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Building Learning Communities: Assessing Persistence in Business Education through the Community of Inquiry Framework

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Abstract
Learning communities have become a vital part of creating a knowledge-based economy. There are two types of learning methods adopted by business institutions, which are asynchronous and synchronous that increase cognitive and personal (students) participation in teaching a course/program. Furthermore, a decisive community of learners consists of teaching faculty and business students who perform their activities in a social situation with the objective of simplifying and establishing a learning process based on modern learning tools. The purpose of this investigation is to probe the intensity of business students' experience for Col (social, cognitive, teaching) presence in keeping with learning satisfaction, learning effectiveness and learning persistence. For this study, data is collected from 438 business students and analyzed through SEM by using smart-pls. This study provides evidence that teaching presence is essential for blended learning experiences, which includes defining and introducing topics with meaningful discussion. The managerial implications are established for the utilization of different indicators that should be applied for gaining better learning satisfaction and desire to persist in their current studies. To enhance students' learning capabilities, institutions should design programs with potential industries and should focus on sharing diverse ideas with other business institutions. Business teachers should focus on sharing personal meaning because it adds value to business students' learning. However, the practical implications could guide business schools in attracting new students as well as increasing the productivity of existing students by offering them a variety of programs in a blended learning environment.

Keywords:

Introduction

Nowadays, building learning communities has become a vital part of creating a knowledge-based economy. The advancement in technologies has integrated with Higher Education (HE) for generating effective teaching and learning processes. There are two types of learning methods adopted by business institutions, which are asynchronous and synchronous that increase cognitive and personal (students) participation in teaching a course/program. The Community of Inquiry (Col) framework has been applied broadly in educational institutions and practiced for blended learning contexts. As a result of the pandemic's rapid and unexpected shift in teaching methodology. The business school has been motivated to involve graduates in the learning process through different methods of interaction and collaboration (Henriksen et al., 2020). The work of

Mystakidis et al. (2021) suggested that students could nurture interpersonal connections to foster cooperation, interaction, and social engagement that provide profound and significant learning opportunities for business students.

According to Cherney et al. (2017), the community of inquiry framework is an effective tool for learning design and inquiry since it involves socio-constructivism, analytical thinking, and inquiry techniques. That is why it has a lot of support and endorsement from academics (Wertz, 2022). The community of inquiry paradigm developed by Garrison et al. (1999) intends to accomplish meaningful and significant learning by integrating presences (teaching, social, and cognitive) as a means of engagement and communication. According to Garrison & Akyol (2013), teaching presence shows how students engage with the instructional learning components of the assigned learning tasks. Moreover, Students' cognitive presence relates to how they engage with the course material, whereas social presence reflects how they engage with other students in the class. When combined, these factors improve the learning process and academic achievement (Garrison, 2016).

Community is the construct that has remained the focus of higher education. Higher education has long held the belief that community is linked to improved learning outcomes because it plays a critical role in collaborative learning (Garrison, 2007). The literature shows a little amount of research focusing on three basic components of instructional approach i.e., direct instructions, communal and psychological presences. However, the concept of business school learning and instructions is not in educational paradigms as this notion is endorsed by Information and Communication Technologies (ICTs) (Picciano, Dziuban, & Alfred, 2007). It has become a challenge now for the researchers to explore in-depth scenarios about student-teacher participation that could customize divergent learning such as face-to-face learning, distance/online and blended learning through the cooperation of ICTs and physical lecture rooms (Szeto, 2015).

New challenges have raised questions regarding learning communities, collaborative inquiry and the potential to break new ground under the theme of pedagogically. The first and most important challenge is to explore new ways in which pedagogical ideals and new ICTs can be integrated to bring revolution to the learning system of higher education (Garrison, Cleveland, & Fung, 2010). Collaborative learning promotes self-regulated individuals as collaborative learning includes recognition and distribution of assignments, governance and setting ambitions for active learning. In such learning environments, students are more responsible and devoted to managing their time and co-curricular activities, setting ambitions, and planning to accomplish them (Pool et al., 2017). Dumford and Miller (2018) emphasize the significance of augmenting students' learning perceptions in the context of higher education to enhance the efficacy of learning. A student's perception of their learning progress and the knowledge they have acquired is an emotional result associated with learning (Zhang, 2020). It illustrates the skills and knowledge that students have acquired as a result of a learning process. Consequently, student involvement and retention in the learning environment might be enhanced by the use of perceived learning, which characterizes a well-designed learning experience and reflects students' views of their learning (Alqurashi, 2019).

The salient features of this research are to investigate the Col framework and its learning outcome by using the quantitative method and by adopting this framework in the context of Pakistan for the first time, based on the author’s knowledge. Secondly, to enhance the learning capabilities of business students. The scope of this study comprised measuring business students’ involvement in defining teaching instructions, developing social communication, and enhancing

their cognitive experience. All these instructions impact business students learning effectiveness, satisfaction, and persistence. This work also investigated the relationship between Col components intent-to-persist by examining the mediating role of satisfaction and effectiveness.

Literature Review

Community of Inquiry (Col) components

The Col framework determines a road map of structured elements that are necessary for obtaining perceptions about complications in a blended learning environment (Garrison & Arbaugh, 2007). It has the power to identify core elements that constitute a collaborative learning environment. Collaborative learning also established a community where individuals share ideas, expressions and purposeful knowledge. Based on collaborative learning, Col factors are teaching, cognitive and social presence that guide to recognition of the influential forces that enhance meaningful blended learning environments (Garrison et al., 2010).

If the researchers and educational practitioners well understand the composition of a community of inquiry (CoI) then a collaborative Col can be created which has the features of sustainable development. The CoI theoretical framework suggests that a positive learning experience emerges when both instructors and students establish an environment to participate in critical thinking actively. Additionally, it argues that three presences—social, cognitive, and teaching—are essential to establish learning intentions between teacher and student effectively. Nevertheless, there is a scarcity of CoI research that addresses the impact of all three of these presences simultaneously (Lee & Faulkner, 2011). The work of Law et al. (2019) suggested that the majority of research presented the three presences as separate and direct effects on learning experiences instead of examining potential differences in their interactions.

A community of inquiry framework was created by Garrison & Akyol (2020) to assist educators in comprehending the process of constructing effective learning communities. According to Garrison and Arbaugh (2007), this type of learning environment is characterized by the use of technology to facilitate critical thinking, inquiry, and discussion among students. The concept of community of inquiry proposes that participants in blended and online learning should concentrate on establishing social and knowledge processes via their discussions, which usually take place in traditional classroom settings (Wertz, 2022).

Based on this premise, the Col model was composed of three major components of an individual's behavior, which are teaching, cognitive and social presence (Horzum, 2015). The first aspect of this model described teaching presence (TP), which comprised of designing and formulating instructions that aimed to enhance personal sharing for discussions and defining related topics (Swan, Garrison, & Richardson, 2009). The component teaching presence decreases the transactional distance between teacher and learner, i.e., student (Arbaugh & Hwang, 2006). Bangert (2009) argued that teaching presence is a method that teachers apply to create quality OL experiences. TP incorporates basic themes such as the formulation of topics and designing innovative discussion platforms that are directed to fabricate understanding among students (Fabro & Garrison, 1998). Teaching presence refers to the purposeful design and structuring of course material, the promote discussion, and the guidance of students' cognitive and social processes in order to achieve significant learning results (Sun & Yang, 2023). The layout and organization dimension include elements related to the course material design, the adopted teaching methodology, and the implemented modifications by instructors (Anderson et al., 2001). The direct teaching dimension includes the strategies employed by instructors to address the learning difficulties that students may face throughout their learning journey. These strategies include

explaining complex subjects, addressing students' misunderstandings, and acquiring prompt feedback to identify their areas of improvement (Garrison, 2016).

Secondly, the integral aspect of Col is based on open intercommunication among individuals (Garrison et al., 2010), which is noted as social presence (SP). Moreover, it ensures individuals experience an active learning community by medium to strengthen collaboration and expression, which reflect them. Social presence refers to the capacity to socially exhibit oneself and build meaningful and intentional connections with others (Procter, 2021). Cognitive presence is the process of exploring, building, resolving, and confirming understanding through cooperation and assessment (Guo et al., 2021). Akyol and Garrison (2011) stated that the teaching presence enhances the process of course design, coaching, and teaching in the lecture hall. Teachers could advise and assist students by providing feedback and mentoring while solving their academic obstacles.

Thirdly, an integral aspect of Col is the cognitive presence (CP), which consists of exploring critical ideas and information exchange that build a sense of innovative problem-solving in a community (Garrison & Arbaugh, 2007). The exclusive trait of this theory is that all three components are interrelated, and each component augments the effectiveness of other factors (Akyol & Garrison, 2011). Moreover, this theory produces guidelines for researchers to recognize the importance of knowledge and develop a sharing practice among individuals that captures learning attitudes (Akyol & Garrison, 2008). Moreover, these Col components have a strong bonding with students' perception about university studies and their level of pride after completing tasks. Thus, interrelations among TP, SP, and CP showed vigorous linkage for building a learning community (Ke, 2010).

Akyol and Garrison (2008) concluded that TP and CP influenced the learning effectiveness of undergraduate students in an online setting, which explored learning tools for measuring satisfaction. The work of Shea et al. (2006) summarized that learning effectiveness explored different outcomes based on student's working experience with Col components and presented a negative interaction with learning satisfaction (Ke, 2010). Thus, to undertake previous conflicting research findings, this study explored the mediating role of satisfaction and effectiveness with TP, CP, and SP because the learning community played an important role in creating a blended learning environment. The study of Carlon et al. (2012) concluded that when a student enrolls himself/herself in a course, that experience impacts SP other than CP and TP. Therefore, based on previous studies, we assumed the following hypotheses:

H_{1a}: *Teaching presence increases learning persistence through the mediating role of learning satisfaction.*

H_{2a}: *Social presence increases learning persistence through the mediating role of learning satisfaction.*

H_{3a}: *Cognitive presence increases learning persistence through the mediating role of learning satisfaction.*

Learning satisfaction and effectiveness

The study by Choo et al. (2020) found that a blended learning environment could be designed in many ways, either it can be asynchronous or synchronous way under the mediation of ICTs. The components of ICTs have transformed traditional learning into a new innovative paradigm of learning society that integrates online and traditional contexts (Szeto, 2015).

Moreover, blended online learning and face-to-face learning have penetrated the higher education system (Martin et al., 2022), and this phenomenon appeals to many academicians to enhance learning satisfaction among students (Yamada, 2009). There are divergent methods that exist in a blended learning environment. However, one approach deals with synchronous that include online dialogues between students, which produce teaching, cognitive and social presences among them (Szeto, 2015). This kind of synchronous learning method designed an improved teaching model that mediates blended learning through video-sharing & and discussion forums. The students' learning satisfaction and effectiveness have moved beyond the old traditional method (textbooks) to the ICTs-based method (Emails, forums) (Bullen, 2007).

Scholars of educational research have a consensus that traditional education is instructor-centered, whereas online education is student-centered. In a learning process, students could be shifted from a traditional passive learning environment to active online learners (Hung & Chou, 2015). Under such contextual transformation, the learning situation impact student's learning perception and expectations, which have also been changed regarding the competence of the instructor and its role in delivering the knowledge (Zingaro & Porter, 2014). Even online education is gaining popularity; the concept of blended teaching is growing rapidly. In the views of educators, blending learning is an essential teaching component and it can ensure effective learning (Ocak, 2011). Investigation made by Dziuban, Moskal and Hartman (2005) concluded that there are two principal advantages of blending learning: the first one is strengthened learning engagement, and the second advantage is strengthened interaction of instructor and learner.

H_{1b}: *Teaching presence increases learning persistence through the mediating role of learning effectiveness*.

H_{2b}: *Social presence increases learning persistence through the mediating role of learning effectiveness.*

H_{3b}: *Cognitive presence increases learning persistence through the mediating role of learning effectiveness*.

Learning Persistence

Lifelong learning has attracted educationists, and a considerable shift has been seen in the paradigm of education toward it because the knowledge of which societies are composed has transformed into a digital medium (Shin & Chan, 2004). People adopted knowledge as a primary resource for learning about things that happen around them. Learning persistence is explained as "*intent-to-persist*", which portrays a situation where students will learn or completer their academic coursework with the aim of accomplishing their academic objectives, such as securing good marks (Müller, 2008). Learning effectiveness and satisfaction improve learners' persistence, and student interactions affect community integration, group learning, and knowledge sharing (Bervell et al., 2019). The work of Joo, Lim, & Kim (2011) conducted a study that surveyed learner satisfaction in Korea; the outcome presented that 18% of participants who applied for online programs would not continue their studies as compared with 3% of participants who applied for traditional programs with face-to-face learning. The findings of Johnson, Hornik, and Salas (2008) argued that students' satisfaction is linked to their learning experience; the more satisfied students are, the more they learn and the more motivated they become to learn. Perceived learning among students also impact their intent to continue as instructional methods improve. It motivates them to finish their enrolled program (Maddrell et al., 2020). Furthermore, the study by Caskurlu et al. (2021) concluded that "presence" in learning is a state where an individual meets with intimate

knowledge about their surrounding and advocates his/her objectives, even in those situations that impact other individuals in society. Based on previous work, the study formulated that:

H_{3a}: *learning satisfaction positively impacts learning persistence.*

H_{3b}: *learning effectiveness positively impacts learning persistence.*

Theoretical framework

Past studies that followed the Col framework are mostly supported by (the TAM) "*Technology Acceptance Model*," developed by Davis (1989), which integrates learners' perception of technology use from a perspective of facilitation and efficiency. This explains that in a learning environment, people tend to accept various advanced ICTs because they believe such technologies will help them achieve their stated objectives in an integrated way, as presented in Figure 2. The improved student satisfaction with the instructional material fosters learning persistence among business students (Mayne & Wu, 2011). Consequently, regardless of the learners' physical participation, instructors play a vital part in enhancing learning effectiveness and satisfaction (Prabhu et al., 2021). Researchers have previously shown that students are more motivated, learn better, and achieve more when they engage in this kind of interaction, which creates "*perceived feelings of interaction between the professor and the students*" (Alahmari & Kyei-Blankson, 2016; LaBarbera, 2013). The importance of the educator-learner relationship in influencing perceived learning results has also been demonstrated by earlier research (Prabhu et al., 2021). From an instructional and learning perspective, it is believed that user-friendly learning tools are expected to enhance the satisfaction of learners by increasing their learning engagement (Choo et al., 2020).

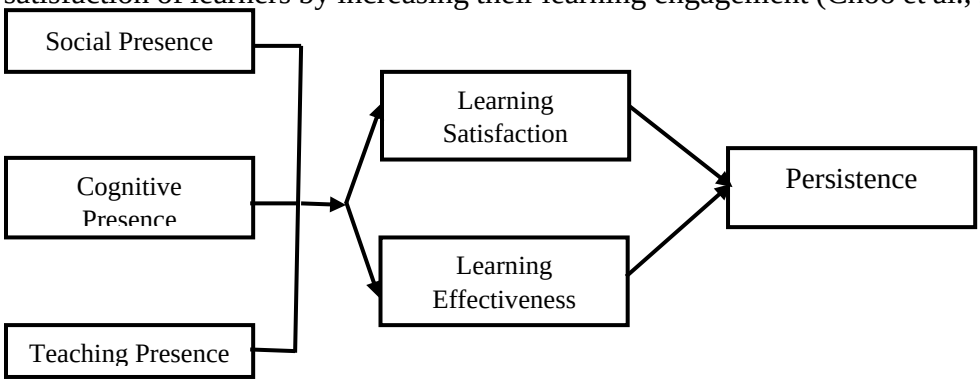

Figure 1: Conceptual model for enhancing learning persistence

Methodology

The relevance of this work is based on the Col framework from a pedagogical perspective, which is unified with the Structural Equation Model (SEM) by predicting the medicating variables (learning satisfaction and course effectiveness activities) and outcome (intent to persist) in studies from the same business school. The proposed framework's relationships and differences are investigated using Pearson's correlation coefficient and one-way ANOVA in this study. This study used a cross-sectional design, and primary data through a fully structured questionnaire was gathered from graduate-level business students of Government College University Faisalabad and the University of Agriculture Faisalabad through stratified sampling.

The questionnaire will use a 5-point Likert scale for measuring proposed variables. The Col survey is designed by following its 14th version (Choo et al., 2020) consisting of 34 items, with 13 focusing on teaching presence, 9 on social presence, and 12 on cognitive presence. Learning effectiveness measures students learning outcomes based on Eom, Wen & Ashill (2006). 3 items will be used to measure learning effectiveness. Learning satisfaction (LS) is characterized as a

level of intensity that business students experience during his/her educational learning at a business school. For that reason, 4 items are adopted from the work of Lin (2005). Lastly, student learning persistence (LP) is conceptualized as a business student's intention to continue their educational learning activities. Moreover, student learning persistence (LP) is described by business students as educational learners who will continue to accomplish their course learning objectives (Müller, 2008). Thus, 6 items are used to measure learning persistence.

Results

The profile of respondents showed that male students presented 71.2% (312 respondents) while females presented 28.8% (126 respondents) of the total sample. The respondents' age presented that 51.8% of the sample is between 21-23 years, followed by 32.4%, which presents an age group of <21; 8% of respondents belong to 24-26 years, and 6.4% of respondents belong to 27-29 years. Mostly, respondents belong to under-graduate business studies. The academic status of respondents showed that 336 respondents (76.7%) are studying BBA, while 86 respondents (19.6%) are enrolled in MBA, as shown in (Table 1).

Table 1: Demographics statistics (N=438)

Gender	Frequency	Percent
Male	312	71.2%
Female	126	28.8%
Age		
Less than 21	142	32.4%
21-23	227	51.8%
24-26	35	8.0%
27-29	28	6.4%
More than 29	6	1.4%
Academic Status		
Under-graduate	336	76.7%
Master	86	19.6%
MS/MPhil	16	3.7%
Name of Program		
BBA	341	77.9%
MBA	95	21.8%
MSBA	2	0.5%

Source: *author's own calculations*

Before, we investigated students learning persistence. The status of business students' enrollment level guided us about their learning level and availability of Col basic attributes that design a profile of respondent. Firstly, this study considered all the regular students who are enrolled as full-time students. This means that respondents are only involved in academic learning. With respect to their specialization, 20.5% of respondents are not clear about their specialization program. However, 36.1% of respondents are taking/interested in marketing specialization, 27.6% of respondents are interested in finance specialization, and 15.3% are enrolled/interested in HRM specialization. To access the internet for their studies, respondents mostly use their home internet services while presented 94.3% of the total sample, only 3.2% of students access internet services at their respective universities. However, 2.4% of respondents access the internet from work-place/others. The status of students' enrollment presented that 179 respondents (40.9%) are enrolled in 3rd semester, which means 2nd year of their schooling. However, 151 respondents (34.4%) are enrolled in 5th semester, which means 3rd year of the business program and 24.7%

(108 respondents) enrolled themselves in 7th semester, which means they are studying their specialization courses, as shown in (Table 2).

Table 2: Status of Students Enrollment Level

Specialization	Frequency	Percent
None	90	20.5%
Marketing	158	36.1%
Finance	121	27.6%
HRM	67	15.3%
Others	2	0.5%
Nature of Enrollment		
Full-time student	438	100%
Access Internet for Studies		
Home	413	94.3%
University	14	3.2%
Work-Place	16	1.1%
Other	6	1.4%
Semester Enrolled		
3rd Semester	179	40.9%
5th Semester	151	34.4%
7th Semester	108	24.7%

Source: *author's own calculations*

The descriptive statistics presented in (Table 3) showed the mean, Std. Deviation and correlation among variables. Teaching Presence (TP) showed a mean of 3.64 with Std. Deviation of 0.651, Social Presence (SP) showed a mean of 3.739 with Std. Deviation of 0.596 and Cognitive Presence (CP) showed a mean of 3.83 with Std. Deviation of .584. These predictors are factors of community of inquiry (Col) which presented those respondents revealed the importance of Col factors during their business studies. The correlational relationship among variables represented the linear relationship among variables such as TP is also positively related to CP by presenting a correlational coefficient of 0.494, and SP showed a positively related with CP by presenting a correlational coefficient of 0.674. The correlational matrix showed that the model is fit for SEM analysis.

Table 3: Descriptive statistics

	Mean	**Std. Dev**	**1**	**2**	**3**	**4**	**5**	**6**
1 Teaching Presence (TP)	3.647	.651	1.00					
2 Social Presence (SP)	3.739	.596	.493**	1.00				
3 Cognitive Presence (CP)	3.835	.584	.494**	.674**	1.00			
4 Learning Satisfaction (LS)	3.592	.778	.475**	.380**	.413**	1.00		
5 Learning Effectiveness (LE)	3.511	.823	.446**	.365**	.392**	.549**	1.00	
6 Persistence to intent (LPI)	3.510	1.00	.434**	.263**	.328**	.607**	.461**	1.00

**. *Correlation is significant at the 0.01 level (2-tailed).*

The measurement model investigates Cronbach alpha, Composite Reliability, AVE and Communality, as given in Table 4. TP presented a Cronbach alpha value of 0.81 with a composite reliability of 0.858 and AVE of 0.503; SP presented a Cronbach alpha value of 0.61 with a composite reliability of 0.77 and AVE of 0.504. CP presented Cronbach alpha of 0.735 with a composite reliability of 0.824 and AVE of 0.495. All the presented values are within the given standards. Based on Confirmatory Factor Analysis (CFA), 12 items are loaded against SP, 12 items

of TP, and 10 items of CP are loaded, out of which 6 items were deleted due to low factor loading of <0.60 (Hair et al., 2017).

Table-4: Cronbach alpha, Composite Reliability & AVE of Measurement Model

		Cronbach Alpha	Composite Reliability	AVE
1	Teaching Presence (TP)	0.8019	0.8586	0.5037
2	Social Presence (SP)	0.6198	0.7754	0.5049
3	Cognitive Presence (CP)	0.7354	0.8248	0.4953
4	Learning Satisfaction (LS)	0.7565	0.8359	0.5066
5	Learning Effectiveness (LE)	0.6171	0.7954	0.5648
6	Persistence (LPI)	0.7862	0.8750	0.7001

The path coefficients presented in (Figure 2) showed that TP and CP are positively significant with learning satisfaction, which demonstrates that business satisfaction depends on teaching and cognitive presence. However, social presence showed insignificant results. Teaching presence (0.275) is the most vital influential factor for satisfaction, with a t-value of 4.819. On the other hand, SP, TP and CP are positively significant with learning effectiveness. Among all these hypothesized statements, Teaching presence has a strong impact on learning effectiveness and satisfaction. Furthermore, the role of the mediator exhibited a strong presence through TP and CP. Learning satisfaction and effectiveness play a vital role in enhancing intent-to-persist studies.

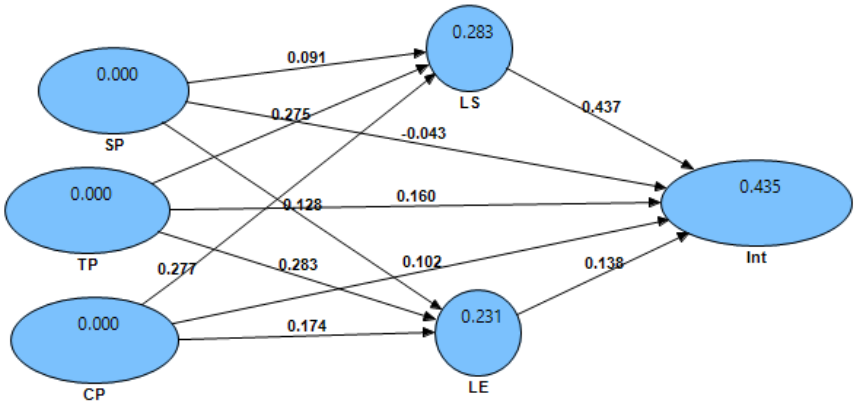

Figure 2: Path coefficients for enhancing learning persistence

Discussion

This study found evidence about business students' perception of a community of inquiry (Col) in determining differences in blended learning experiences. This study conceives components of Col that craft and design elements of teaching presence that are methodically managed and supervised by business schools to provide beneficial learning to students. Cognitive presence, rather than social presence, was determined to have a greater impact on learning persistence in this research. This suggests that students' perceptions of their learning experience are mostly based on their knowledge-building and the information they get from the blended environment rather than on their interactions with their fellow students or teachers. This research finding extracted factors for building a learning community that enables business students to contribute to producing diverse managerial ideas for organizations based on Pakistani cultural

perspective. Primarily, educating business students on online learning methodologies and demonstrating participation in electronic educational activities should be prioritized. This is particularly important in the basic courses of a degree program, allowing students to learn self-management and take responsibility for their own learning goals. As students learn more, they will need less dependent on the instructor.

In a Blended environment, teachers face difficulty in applying learning activities to cultivate higher-order thinking abilities, while students also struggle to adapt to active learning methodologies. Furthermore, students must familiarize themselves with the several online platforms used by educational institutions. The prior study by Kucuk and Richardson (2019) also concluded that cognitive and teaching presence as major factors of student engagement/learning. The factors are interconnected and vital for establishing a CoI for educational objectives, specifically encouraging discussion, developing indigenous course material, and fostering an interactive and enjoyable learning experience (Garrison et al., 2010). These presences increase the efficacy of the courses and result in learning skills (such as communication, critical thinking and analytical reasoning). Prior research also indicated that fostering each of these three presences is essential in blended courses (Garrison, 2017). The present research suggests that TP became an even more powerful component in a blended environment that influences students' learning experiences when compared to earlier studies. According to the study by Fiock (2020), students were more engaged and mentally present when teachers promoted student engagement, encouraged class discussions, and used real-life examples in course material as TP indicators. Additionally, students were more likely to engage in CP when they were encouraged to contribute to class debates and offer their thoughts (Arbaugh, 2012).

The study's findings demonstrated that teaching presence has a favorable effect on learning persistence, which is consistent with prior research (Shea & Bidjerano, 2012; Zhang & Lin, 2021). Teachers' responsibilities extend beyond curriculum design, student involvement facilitation, and curriculum delivery. Teaching presence is essential for fostering student contact and mutual support and also for allowing students to develop understanding via ongoing reflection and dialogue (i.e., CP). These results show that having more instructors in the classroom by creating course materials, helping students learn, and being there for them while they are learning can improve their social skills, motivation to learn, and intellectual growth. Instructional advice from instructors enhances students' social relationships and enables them to stay actively involved in their learning to attain their intended learning goals (Martin & Bolliger, 2018; Zhang & Lin, 2021). Furthermore, students' cognitive presence is shaped by their perceptions of course design and instructor guidance, which they reflect on during inquiry practices to construct meaning (Lee et al., 2021). Caskurlu et al. (2021) discovered a relatively significant association between teaching presence and perceived learning.

Conclusion

This study revealed that teaching and cognitive presence have a substantial impact on the primary determinant of students' learning presence in blended learning. Theoretically, the present research contributes new evidence that validates the growing discussion in the literature on the significance of implementing learning presence into the Col framework for improving academic experiences. In particular, the results showed how important learning presence is for expressing how students understand their mixed learning experiences through cognitive presence. Based on the student’s perspective, this study analyzed cognitive and teaching presences that are vital for promoting the university name/image in corporate-institution linkage (community building). Motivating students

to reflect and discuss their own experiences with authentic learning is crucial for their development of new or deeper comprehension (Kilis and Yıldırım, 2019). Government policies and financing might help business schools improve their technological capabilities so that students have access to more efficient software's and devices, practical learning environments, and a blend of resources. In order to improve their students' learning intent, teachers should increase their technological adaptability. The Community of Inquiry (Col) framework application in a blended environment could provide business students with the need to enhance their learning capabilities by connecting with teachers, peers and institutions. Keeping students interested in their educational journey is enhanced by designing synchronized courses and projects that enable interaction between instructors and students. The proper application of a learning management system could offer lessons and tasks for higher teaching presence. Thus, we can design marketing strategies for new business programs that generate higher connectivity with potential industries.

The study offers practical implications for professors and experts at higher education institutions that have integrated online teaching and learning into their standard practices or want to maintain this approach in the years to come. Universities and researchers should recognize the value of contacts and create opportunities to strengthen them. Using social media serves as one of the instruments that facilitate communication, cooperation, and connection among students. Business instructors need to illustrate the advantages of industry-academia relationships, including effective collaboration and a feeling of community, as well as job/business opportunities. Augmented interactions improve the student's learning experience and increase student engagement in a blended setting.

This study has several limitations despite its theoretical and practical contributions. First, this study's subjects were from a single Pakistani university, making it hard to generalize. Thus, further research should incorporate students from Pakistani and foreign universities. Secondly, the research respondents were registered in their specialization classes, so they understand the academic environment. So, their reactions might be different when they are in a lecture hall with students from multiple specializations whom they never met. The current study examined students' learning perceptions, but more research is needed to determine how well the Col framework supports learning outcomes.

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