancements in information technology offer a number of platforms that supply constructive learning opportunities both inside and outside of the classroom. Recently, a cutting-edge educational platform named EduNext has just been created by Mr. Cao Van Viet, one of the leading figures in the EdTech sector and a specialist in leveraging technology to construct educational products at FPT Corporation (this is truly inherited and developed from CodeLearn). From the Spring semester of 2021, this platform, which intends to provide both students and teachers with a variety of educational technologies for socially constructive learning, has been used in several courses at a private university in Vietnam. Besides that, Vygot sky's social constructivism (1978)-knowledge construction occurs through social and cognitive processes – is the key foundation to constructing this platform. Thereby, relatively little research information about this platform has not been determined through many authentic studies. Therefore, the aims of this research are to identify factors that influence student satisfaction when learning through the novel platform. To fill in the blank of the research gap above, the current study is aimed to answer the following questions:

RQ1: To what extent do perceived usefulness, perceived ease of use, cognitive presence, and student satisfaction correlate with each other?

RQ2: How do perceived usefulness, perceived ease of use, and cognitive presence affect student satisfaction?

Literature Review

Constructivism

Constructivism appears to be a strict association between behavior and cognition. In other words, it is the process by which learners form their own knowledge and turn it into their own knowledge. More importantly, they have to be able to turn it from theory into practice (Amineh & Asl, 2015). Learner-centered is a principle emphasized in constructivism (Pope et al., 2005). It means that the processes of analyzing, remembering, and absorbing knowledge will be learner-centered and they are almost active people in stages to form new knowledge. According to Phillips (2000), the most popular variations of constructivism include Jean Piaget's

personal constructivism (Piaget & Inhelder, 1969) and Lev Vygotsky's social constructivism (Vygotsky, 1978).

Social Constructivism

Social constructivism is a sociological and communication theory of knowledge that looks at how people come to form their collective knowledge and understanding of the world. According to this theory, human beings collaborate to produce understanding, significance, and purpose. The assumption that people rationalize their experience by building models of how the social world works and the notion that language is the primary tool used by people to construct reality are the two key tenets of this theory (Leeds-Hurwitz, 2009). According to Vygotsky (1978), cognitive development ultimately takes place on a social level before it may happen within an individual. Making sense of people and building knowledge on such a social level enables students to relate to situations. Social constructivist researchers view learning as an operational process in which students should learn to determine data for themselves, consequently they encourage and assist learners' use of intuition and guessing (Brown, 1989). In other words, social constructivism emphasizes that reality is something that individuals cannot locate since that didn't already exist before people started constructing it in society. Furthermore, Vygotsky (1978) stated that learning is a continuous progression from the learner's current intellectual level to a higher stage that more strongly matches their capability.

Student satisfaction

Student satisfaction is an important term in assessing whether a curriculum or platform is successful. Specifically, this term can be understood as students' feelings or evaluations after experiencing knowledge from a certain service. Universities tend to use student satisfaction as a measure of their programs (Elliott & Shin, 2002; Lee, 2010). The concept of satisfaction is gradually changing with the times. Especially, in the online teaching environment, it is even more necessary to be aware of the importance of this term. Specifically, it is strongly perceived in terms of interaction, technology, and perception (Strachota, 2003).

Edunext Platform

Edunext was created by Mr. Cao Van Viet, one of the leading figures in the EdTech sector and a specialist in leveraging technology to construct educational products at FPT Corporation (this is truly inherited and developed from CodeLearn) in 2021 with the aim of providing a place where students can share their critical thinking, and interact with their peers. Moreover, students can acquire knowledge from their lecturers, their classmates, and other sources to construct their own knowledge. Besides that, the key foundation to constructing this platform is based on the social constructivist model. Figure 1 depicts the interface of this platform.

Because EduNext is developed to help students build knowledge and skills through interactive activities, personal views are encouraged to be shared and self-assessment is formed. To illustrate, Edunext has plenty of features that permit instructors to create constructive questions; Students joining the class are required to answer

the questions; Edunext also permits students to rate their classmates' answers by star voting. (which is illustrated in Figure 2). The questions are set under the form of social construction, hence the answers are always general. Teachers always comment on the answers so that students can absorb them correctly. More importantly, the Edunext platform also provides instructors with features to help them manage classes effectively. For instance, they can know which students haven't answered the questions, and which students are most active or least active.

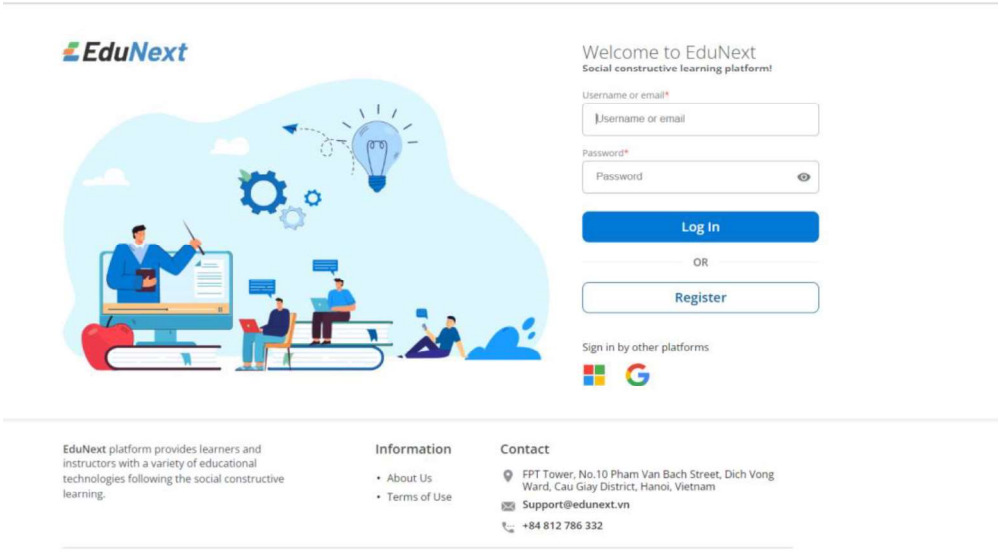

Figure 1. EduNext's interface

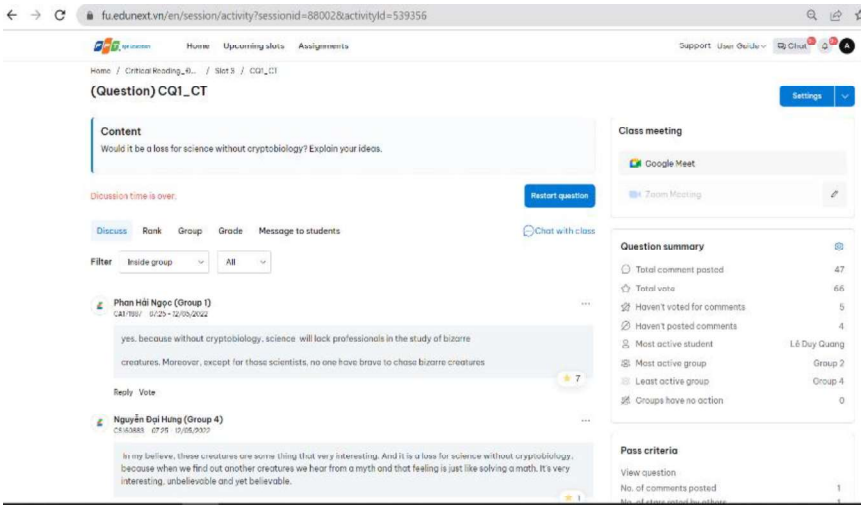

Figure 2. Space to participate in answering social construction questions and voting stars on EduNext

The interaction between peers is developed by EduNext through the integration of chat between group members. Figure 3 shows the chat feature on EduNext. Members in the same group can use the group chat feature to discuss with each other. Group members can exchange text or visual information via Google Meet.

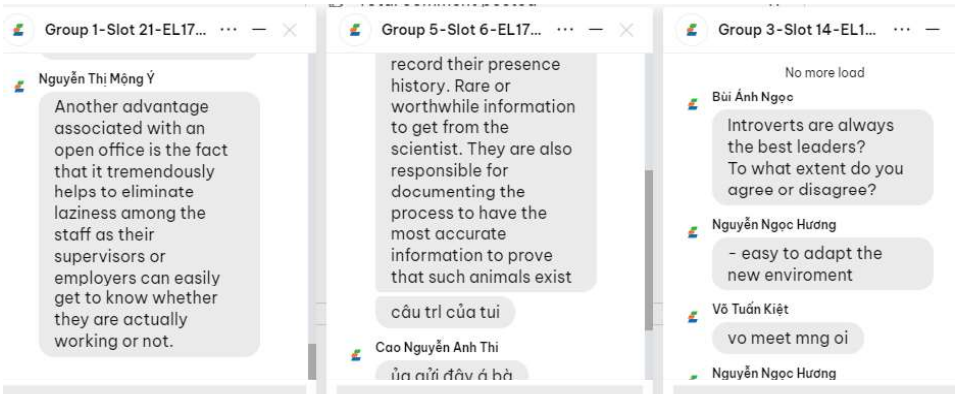

Figure 3. Group chat feature on EduNext

Theoretical framework

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theory of information systems that describes the method users accept and choose to embrace technology. Davis (1989) developed the model based on investigations on perceived usefulness regarding utility and ease of use. Besides, one of the reasons for designing TAM was to anticipate and explain user adoption and usage of technological information. The model has been utilized in a range of technology-related sectors and situations, and it is recognized as a significant model suitable for examining the adoption of different online learning tools. That's the reason why "TAM" (Davis, 1989) was selected for the research.

Community of Inquiry (CoI)

The CoI framework developed by Garrison et al., (1999), outlines the crucial components of an effective online learning approach. It is based on Dewey's educational theory and social constructivism. It offers a collaborative-constructivist perspective (Arbaugh et al., 2008). According to Garrison et al., (1999), this framework included social, teaching, and cognitive presence. Firstly, social presence is defined as one's realness via affective expression, open dialogue, and group cohesiveness. Secondly, teaching presence is referred to as the planning, facilitating, and guiding of social and cognitive developmenttoo produce worthwhile and practical learning outcomes. Eventually, cognitive presence refers to how effectively students are capable of generating and validating meaning via extended thought and discussion within a critical Community of Inquiry (Garrison et al., 2001).

Cognitive Presence

Cognitive presence was defined by Garrison et al., (2001) as *"the extent to which learners can construct and*

confirm meaning through sustained reflection and discourse in a critical community of inquiry". Obviously, learners' online experiences have been deeply revealed via reflection and discourse. Therefore, cognitive presence is considered the core value of a community of inquiry even though it may be the least studied and understood. In fact, cognitive presence has a more stable meaning compared to the other presences because its meaning is originally from the Practical Inquiry Model (PIM) which is widely used in measuring cognitive presence in virtual activities and highlighted the integral role of collaboration between cognitive presence and the need of community. There are four phases in PIM comprising trigger event, exploration, integration and resolution/application (Garrison et al., 2001). The trigger event is defined as the first stage of critical inquiry to identify problems, dilemma emerged from experience. The next phase is exploration which is a vital and time-consuming stage for learners to individually and collaboratively search for various materials and share their ideas. Ideas searched from the second phase will be constructed into meaning in the thrid phase, which is Integration, besides it provides learners an opportunity to evaluate the feasibility and applicability of ideas to consider whether or not they are well-connected to the problem and to offer some promising solutions. The ultimate one is resolution/ application which is the phase to test solutions for problems from the initiation stage.

Previous Studies

The evolution of technology, recently, has been changing the way of learning as well as the training strategy of educational institutions, popularly the use of technology tools. There is no doubt about the benefits that technology tools bring to learners; besides that, there are also factors that also affect students' satisfaction. Therefore, there have appeared more and more research papers in international studies and studies in Vietnam, which are conducted with the aim of giving an overview of students' experiences in online learning.

According to Azhari et al., (2020)'s research with pharmacy students' perceptions on social constructivist learning environments. The findings showed that their positive feelings as well as their positive perception decreased with each school year (first year to final year). This is caused by the background, knowledge of the students, and interaction. It can be seen that although students have a positive satisfaction towards social constructivist learning environments, the majority of students expect e-learning associated with their professional practice, the second students have higher satisfaction than the final-year students. Furthermore, readiness was also reported by Chung et al., (2020) emphasizes having an impact on students' learning experience and satisfaction. They suggest that readiness is also affected by student maturity. The report shows that the ages of 3rd - 4th year students show more readiness for online learning than 1st - 2nd year students (Chung et al., 2020; Hung et al., 2010; Wojciechowski & Palmer, 2005). By the way, readiness has the opposite effect reported by Chung et al., (2020) compared with that reported by Azhari et al., (2020).

Cole et al., (2014) conducted a 3-year study on student satisfaction with an e-learning learning environment. Specifically, students did not show high satisfaction with the online learning environment, and they only rated satisfaction at a moderate level. Student satisfaction in blended learning will be higher than in synchronous online learning. Moreover, two main factors affecting students' satisfaction and dissatisfaction with the learning

environment are convenience and lack of interaction, respectively. Cole et al., (2014) also stated that gender has no significant influence on their satisfaction with e-learning. While Chung et al., (2020) determined that student satisfaction with online learning varies by gender and study program. Their research shows that females and degree students show more satisfaction than males and diplomas. The research time of the two reports is different, which leads to different results (2014-2020).

Moreover, by using TAM (Davis, 1989), Sahin & Shelley (2008) postulated that skillfully using online tools and well awaring of the benefits of online learning will positively impact students' satisfaction. Similarly, an investigation into the application of technology in teaching tourism students during the Covid-19 epidemic by Kallou et al., (2022), partly through TAM, has shown that it is a positive sign for the continued development and adoption of web conferencing technology in higher education. Research results show that the acceptance and satisfaction of students are gradually improving.

In Viet Nam, owing to the outbreak of the Covid-19 epidemic, most institutions required their students to switch to online and distance learning methods (Chen & Bui, 2020). At an early stage, when first exposed to a new type of learning, a study conducted by Pham et al., (2019) shows dissatisfaction with this form among the majority of students because of the new and sudden exposure to the new type of education while a study conducted by Chen & Bui (2020) with first-year English language students showed a certain difference. The majority of students expressed satisfaction with this educational policy.

In the same vein, a study by Dinh & Nguyen (2020) at a national university in the southern region of students exposed to online learning in the first 2 months, shows that most students have a certain satisfaction about the online learning environment. They have expectations for the future of distance learning because it is flexible and supportive. Thereby, it also shows a very quick adaptation of students although it also had the identified impediments like internet connection, interaction or audio problems. However, Dinh & Nguyen (2020) also reported that in the choice of learning method, students still focus on face-to-face learning more than online learning. This is the author's assumption that students easily acquire knowledge in a familiar environment.

Additionally, Nguyen (2022) showed that knowledge acquisition and satisfaction have a close relationship. In his research at a Law school, he demonstrated that the benefits of online learning are markedly changed through the elements of ease of use, ease of learning, and factors of the TAM Model (Davis, 1989). The benefits of learning are appreciated if students have a good feeling about the above factors. Since then, student satisfaction has also increased significantly. Another study on the use of technology in learning by Hoang & Dang (2021) showed a positive impact students' learning outcomes, on the cognitive side of students from the application of technology. This is a positive result compared to traditional learning methods (Alves & Raposo, 2007; Abrahams, 2010). However, Hoang and Dang (2021) also emphasize the usage control of students.

From the above-mentioned sections, there is scarce research on the impact of cognitive presence on other learning environments such as video-based learning platforms, learning management systems, etc. Therefore, it

urges us to carry out the study to explore factors affecting the factors that influence student satisfaction with the novel learning tool-EduNext in terms of cognitive presence and the TAM framework.

Method

Research design

The mixed method study was used in the current study because this is regarded as an effective method to land a broad insight and strengthen the conclusion (Morse, 2016). The paper makes use of quantitative and qualitative analysis methods and references from a few relatively early research to explore students' satisfaction with factors related to perceived usefulness, perceived ease of use, and factors related to cognitive presence when they experience courses on the novel mediating tool-EduNext.

The participants of the current study consist of 186 students who participated in at least one subject on EduNext. They are from all majors at a research site consisting of Business Administration (45,70%), Information Technology (28,49%), and Linguistics (25,81%).

The sampling technique used in the study is purposeful sampling since this is also known as a non-statistical participant selection method, which enables researchers to determine and choose study participants based on initial volunteers who refer them to further study participants who fulfill the criteria (Flick, 2009).

Research instruments

At the quantitative research stage, the questionnaire was used with two main parts. Initially, the filter question and the demographic information included name, email, gender, school year, age, major, and the number of subjects students participated in EduNext. Next, the survey continues with constructs affecting students' satisfaction. A questionnaire consisting of 22 items from the Technology Acceptance Model (TAM) developed by Davis (1989), Cognitive presence extracted from the Community of Inquiry framework (Garrison et al., 2010; Shea & Bidjerano, 2008; Swan et al., 2008), and student satisfaction (Ejubović & Puška, 2019) were deployed to collect the data. The items were in the order of 3 items from perceived usefulness, 3 items from perceived ease of use, 12 items from the perceived cognitive presence, and 4 items from student satisfaction. A 5-point Likert scale with 1 = strongly disagree and 5 = strongly agree was applied.

In the qualitative phase, semi-structured interviews with 10 students individually were used. Each interview was 15 minutes. Then, the data is content-analyzed. The data of the variables, which were purposefully collected early from 40 students who attended at least 1 course on EduNext, were used to demonstrate the reliability of the research questionnaire with Cronbach's Alpha based on SPSS 26. Cronbach's Alpha indexes will be considered at the level of 0.7 or higher, which is the appropriate level to demonstrate the reliability of the variables (Pallant, 2007). According to the tested result, the index of the variables is determined to reach higher

than 0.7, particularly the details shown in Table 1. Additionally, respondents may be impacted by their current emotions, prejudices, or level of comprehension when completing questionnaires, which could lead to their responses not correctly reflecting their true thoughts, hence the questionnaire was translated and modified to be appropriate for the objective of our study and the Vietnamese context while keeping the reliability and validity of the used instrument. Besides, all members of the team and an EFL lecturer have devoted time to verifying the language's accuracy. Taking everything into consideration, the questionnaire has high reliability.

Table 1. The Reliability of The Questionnaire

Variables		No. Items	Mean	No. Participants
Perceived Usefulness (PU)		3	.923	
Perceived Ease of Use (PEOU)		3	.903	
Cognitive Presence (CP)	Triggering Event (TE)	3	.892	40
	Exploration (E)	3	.828	
	Integration (I)	3	.803	
	Resolution (R)	3	.912	
Student Satisfaction (SS)		4	.909	

Results

To what extent do perceived usefulness, perceived ease of use, and student satisfaction correlate with each other?

Pearson correlation analysis was conducted on student satisfaction (SS) variables with two factors of the TAM model, perceived ease of use (PEOU), and perceived usefulness (PU). The purpose is to answer research question 1. The results of the analysis are shown in Table 2.

Table 2. The Pearson Correlation between SS and PEOU, PU

Correlations				
		SS	PEOU	PU
SS	Pearson Correlation	1	.016	.806**
	Sig. (2-tailed)		.151	.000
	N	186	186	186
PEOU	Pearson Correlation	.106	1	0.085
	Sig. (2-tailed)	.151		.249
	N	186	186	186
PU	Pearson Correlation	.806**	.085	1
	Sig. (2-tailed)	.000	.249	
	N	186	186	186
**Correlation is significant at the 0.01 level (2-tailed)				

The results of the analysis show that there is a strong correlation between student satisfaction (SS) and perceived usefulness (PU) ($p=0.00 < 0.05$). It is obvious that the use of learning on the EduNext platform contributes to student satisfaction, which is highlighted via the data from the interview "*One of the things I like about the EduNext is that I can refer to the answers of all of my friends' comments. It is great when I haven't come up with any ideas for the question.*"(P8)

In contrast, there is no correlation between student satisfaction SS and perceived ease of use (PEOU) ($p=0.151 > 0.05$). It means whether or not the use of the platform is easy or difficult, it does not affect the satisfaction of students in the learning process. One of the interviewed participants stated that "*We are GenZ and digital citizens, hence using a new platform is not a huge deal for us*." (P10)

Additionally, to explore the relationship between student satisfaction and cognitive presence, we conducted a Pearson correlation analysis between SS and 4 factors of cognitive presence including TE, E, I, and R, which are shown in Table 3.

Table 3. The Pearson Correlation between SS and Factors of Cognitive Presence (CP)

Correlations						
		SS	TE	E	I	R
SS	Pearson Correlation	1	.709**	.584**	.637**	.693**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	186	186	186	186	186
TE	Pearson Correlation	.709**	1	.613**	.667**	.678**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	186	186	186	186	186
E	Pearson Correlation	.584**	.613**	1	.725**	.610**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	186	186	186	186	186
I	Pearson Correlation	.637**	.667**	.725**	1	.656**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	186	186	186	186	186
R	Pearson Correlation	.693**	.678**	.610**	.656**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	186	186	186	186	186
**Correlation is significant at the 0.01 level (2-tailed)						

It asserts a strong correlation between student satisfaction (SS) and elements of cognitive presence variables including triggering event (TE), exploration (E), integration (I), and resolution (R). Specifically, based on the results, it reflects the relationships of the variables. Variables of cognitive presence have a strong impact on student satisfaction in the learning process. The more positive the perception of these variables, the higher the student satisfaction with learning on EduNext. This was also emphasized via ideas from the interview:
"*I think EduNext will help students to finish the questions posed by the teacher and to become self-study as they will have to explore the answers from a variety of sources.*" (P1)

Moreover, students affirmed that EduNext provides them an opportunity to enhance their cognitive thinking through the process of searching for answers. "*I post the answer on my own, besides I frequently read and consult good answers from my peers to make my answers more insightful and complete.*" (P2)

How do perceived usefulness, perceived ease of use, and cognitive presence affect student satisfaction?

The study aims at investigating the impact of the constructs hence multiple regression analysis was performed. Multiple linear regression was calculated, at the 0.05 significance level, to estimate the effect of PU, PEOU, and

TE, E, I, and TE on their satisfaction with the social constructivist learning environment on the EduNext platform. According to Sarstedt et al., (2019), the Variance Inflation Factor (VIF) should be lower than 3 in order to avoid the degree of collinearity or even multi-collinearity among the independent variables. As a result, the regression analysis of this model is accepted.

Table 4. Regression of Student Satisfaction

	B	Std. Error	Beta	t	Sig	Statistics VIF
(Constant)	-.544	.245		-2.224	.003	
PU	.539	.061	.518	8.795	.000	2.257
PEOU	.031	.045	.028	.698	.486	1.064
TE	.151	.069	.140	2.174	.031	2.716
E	.065	.077	.051	.841	.401	2.431
I	.049	.087	.037	.568	.571	2.804
R	.263	.072	.218	3.676	.000	2.292

a. Dependent Variable: SS

b. Independent Variables: PU, PEOU, TE, E, I, R

c. Model Summary: R=.851; R2=.725; Adjusted R=.716; Sig=.000

As can be seen from Table 4, the model explained 71,6% the variance in student satisfaction when they study on the EduNext platform under the impact of PU (p=0.000; B=0.518; VIF=2.257), R (p=0.000; B=0.218; VIF=2.292), and TE (p=0.031; B=0.151; VIF=2.716). In particular, the impact of PU was the most influential (B=0.518) followed by R (B=0.218) and TE (B=0.151). This also means that the more students perceive the EduNext platform as useful, the more satisfied they will be. In terms of R(resolution), student satisfaction will be higher if students can find the solutions for the problems easily and accurately (p=0.000; B=0.518). Another element of cognitive presence that positively influences satisfaction is TE (Triggering Event). This means that the questions posed on EduNext are more obvious and easier to understand, and the more satisfied students feel. Conversely, the regression also indicated that PEOU (p=0.486 > 0.05), E (p=0.401 > 0.05), and I (p=0.571 > 0.05) are withdrawn from the model.

Discussion

Initially, the research results revealed that, in terms of TAM, PU is the factor that has a great impact on student satisfaction. The more they find the platform to be of great benefit to them, the better their satisfaction with the platform gradually changes. This is in line with Nagy (2018) and Pham et al., (2021). However, our results are in contrast to those of Daneji et al., (2019). Specifically, Daneji et al., (2019) showed that PU had no major impact on SS. Besides, there was no correlation between PEOU and SS. This is similar to the report of Nagy (2018). Furthermore, our novelty in this report is to determine how it affects interviews. In other words, students interviewed in the study said that they had access to many sources of information to answer according to

instructions when studying on EduNext. Those sources can include the Internet or friends in terms of PU, yet they were born in the age of technology so interacting and using technology did not create difficulties for them, leading to PEOU does not correlate with SS.

Finally, the results indicated that factors of cognitive presence including TE, E, I, and R were strongly correlated with SS. Perceived value as well as knowledge from learning on the platform will significantly contribute to their satisfaction. The results of this study are supported by previous work by Zhonggen et al., (2018) with a positive relationship between cognitive presence and student satisfaction when applying technology platforms to learning. The reason can be mentioned that their main purpose is learning and must get knowledge from that learning. Thus, it is understandable that cognitive presence has a huge impact, especially when adopting a new educational technology platform. In the results of the regression analysis, 2 factors of a cognitive presence having significance were (R) resolution and TE (triggering event). R has a stronger impact than TE on satisfaction. More specifically, the knowledge learned from the course becomes useful to the students by applying it outside the course which contributes to satisfaction. Furthermore, the initial requirements for answering questions are students' interest, curiosity, or motivation. If these requirements are fulfilled, students will be more satisfied.

Conclusion

In conclusion, the findings of the current study revealed that perceived usefulness, resolution, triggering event, and student satisfaction were significantly correlated with each other. Specifically, usefulness will enhance the learners' satisfaction when experiencing courses on EduNext. Additionally, students will become more satisfied when they can find out the answers to the fixed and triggering questions on EduNext. Therefore, there is a need for the program developers to select materials and assign content linked to students' demands to increase their satisfaction with courses on the EduNext platform. In addition, lecturers need to pose effective questions to stimulate students' engagement.

Generally, the results of the study have some implications for students at the research site as well as provide educators especially the board of planning and curriculum developers with overall views about factors affecting student satisfaction when experiencing courses based on the social constructivist learning approach on the EduNext. The initial implication is for participants. Participating in the study, undeniably, is a valuable opportunity for students to express their thoughts after approaching the innovative kind of educational platform. Through their conceptualizations, institutional educators can deeply understand learners' demands and thinking. The remaining significance is discovering successful factors impacting student satisfaction when adapting the novel platform, EduNext, and the characteristics of EduNext. Accordingly, the board of planning and curriculum developers, and education staff including lecturers and technicians will design appropriate curricula, and their teaching methods/ techniques, and adjust the tool to adapt to learners' expectations.

Recommendations

Social constructivist learning through the EduNext platform brings many improvements and innovations in learning and teaching. Therefore, we encourage more research on learning on this platform to bring to a multi-dimensional view. It is necessary to implement the following studies to synthesis and analysis for students, instructors, and course contents to have a more complete view about the E-learning model. Furthermore, it can extend the scope of research to other institutions that use EduNext as a compulsory teaching platform.

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