The Relationship Between Social Presence and Language Anxiety for English as a Foreign Language Learners: A Community of Inquiry Perspective

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Abstract: This study explored the relationship between social presence and language anxiety in online language learning environments. It involved a diverse group of 220 first-year English as a foreign language learner enrolled in an English language course at Taibah University in Saudi Arabia. Quantitative analysis revealed a statistically significant negative correlation between key dimensions of social presence—affective expression, open communication and group cohesion—and language anxiety. Complementary qualitative findings highlighted themes such as a supportive learning environment, peer interaction and the role of familiarity in reducing anxiety. These results indicate the importance of fostering a strong sense of connection between learners, peers and an instructor to reduce language anxiety. Key recommendations include adopting a multifaceted approach to enhancing social presence, supportive environments, peer interactions and addressing technological barriers. Future research should investigate the long-term effects of these strategies and account for learners' differences to develop best practices for instructors.
Keywords: social presence, language anxiety, online learning, EFL learning.

العلاقة بين الحضور الاجتماعي وقلق تعلم اللغة الإنجليزية كلغة أجنبية: منظور مجتمع الاستقصاء

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المستخلص:

هذه الدراسة إلى استكشاف العلاقة بين الحضور الاجتماعي والقلق اللغوي في سياقات تعلم اللغة الإنجليزية كلغة أجنبية عبر التعليم الالكتروني. وقد أجريت الدراسة على عينة مكونة من ٢٢٠ طالبًا في السنة الأولى من متعلمي اللغة الإنجليزية كلغة أجنبية بجامعة طيبة في المملكة العربية السعودية. وأظهر التحليل الكمي عن وجود علاقة عكسية ذات دلالة إحصائية بين الأبعاد الرئيسية للحضور الاجتماعي وبين القلق اللغوي. وأظهرت النتائج النوعية المكملة عن عدد من المحاور المهمة، مثل بيئة التعلم الداعمة والتفاعل بين الأقران في خفض مستوى القلق. وتشير هذه النتائج إلى أهمية تعزيز الشعور بالتواصل بين المتعلمين وزملائهم وأساتذة المقرر للحد من القلق اللغوي. وتضمنت التوصيات الرئيسية اعتماد منهج متعدد الجوانب لتعزيز الحضور الاجتماعي وتوفير بيئات داعمة وتشجيع التفاعل بين الأقران والتغلب على الحواجز التقنية. ويُنصح بإجراء المزيد من الدراسات حول الآثار الطويلة المدى لهذه الاستراتيجيات ومراعاة الفروق بين المتعلمين بهدف وضع أفضل الممارسات للمعلمين.

الكلمات المفتاحية: الحضور الاجتماعي، القلق اللغوي، التعلم عبر الإنترنت، تعلم اللغة الإنجليزية كلغة أجنبية

Introduction

In the context of English as a foreign language (EFL), the Community of Inquiry (CoI) framework is a model that supports collaborative learning via three interconnected elements: cognitive presence, teaching presence and social presence. Social presence is 'the ability of participants to identify with the community (e.g., course of study), communicate purposefully in a trusting environment, and develop inter-personal relationships by way of projecting their individual personalities' (Garrison, 2009, p. 352). Teaching presence is the design, facilitation and direction of cognitive and social processes to realise personally meaningful and educationally worthwhile learning outcomes (Anderson et al., 2001). Cognitive presence is the extent to which learners can construct and confirm meaning via sustained reflection and discourse (Garrison et al., 2001).

Language anxiety is the apprehension experienced by EFL learners when using a foreign language. Online learning environments, which are increasingly prevalent in EFL education, provide unique challenges and opportunities for fostering social presence and managing language anxiety. Language anxiety poses significant challenges in EFL learning, often leading to reduced participation, lower confidence and hindered language acquisition. In online settings, these challenges can worsen due to the absence of physical social cues, which are crucial for effective communication and reducing anxiety. A lack of immediate feedback and the impersonal nature of digital interactions can increase learners' feelings of isolation and anxiety.

Despite the growing use of online learning platforms, there is limited understanding of how social presence within these environments impacts language anxiety among EFL learners. Exploring this relationship is critical, as enhancing social presence could potentially moderate language anxiety and improve learner outcomes. By investigating this dynamic, instructors can develop strategies for creating more supportive, engaging online EFL communities, ultimately leading to better language acquisition and learner satisfaction.

## Literature Review
The Community of Inquiry Framework

The CoI framework was inspired by the foundational work of John Dewey, who understood that educational experiences should be understood in social terms. For Dewey, 'inquiry was a social activity and went to the essence of an educational experience' (Garrison et al., 2010, p. 5). Dewey's (1959) practical inquiry model, developed in the 1930s, sought to model an individual's approach to his or her learning via a cycle of reflective engagement (Garrison et al., 2010; Miy & Diaz, 2015).

The innovation developed in Garrison et al.'s work was to extrapolate this to consider its reapplication to groups of learners in a specific set of contexts. In Garrison et al.'s application of Dewey's ideas to the then-emerging context of

online educational delivery, they developed the CoI framework as a means by which the human, cognitive and technological aspects of internet-supported learning might be modelled. Through this, the centrality of CoI, rather than the staged processes by which an individual might learn, can be better defined and understood (Garrison et al., 2000). In other words, there was interest in mutual support: contributing to others' learning while benefitting oneself from peer learning (Garrison et al., 2000; Garrison, 2016). The work was then consolidated in later articles and a subsequent book-length examination of the CoI framework (Garrison & Anderson, 2003; Garrison, 2016).

Figure 1
The community of learning framework (image source: Miy & Diaz, 2015, p. 84)
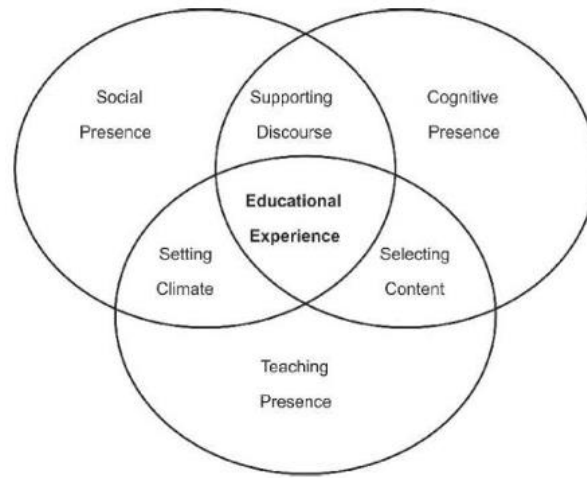
As shown in Figure 1, the CoI framework is represented as a Venn diagram. Three presences (i.e., domains) – the social, the cognitive, and the pedagogical – are identified. The intention here is to indicate that these three presences mutually support the development of a holistic online educational experience. From this, when one or more presences are under-represented or not engaged, then an entire educational experience becomes undermined (Garrison, 2016). The overlaps in the diagrammatic representation indicate contributions being made by the three combined presences in relation to setting an appropriate learning environment (at the intersection of social presence and teaching presence), fostering relevant discourse (where cognitive and social needs meet) and content selection (where teaching and cognitive presence engage) (Garrison & Anderson, 2003; Garrison, 2016).

Cognitive presence is associated with the ability of those in a CoI to support meaning-making via effective communication between a student and an instructor. This involves a four-stage process: 1) an inciting or triggering event to engage an interest in learning, 2) the exploration of a concept or new competency being considered, 3) integrating the new with what has been learned and 4) being

supported to apply the integration of an augmented skill and knowledge set (Garrison & Anderson, 2003; Garrison, 2016).

Teaching presence is related to 'implementing activities that promote independent study and build community by deeply exploring content and offering diverse forms of formative assessment to individual and collective needs' (Miy & Diaz, 2015, p. 85). An instructor has three main roles: pedagogical planning and assessment, the promotion of participation in online learning contexts and community coordination (Miy & Diaz, 2015; Garrison, 2016).

Social presence, which is the focus of this current study, relates to those who are learning online establishing and maintaining good relations with each other, fostering a productive and mutually engaging environment and resultantly stimulating positive experiences and a sense of community (Garrison, 2016). As Aykol (2013, p. 44) put it, social presence engages with the competencies of each person taking part in learning to 'identify with the community, communicate purposefully in a trusting environment and develop interpersonal relationships by way of projecting their individual personalities'.

Quite early in Garrison et al.'s investigations, they understood that for online learning to be effective, relevant, meaningful, enjoyable and innovative stances towards social presence need to be adopted (Garrison et al., 2010). Furthermore, links need to be fostered between the social and other aspects of online learning so that there can be mutual support given towards a holistic, positive set of learning experiences. Questions of fostering mutual trust, participation, the development of good interpersonal relationships and a sense of common purpose are involved. This is not least because it is understood that the initial priority for 'most students in a formal educational context is shared social identity (i.e., the purpose of the course), and not personal identity (i.e., interpersonal relationships)' (Garrison et al., 2010, p. 7). Social presence is an essential mediator between teaching and learning in online group contexts and is, therefore, important to engage with and for the sense of a wider CoI (Garrison, 2015, 2016).

Social Presence in Online Learning

Social presence is linked to learners' ability to represent themselves authentically in online learning contexts (Lowenthal, 2010). Depending on the online learning type being engaged, there may be limits to the extent to which opportunities to be socially present can be supported. For example, asynchronous learning may limit opportunities for interactions and the development of social connections between participants, peers and an instructor unless a course has been designed to actively include such elements (Lowenthal, 2010; Aldosari et al., 2022).

Fostering authentic opportunities to interact and engage synchronously (e.g., live virtual classrooms, real-time videoconferencing as a teaching tool and live online discussion forums) are positively supportive of the maximisation of social presence (Aldosari et al., 2022). Similarly, maximising the usage of video

(both in synchronous and asynchronous delivery) is important for supporting social presence and enhancing the experience of and with non-verbal cues (Aldosari et al., 2022). Where non-verbal cues are de-emphasised in online learning, restrictions can be placed on learners' abilities to engage with the social presence of other learners (Heidari et al., 2020).

Other studies (Kemp & Grieve, 2014; Järvelä et al., 2016) reinforced that supporting opportunities for learners to authentically engage with each other is important for social presence and the fostering of peer learning prospects. Learner satisfaction and social presence are linked because students share opportunities to learn from each other and develop working relationships. As learners may tend to interact socially freely with each other rather than with an instructor, the maximisation of the facilities in which these interactions can occur is important for the development of social presence (Kemp & Grieve, 2014; Järvelä et al., 2016; Aldosari et al., 2022).

Language Anxiety

Language anxiety can be understood as a possible response in second language (L2) learning contexts to 'the anticipation of possible but currently non-existing situations' related to relative failure, being judged negatively by others, social embarrassment, inability to meet one's expectations in the language being learned' (Papi & Khajavy, 2023, p. 127). Anxiety is, in part, an adaptive preparation for anticipating future negative situations. However, language anxiety in itself may inhibit the ability to engage, process new information and interact with others; language anxiety is, therefore, understood both by learners and by instructors as an significant barrier to learning (Gkonou, 2016; Collins & Baker, 2023; Papi & Khajavy, 2023). Learners who experience language anxiety might avoid classes or exhibit physical stress symptoms such as palpitations, nausea or sweating.

In a learning environment, there may be performance issues, such as avoiding the use of a target language, being distracted in teaching sessions and having difficulty assimilating new knowledge (Matsuda & Gobel, 2004; Papi, 2010; Woodrow, 2006). Understanding and mitigating language anxiety is, therefore, a central issue for instructors. This is so that learners can feel comfortable and supported in a CoI, in the specifics of their courses and so that learners can be supported to maximise their positive experiences of L2 learning (Papi & Khajavy, 2023).

Sources of language anxiety vary and may reinforce each other. Papi and Khajavy (2023) identified three types of language anxiety in the wider literature: linguistic, learner-internal and learner-external factors. These relate specifically to linguistic factors and to other elements that are, alternatively, internal to and external to a learner. Linguistic factors may relate to previous issues of learning a first language, to having a fixed rather than a growth mindset regarding

language learning and to a learner extrapolating from present competencies to an L2 in the future. Therefore, supporting competence addresses language anxiety.

Learners' internal factors related to language anxiety have been linked cautiously to demographics; older learners and males may be more susceptible to anxiety than those who are younger and/or female (Papi & Khajavy, 2023). There is greater certainty about the role that psychological issues such as low self-esteem and competitiveness have on language anxiety (Mercer & Ryan, 2010). Mindset has been identified as being relevant: Having a fixed mindset tends to foster L2 anxiety, where 'learners with a growth mindset see … challenges as opportunities for learning and are less concerned about others' judgements. These perceptions protect them from experiencing L2 anxiety' Papi & Khajavy, 2023, p. 134). Fostering a growth mindset in learners is, therefore, important for addressing the debilitating potential of language anxiety (Mercer & Ryan, 2010; Dweck, 2017).

External factors related to language anxiety are linked to the supportiveness of a learning environment, to an instructor's persona and approach to error correction, to fostering positivity among learners and to learners being asked to demonstrate language competencies in which they do not feel confident (Khajavy et al., 2018; Papi & Khajavy, 2023). Perceptions of low social standing in a learner group context can also contribute to language anxiety levels (Khajavy et al., 2018; Papi & Khajavy, 2023). Language anxiety is a potentially significant issue and one that is important to address. The literature indicates, however, that there are roles to play by learners, an instructor and a peer group; this is concerning mutual support and positive learning environments and approaches and having a CoI that fosters the experiences of everyone in a learning context.

Language Anxiety in Online Learning

Factors of relevance include both an instructor's and students' capacity in terms of their general level of technological competence concerning using online tools and the specifics of the software involved in the delivery of a course of instruction (Russell, 2020). Lack of confidence with a software program when presenting remotely and/or with digital conferencing may be a factor here. This, in conjunction with apprehension, is linked to having suitable internet connectivity and a location from which to comfortably study and engage with others (Aydin, 2018; Russell, 2020).

Anxiety may present in online learning as shyness, panic-related symptoms, reticence or unwillingness to engage and/or task avoidance, such as avoiding the use of English as the target language and using a first language instead. There may be a reluctance to complete group tasks, engage socially with others and attend sessions (Seidikenova et al., 2019).

Aydin (2018) stated that there may be multiple sets of perceived barriers to online language learning that mutually reinforce anxiety. In Aydin's work focusing on the impacts of digital technologies on foreign-language anxiety, a

call was made for teachers to be at least competent in the software being used, for design considerations to maximise transparency of a digital learning environment and for accommodations to be made wherever practicable to support learners in gaining confidence in the use of digital learning systems.

Instructors must consider the relationship between technology and a subject and work to ensure that the former does not impinge on the latter (Aydin, 2018). There are links to be made here to the technological pedagogical content knowledge (TPACK) model associated with the work of Mishra and Kohler (2006), which emphasises the importance of instructor expertise in three overlapping domains: the subject-specific, the pedagogic and the technological. If competencies in all these areas are not evident, then a teacher using technology to support learning will tend to compromise both their effectiveness and learners' engagement and their potential to succeed (Mishra & Kohler, 2006). Similarly, the substitution, augmentation, modification and redefinition (SAMR) model of integrating digital technology into learning foregrounds the importance of modifying delivery to prioritise learner collaboration, peer feedback and mutualised support and, from this, the enhancement of social presence both inside and outside formal class-based hours (Puentedura, 2013).

Strategies for reducing EFL learners' foreign-language anxiety in online delivery contexts vary (Kim et al., 2015; MacIntyre, 2017). First, there are strategies for cultivating and sustaining a non-threatening learning environment. These include creating social networking groups for students to socialise within, sharing digital resources, recording lessons and using self-, peer- and formative assessments (Liu & Wang, 2023). Second, there are approaches to fostering learner autonomy. Examples include having a choice of assessments, using gamification strategies in learning and integrating the development of wider digital skills alongside English language learning. Offering additional resources to facilitate learners' explorations outside formal tuition also fosters learner autonomy and, with that, a reduction in language anxiety levels (Liu & Wang, 2023).

Third, it has been argued that students' engagement in the co-curation of digital learning helps address language anxiety (MacIntyre, 2017). Fourth, maximising collaboration between students in a class, using chat facilities to be supportive in group and in private one-on-one instances of communication and spending time and effort in developing and sustaining good interpersonal relations with and between learners have also been noted to be important in addressing language anxiety in digital contexts (Liu & Wang, 2023).

The Intersection of Social Presence and Language Anxiety

This element considers previous studies on the relationship between social presence and language anxiety in online learning. From here, there is a consideration of the nature and extent of that relationship, drawing on relevant

theory as appropriate for offering a model of such relationships. This informs the primary research addressed below.

For Aldosari et al. (2022), fostering social presence is key to addressing language anxiety. One key set of methods by which this can be done is maximising opportunities for supportive interactions, developing relationships between learners and providing a digital learning environment, which can be experienced by students as a facilitator of their social comfort (Aldosari et al., 2022).

Research has suggested that utilising live videoconferencing as a means by which education can be delivered via the likes of Microsoft Teams, Zoom or a setting's virtual learning environment can be beneficial in addressing social presence issues, and from this, anxiety (Grassini et al., 2020). The turn to interactive live-streaming of teaching and learning maximises the online potential for real-time interactions and for supporting learners via visual and non-verbal cues. A lack of non-verbal cues in delivery systems that do not use video (or in which some reticent learners may opt not to use their webcams) can be a significant barrier to social presence and to limiting the addressing of language anxieties (Heidari et al., 2020; Aldosari et al., 2022).

It is 'undeniable that social presence is not solely influenced by the media used but is instead more based upon personal and social factors' (Aldosari et al., 2022, p. 3). In other words, a holistic approach to fostering positivity towards L2 learning via the maximisation of social presence should be taken rather than one that focuses narrowly on the technological means by which online learning is being delivered.

Lee (2014) found that supporting learner interaction and peer engagement fosters social presence and addresses anxiety, although the research indicates that text-based collaborations (e.g., chatrooms and discussion forums) rather than live video offer advantages. This is partly because using only text in a teaching lesson removes the potential for being video-streamed, being itself a cause of anxiety. Shyness was addressed through the use of discussion boards rather than video-based alternatives. The research indicates a reciprocal relationship between cognitive and social modes of presence. Social interaction in a class group supports engagement with L2 learning and vice versa. That being said, different learners will have their own subjective responses: off-topic discussions may be detrimental to some learners' experiences, and long text messages may prove a barrier to those who prefer not to read or who struggle with digital screens (Lee, 2014).

In comparing L2 anxiety in distance versus classroom-based learners of an L2, Pichette (2009) examined French speakers studying English or Spanish and found that, while there was similarity in learners' initial anxiety levels in the two modes of study, there were changes over time. Those studying remotely tended to have lower anxiety levels over time, although this was not the same for their classroom-based peers. In other words, language anxiety among L2 learners

persisted in physical classrooms and tended not to be in online alternatives. The study suggests that 'anxiety-reducing strategies … lend themselves well to distance learning: using more extensive and detailed written material, using portfolios for assessment, providing more material for test preparation, and including interesting and humorous content' (Pichette, 2009, p. 86).

As such, collaborative learning is foregrounded as a consequence, it may be that the turn to digital mediums in and of itself is supportive of addressing language anxiety. This, however, requires that a learner be supported by an instructor, a course's design, content and mode of delivery to facilitate meaningful interactions and mutual support, and from that, the maximisation of social presence (Pichette, 2009; Russell, 2020; Alsosari et al., 2022).

Research Problem

Despite the increasing adoption of online learning platforms, there is a significant gap in understanding how social presence within these environments impacts language anxiety among EFL learners. This lack of understanding hinders the ability to develop effective strategies for mitigating language anxiety and creating supportive, engaging online EFL learning experiences. Specifically, the problem lies in the limited knowledge of whether and how increased social presence can reduce language anxiety and enhance learning outcomes. Addressing this issue is crucial, as language anxiety can significantly impede language acquisition and learner satisfaction. Therefore, exploring this relationship is essential for instructors to develop evidence-based strategies that can foster more effective online language learning environments.

Purpose of This Study

The purpose of this study was to explore the potential correlation between the degree of social presence experienced by EFL learners within a CoI in online learning environments and the intensity of their language anxiety. By analysing this relationship within the context of online education, this study intended to uncover whether higher levels of perceived social presence in online classrooms correlate with lower levels of language anxiety, thereby providing insights into the potential of online EFL platforms to create supportive and engaging learning environments that may enhance language learning outcomes.

Research Questions

1. What is the degree of social presence within a CoI?
2. What is the degree of language anxiety in online settings within a CoI?
3. Does higher perceived social presence correlate with lower language anxiety among EFL learners?
4. How do dimensions of social presence relate to aspects of language anxiety?
5. What online environment factors contribute to comfort and reduced language anxiety?

6. How do EFL learners perceive social presence as reducing language anxiety and enhancing engagement?

Method
Research Design

This research employed a mixed-methods approach that included a questionnaire incorporating both quantitative scales and open-ended questions to investigate the complex relationship between social presence and language anxiety among EFL learners in online settings. Quantitative data gathered by established measures, such as the Social Presence Scale and the Foreign Language Classroom Anxiety Scale, were analysed using descriptive statistics and correlation analysis to reveal patterns and potential relationships between social presence scores and language anxiety levels.

Simultaneously, qualitative data from open-ended questions and potential semi-structured interviews were examined by thematic analysis, uncovering deeper meanings and personal experiences related to social presence and language anxiety within online learning environments. By integrating and comparing findings from both approaches, this research aims to provide a comprehensive understanding of the dynamic, ultimately informing strategies to enhance social presence and reduce language anxiety in online EFL contexts. Ethical considerations, including informed consent and data confidentiality, were carefully maintained throughout the study.

Participants

The study participants were 220 first-year EFL learners enrolled in an English language course at Taibah University in Saudi Arabia. The majority of these students (96.4%) were between the ages of 18 and 22, with a higher representation of females (60%) compared to males (40%). Most of the learners (31.4%) identified as having either beginner or intermediate (62.3%) English proficiency levels, while only a small percentage (6.4%) considered themselves to have advanced English skills.

Table 1
Demographic variables of this study

No.	Variable	Categorisation	Frequency	%
1	Age	8	3.6	8
		108	49.1	108
		104	47.3	104
	Total		**220**	**100**
2	Gender	88	40	88
		132	60	132
	Total		**220**	**100**
3	English Language Proficiency	69	31.4	69
		137	62.3	137
		14	6.4	14
	Total		**220**	**100**

Data collection

The survey instrument used in this study is derived from a social presence scale originally developed by Gunawardena and Zittle (1997). This scale was used to investigate social presence as a predictor of satisfaction in computer-mediated conferencing environments. The original scale was adapted in several ways: the language was adjusted to fit the SUNY Learning Network (SLN) context instead of the original GlobalEd setting. Additionally, the independent variables were expanded to emphasize students' perceived learning. The scale was also altered to assess individual course activities, as opposed to the original scale, which evaluated the course from a broader perspective.

Construct Validity (Exploratory Factor Analysis)

To assess the construct validity of the social presence tool, an exploratory factor analysis (EFA) was conducted. The tool comprises several items assessed on a Likert scale. It evaluates three key dimensions: Affective Expression, Open Communication, and Group Cohesion. Affective Expression explores emotional connections and the sense of belonging. Open Communication measures comfort and ease of communication among participants. Group Cohesion assesses collaboration and trust within the group. The results of the EFA are presented below.

Table 2
Loading matrix for the dimensions of the social presence tool

No.	Dimension	Item	Correlation
1	Affective expression	Getting to know other course participants gave me a sense of belonging in the course.	0.702
2		I was able to form distinct impressions of some course participants.	0.747
3		Online or web-based communication is an excellent medium for social interaction.	0.797
4	Open communication	I felt comfortable conversing via the online medium.	0.843
5		I felt comfortable participating in the online course discussions.	0.866
6		I felt comfortable interacting with other course participants.	0.886
7		I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	0.863
8	Group cohesion	I felt that my viewpoint was acknowledged by other course participants.	0.844
9		Online discussions help me to develop a sense of collaboration.	0.839
		Kaiser-Meyer-Olkin	0.905
		Bartlett's Test of Sphericity – Chi-Square	1,606.031
		Df	36
		Eigen Value	6.092
		Sig.	0.00**

**Statistically significant at ($\alpha = 0.05$)

The results of the EFA revealed a single dominant factor with an eigenvalue of 6.092, exceeding the recommended level of 1. This suggests that a single factor adequately explains a significant proportion of the variance in the social presence scale items. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.905, surpassing the recommended standard of 0.50 (Hair et al., 2010), indicating sufficient common variance among the items for factor analysis.

Furthermore, Bartlett's test of sphericity yielded a statistically significant result (χ^2 (36) = 1,606.031, p < 0.001), confirming the factorability of the data. All nine items loaded strongly onto this single factor, with loadings exceeding the 0.40 mark, signifying a cohesive construct of social presence within the instrument. These findings provide solid evidence of the construct validity of the social presence tool. An EFA was also conducted to evaluate the construct validity of language anxiety in online settings tool.

Table 3

Loading matrix for the items on the dimensions of language anxiety in the online settings tool

No.	Item	Correlation
1	I feel nervous when I have to speak English in online classes.	0.82
2	I avoid speaking English online because of fear of making mistakes.	0.921
3	I feel anxious when participating in group discussions in English.	0.867
4	I worry about making mistakes in English during online interactions.	0.852
5	The thought of speaking English online makes me anxious.	0.917
6	I feel confident when I have to use English in online classes.	0.86
7	I get anxious when I don't understand everything being said in English in online sessions.	0.712
8	I feel embarrassed to speak English online if I am not well-prepared.	0.818
	KMO	0.902
	Bartlett's Test of Sphericity – Chi-Square	1,291.790
	Df	28
	Eigen Value	5.050
	Sig.	0.00**

**Statistically significant at (α = 0.05)

The EFA results, presented in Table 3, demonstrate a single dominant factor with an eigenvalue of 5.050, indicating that a single factor sufficiently explains a significant portion of the variance in language anxiety in online setting items. The KMO measure of sampling adequacy was 0.902, surpassing the recommended standard of 0.50 (Hair et al., 2010), suggesting adequate common variance among the items for factor analysis. Bartlett's test of sphericity yielded a statistically significant result (χ^2 (28) = 1,291.790, p < 0.001), confirming the suitability of the data for factor analysis. All items loaded strongly onto this single factor, with loadings exceeding 0.40, indicating a unidimensional construct of language anxiety. These findings provide strong evidence for the construct validity of language anxiety in online learning environments.

Reliability of Questionnaire Dimensions

To determine the internal consistency of the study instruments, Cronbach's alpha coefficients were calculated for each scale and its subscales. The results are presented in Table 4.

Table 4

Reliability test (Cronbach's alpha) for all variables

No.	Scale	No.	Cronbach's Alpha Value
1	Social presence	9	0.938
1.1	Affective expression	3	0.790
1.2	Open communication	3	0.903
1.3	Group cohesion	3	0.894
2	Language anxiety in online settings	8	0.887
	Overall	**17**	**0.845**

The reliability analysis of the questionnaire dimensions, as shown in Table 4, indicates high-reliability coefficients for all the scales. Each Cronbach's alpha value exceeded the acceptable threshold of 0.70 (Pallant, 2005), confirming the study tool's suitability for achieving the research objectives.

Data Analysis

Quantitative data from the questionnaires, specifically scores related to social presence and language anxiety, were analysed using descriptive statistics and correlation analysis to identify patterns and potential relationships. Qualitative data derived from open-ended questionnaire responses were examined using thematic analysis. This process involved coding responses, identifying recurring themes and interpreting their meanings within the context of social presence and language anxiety in online EFL learning. The findings from both the quantitative and qualitative analyses were then integrated and compared to provide a comprehensive understanding of the interplay between these two factors.

Results and Discussion

The results related to the first research question, 'What is the degree of social presence within a CoI?', are presented in Table 5. The researcher calculated the means, standard deviations, ranks and importance levels for the dimensions of social presence.

Table 5

Means, SDs, ranks and importance levels for social presence dimensions

No.	Dimension	Mean	Std.	Rank	Importance Level
1	Affective expression	3.42	0.64	3	Medium
2	Open communication	3.45	0.97	2	Medium
3	Group cohesion	3.54	0.99	1	Medium
	Overall	**3.47**	**0.89**		**Medium**

**Statistically significant at ($\alpha = 0.05$)

Table 5 reveals that the mean values were between 3.42 and 3.54, with standard deviations between 0.64 and 0.99. The overall mean was 3.47, with a standard deviation of 0.6489 and a medium degree of estimate. Dimension 3 (group cohesion) came in first with a mean of 3.54, a standard deviation of 0.99 and a medium degree of appreciation. Dimension 2 (open communication) came in second, with a mean of 3.45, a standard deviation of 0.97 and a medium degree of appreciation. Dimension 1 (affective expression) came in last, with a mean of 3.42, a standard deviation of 0.64, and a high medium of appreciation.

Dimension 1: Affective Expression
Table 6

Means and SDs of affective expression

No.	Item	Mean	Std.	Rank	Importance Level
1	Getting to know other course participants gave me a sense of belonging in the course.	3.43	1.11	2	Medium
2	I was able to form distinct impressions of some course participants.	3.53	0.96	1	Medium
3	Online or web-based communication is an excellent medium for social interaction.	3.31	1.26	3	Medium
	Overall	**3.42**	**0.64**		**Medium**

**Statistically significant at ($\alpha = 0.05$)

The overall mean score of 3.42 suggests that, on average, the participants felt a moderate level of affective expression in the online course. Item 1 (sense of belonging) had a mean of 3.43, indicating a slightly higher level of perceived belonging than the overall average. This is positive and supports the importance of fostering a sense of community. Item 2 (forming impressions) had a mean of 3.53, suggesting a relatively strong ability to form impressions of fellow participants. This could be due to online communication tools or the nature of the course activities. Item 3 (online communication as a medium) had a mean of 3.31, slightly lower than the overall average. This suggests that while online communication is used, it may not be perceived as the most effective medium for social interaction.

Dimension 2: Open Communication
Table 7

Means and SDs of open communication

No.	Item	Mean	Std.	Rank	Importance Level
1	I felt comfortable conversing via the online medium.	3.44	1.05	2	Medium
2	I felt comfortable participating in online course discussions.	3.41	1.06	3	Medium
3	I felt comfortable interacting with other course participants.	3.51	1.09	1	Medium
	Overall	**3.45**	**0.97**		**Medium**

**Statistically significant at ($\alpha = 0.05$)

The overall mean score of 3.45 suggests that on average, the participants felt comfortable with open communication in the online course. This is a positive sign that the online learning environment encourages active participation and interactions. Item 1 (comfortable conversing) had a mean of 3.44, indicating a slightly higher level of comfort in conversing via the online medium compared to the overall average. This is encouraging because the ease of online conversations can contribute to the overall sense of community.

Item 2 (comfortable participating in discussions) had a mean of 3.41, slightly lower than the overall average. This could imply that there is room for improvement in the design of course discussions to enhance participation. Item 3 (comfortable interacting with other participants) had a mean of 3.51, which was the highest among the items. This suggests that the participants generally felt at ease interacting with their peers online, which contributed to positive social experiences.

Dimension 3: Group Cohesion
Table 8

Means, SDs, item importance, and importance level of group cohesion

No.	Item	Mean	Std.	Rank	Importance Level
1	I felt comfortable disagreeing with other course participants while still maintaining a sense of trust.	3.61	1.00	1	Medium
2	I felt that my point of view was acknowledged by other course participants.	3.59	1.07	2	Medium
3	Online discussions help me develop a sense of collaboration.	3.41	1.19	3	Medium
	Overall	**3.54**	**0.99**		**Medium**

**Statistically significant at (0.05 = α)

The overall mean score of 3.54 suggests that the participants experienced a medium level of group cohesion in the online course. Item 1 (comfortable disagreeing while maintaining trust) had the highest mean score of 3.61, indicating that participants generally felt comfortable expressing differing viewpoints while still maintaining trust. Item 2 (acknowledgement of participants' viewpoints) received a mean score of 3.59, which is close to the overall mean. This suggests that the participants felt that their opinions were recognised by their peers. Item 3 (collaboration via online discussions) had the lowest mean score of 3.41, implying that participants may perceive less collaboration in online discussions compared to other aspects of group cohesion.

To determine results related to the second research question, 'What is the degree of language anxiety in online settings within a CoI?', the researcher used the means, standard deviations, item importance and importance levels for the dimensions of language anxiety in online settings.

Table 9

Means, SDs, item importance, and importance levels of language anxiety in online settings

No.	Item	Mean	Std.	Rank	Importance Level
1	I feel nervous when I have to speak English in online classes.	3.12	1.16	5	Medium
2	I avoid speaking English online because of fear of making mistakes.	3.00	1.23	7	Medium
3	I feel anxious when participating in group discussions in English.	3.06	1.10	9	Medium
٤	I worry about making mistakes in English during online interactions.	3.19	1.09	4	Medium
٥	The thought of speaking English online makes me anxious.	2.99	1.17	8	Medium
٦	I feel confident when I have to use English in online classes.	3.62	0.94	1	Medium
٧	I get anxious when I don't understand everything being said in English in online sessions.	3.40	1.16	2	Medium
٨	I feel embarrassed to speak English online if I am not well-prepared.	3.29	1.10	3	Medium
	Overall	**3.21**	**0.84**		**Medium**

**Statistically significant at (α = 0.05)

It is noted from Table 9 that the mean values range between 2.99 and 3.62, with standard deviations between 0.94 and 1.23. The overall mean was 3.21, with a standard deviation of 0.84, indicating a medium degree of importance. These results suggest that the study samples' responses to the question related to the

degree of language anxiety in online settings within a CoI show a medium level of appreciation.

To address the third question, 'Does higher perceived social presence correlate with lower language anxiety among EFL learners?', the students were categorised based on their respective levels of social presence and language anxiety: high, medium or low. The Pearson correlation coefficient was calculated to determine the relationship between these variables. Table 10 presents the results.

Table 10.

Pearson correlation coefficient between social presence and language anxiety Among EFL learners

Dimension	Statistics	Language Anxiety in Online Settings
Social Presence	Pearson Correlation	-0.810**
	Sig. (2-tailed)	0.000
	N	37

The analysis showed a strong inverse correlation between higher perceived social presence and lower language anxiety among EFL learners. The correlation coefficient is -0.810, which is statistically significant ($\alpha = 0.05$). This result indicates that a higher perceived social presence is associated with lower language anxiety among EFL learners.

To address the fourth research question, 'How do dimensions of social presence relate to aspects of language anxiety?' by exploring the relationship between the dimensions of social presence (affective expression, open communication, group cohesion) and language anxiety (e.g., communication apprehension, fear of negative evaluation and test anxiety), this study categorised students into three levels (high, medium, low) for both variables. Table 11 presents the cross-tabulation of the participants' distributions across these levels.

Table 11

Distribution (cross-tabulation) of students by social presence and language anxiety levels

Social Presence Level	Language Anxiety Level	Count	% With Social Presence	% With Language Anxiety	% of Total
High	High	18	22.8%	30.0%	8.2%
	Medium	8	10.1%	22.2%	3.6%
	Low	53	67.1%	42.7%	24.1%
Total		79	100.0%		35.9%
Medium	High	36	30.3%	60.0%	16.4%
	Medium	26	21.8%	72.2%	11.8%
	Low	57	47.9%	46.0%	25.9%
Total		119	100.0%		54.1%
Low	High	6	27.3%	10.0%	2.7%
	Medium	2	9.1%	5.6%	0.9%
	Low	14	63.6%	11.3%	6.4%
Total		22	100.0%		10.0%
Overall Total		220			100.0%

To answer the fourth research question, the Pearson correlation coefficient was calculated. Table 12 shows the results of the analysis.

Table 12. The Pearson correlation coefficient between the dimensions of social presence and aspects of language anxiety

Dimension	Statistic	Language Anxiety in Online Settings
Affective expression	Pearson Correlation	-0.625[**]
	Sig. (2-tailed)	0.000
	N	37
Open communication	Pearson Correlation	-0.593[**]
	Sig. (2-tailed)	0.000
	N	37
Group cohesion	Pearson Correlation	-0.586[**]
	Sig. (2-tailed)	0.000
	N	37

Based on the data and analyses, a clear inverse relationship emerges between social presence dimensions and language anxiety in online learning environments. The Pearson correlation coefficients, ranging from -0.625 to -0.586 and all statistically significant at α = 0.05, demonstrate that higher levels of affective expression, open communication and group cohesion are consistently associated with lower levels of language anxiety. This finding is further supported by the distribution data in Table 11, which shows that students with a high social presence tend to experience lower language anxiety. Specifically, 67.1% of the students with high social presence reported low language anxiety.

These results suggest that fostering a strong sense of community and encouraging open, supportive interactions in online courses may play a crucial role in reducing students' apprehension about communicating in a foreign language and their fear of negative evaluations. Instructors and course designers could potentially leverage this insight to create more effective and less stressful online language learning experiences by implementing strategies that enhance social presence across its various dimensions.

Qualitative Results

The qualitative data analysis, addressing the fifth and sixth research questions, revealed several key themes regarding online environment factors contributing to comfort and reduced language anxiety, as well as EFL learners' perceptions of social presence in reducing anxiety and enhancing engagement. These themes include: A Supportive Learning Environment; Peer Interaction and Collaboration; Language Anxiety and Its Impact; The Challenges of Online Learning; Motivation and Self-Improvement; and The Importance of Practice. Each theme offers insights into how the online environment and social presence influence EFL learners' experiences, particularly in relation to language anxiety and engagement.

A Supportive Learning Environment

A prominent theme that emerged is the importance of a supportive learning environment. The participants frequently mentioned the role of their instructors

in fostering a sense of comfort and encouragement. For instance, one participant noted that support and encouragement from a course instructor are significant factors in a learning experience. This support alleviates anxiety and motivates students to engage more actively in their learning. The presence of a supportive instructor who corrects mistakes without ridicule was highlighted as being crucial, with a comment such as an instructor not showing annoyance or laughing at mistakes contributing to a positive atmosphere conducive to learning.

Peer Interaction and Collaboration

Another key theme was the value of peer interaction and collaboration in reducing language anxiety. Many participants expressed that being in a class with peers who share similar language challenges creates a sense of camaraderie. For example, one participant stated that when a class is composed of students whose native language is not English, they feel more at ease knowing that everyone is learning together and making similar mistakes. This shared experience fosters a supportive network where students can practise without fear of judgement, enhancing their confidence and willingness to participate.

Language Anxiety and Its Impact

Language anxiety was a recurring theme that significantly affected students' participation in online English learning. The participants described feelings of stress and pressure when they struggled to express their thoughts, as seen in a statement about the stress and psychological pressure of not being able to convey their thoughts. This anxiety can hinder learners' ability to engage fully in discussions and presentations, leading to reluctance to participate. Fear of making mistakes, particularly in pronunciation or vocabulary, is a barrier that many students face, as indicated by comments about forgetting words during presentations.

The Role of Familiarity and Comfort

Familiarity with peers and instructors plays a crucial role in reducing anxiety and enhancing participation. The participants expressed that knowing their classmates well helps them feel less pressure when speaking. One participant mentioned, 'If I have a strong relationship with them, I will not feel the weight or sense of failure'. This sense of connection allowed the students to engage more freely, as they felt supported by their peers. The comfort of familiar interactions was contrasted with the anxiety of speaking in front of strangers, highlighting the importance of building relationships in a learning environment.

The Challenges of Online Learning

The transition to online learning presented unique challenges that impacted the students' experiences. Many of the participants expressed that they found online classes less effective than in-person learning, stating that 'online learning is harder than in-person learning'. Issues such as technical difficulties, lack of immediate feedback and reduced interaction contributed to feelings of discomfort and confusion. One participant noted 'not understanding well due to online

learning', indicating that the online format can hinder comprehension and engagement.

Motivation and Self-Improvement

A strong desire for self-improvement was evident among the participants. Many expressed a commitment to enhancing their English skills, with statements such as, 'The desire for development and lack of anxiety are the foundations that increase the desire to communicate'. This motivation drove the students to seek opportunities for language learning and practise despite the challenges they faced. Encouragement from instructors and peers to learn more and improve their skills created a cycle of support and motivation that enhanced their learning experience.

The Importance of Practice

The theme of practise emerged as a critical factor in building confidence and reducing anxiety. The participants emphasised that regular practise in using the English language makes speaking easier and boosts their confidence. One participant stated, 'Practising English always makes speaking easier, which boosts confidence'. This highlights the necessity of creating opportunities for practise within a learning environment, whether group discussions, presentations or informal interactions among peers.

Summary of the Qualitative and Quantitative Findings

The quantitative findings revealed a statistically significant negative correlation between the dimensions of social presence (affective expression, open communication and group cohesion) and language anxiety in online settings. The Pearson correlation coefficients ranged from -0.625 to -0.586, indicating that higher levels of social presence are consistently associated with lower levels of language anxiety. This aligns with previous research emphasising the crucial role of social presence in mitigating language anxiety in online learning (Aldosari et al., 2022; Lee, 2014; Pichette, 2009).

These findings, as presented in the seven themes, provide a more in-depth understanding of the participants' experiences and perceptions. The themes highlight the importance of a supportive learning environment, peer interaction and collaboration, and the role of familiarity and comfort in reducing language anxiety. Additionally, the themes reveal the challenges of online learning, the importance of motivation and self-improvement, and the necessity of practice in building confidence and reducing anxiety. These findings echo the work of Aldosari et al. (2022) on the need for social comfort, peer interaction, and collaboration, and reflect Lee's (2014) research on the benefits of collaborative environments and the role of familiarity and comfort in reducing language anxiety. These qualitative insights provide context for how social presence contributes to a less anxious learning environment, potentially explaining the negative correlation observed quantitatively.

The quantitative and qualitative findings complement each other, providing a more comprehensive understanding of the relationship between social presence and language anxiety in online learning environments. While the

quantitative findings provide statistical evidence of the correlation between social presence and language anxiety, the qualitative findings offer a more nuanced understanding of the participants' experiences and perceptions.

The qualitative findings support the quantitative findings, as they highlight the importance of social presence in reducing language anxiety. The themes of a supportive learning environment, peer interaction and collaboration and familiarity and comfort all relate to aspects of social presence. The qualitative findings also provide additional insights into the challenges of online learning and the importance of motivation and self-improvement, which are not explicitly addressed in the quantitative findings.

Additionally, the themes reveal the challenges of online learning, such as technical difficulties and reduced face-to-face interaction, aligning with concerns raised by Aldosari et al. (2022) about the need for holistic approaches beyond technology. The qualitative data also highlight the importance of intrinsic motivators, such as self-improvement and the desire to practise, aspects not always captured in quantitative measures but crucial for understanding students' experiences.

Limitations of This Study

The study's focus on only three dimensions of social presence—affective expression, open communication and group cohesion— limits its insight into how social presence influences language anxiety. While these dimensions are crucial, neglecting teaching presence and cognitive presence leaves a significant gap in understanding how these factors contribute to a learner's emotional well-being in online learning environments. For instance, instructor presence, which refers to the design, facilitation and direction of cognitive and social processes, can significantly impact learners' motivation, engagement and learning outcomes. Similarly, cognitive presence, which relates to the exploration, construction and application of knowledge, can affect learners' ability to understand and apply course material.

Conclusion and Recommendations

Based on the research findings, it is evident that maximising social presence plays a pivotal role in reducing language anxiety in online language learning environments. The strong negative correlation between social presence and language anxiety, supported by insight from this study's qualitative findings, highlights the importance of a supportive environment, peer interaction and familiarity as key themes linked to reducing anxiety. Recommendations include fostering a supportive online community, designing and implementing collaborative pedagogical practices, addressing technological challenges and providing professional development for educators.

Future research should explore the long-term impacts and individual learner differences and develop best practices for online language learning. It should investigate the long-term effects of social-presence interventions on language anxiety and language acquisition in online settings. Examining how

individual student characteristics, such as learning style and prior online learning experience, influence responses to social presence strategies is essential. Developing evidence-based best practice guidelines for instructors can offer practical support for enhancing social presence and reducing language anxiety in online language environments.

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