

Chinese Postgraduate Students' Perceived Social Presence in Online Learning Environments: A Zoom-Based Online Student-Led Project Evaluation

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Abstract: Research on how Chinese students perceive their social presence, especially in the UK's higher education and online environment, has received less attention. This qualitative study will fill the research gap by providing data to understand Chinese students' attitudes towards Zoom-based student-led online learning projects, aiming to explore how Chinese students perceive social presence and what factors influence their social presence. We collected data by conducting semi-structured interviews with seven postgraduate students who attended an online Zoom-based student-led project, "Holistic Academic and Research Reflective Practice". It is found that students' perceived social presence can be grouped into three themes: conceptualization of social presence; the level of perceived social presence in the online environments; and the perceived importance of social presence. The factors that affect the social presence of Chinese students can be put into three categories: social context, online communication, and interactivity. We suggest that students should always be aware of the impact of emotional values and human interaction in online learning environments in order to have a positive learning experience. Chinese students who want to take part in more interactive online learning environments should think about how to build a healthy sense of social presence.

1. Introduction

A range of computer-mediated communication (CMC) tools has been steadily evolving around the world. CMC technology has been used by course designers and lecturers to create web-based courses over the past two decades. Given the instructional problems posed by the COVID-19 pandemic in 2020, information and communication technology (ICT) platforms have enabled institutions to embrace online course delivery. Zoom, a powerful and dependable technology for collaborative meetings, brings together remote participants and instructors to maintain contact and involvement with the inclusion of social components into the online environment through various

online activities ^[1]. This two-way interactive video and audio gadgets can interchange real visual and auditory data, regain some lost emotional and social relationships as a result of CMC, bolstering the growth of social presence ^[2].

Social presence is very important for making teaching more effective, and it is seen as a key part of how a learning process should work in higher education ^[3]. However, because there are relatively few non-verbal communication channels in the CMC environment, the computer-aided learning environment may weaken classroom interaction and the social presence of students ^[4]. Educators agree that the lack of nonverbal and contextual cues in online settings makes it harder for students to learn how to communicate well and understand each other ^[5].

Chinese students studying for higher education degrees at UK universities have poor social skills and lack confidence in their interaction abilities, which prevents them from fully socializing in education ^[6]. Because of their cultural traditions, linguistic difficulties, and preference for autonomous learning techniques, Chinese students find it challenging to assimilate into English-speaking academic life. They may not be able to benefit from the online learning community because they are a silent group in classes ^[7,8].

Therefore, the purpose of this study is to obtain information about the Chinese students' perceived social presence in Zoom-based online student-led projects and the factors that may affect their social presence in the online learning environment. Because learners' perceptions and attitudes are critical to learning motivation and outcomes, course designers and online course deliverers must have a better understanding of how students see and respond to all aspects of online learning ^[9].

2. Literature review

2.1. Social presence theory

The term "social presence" comes from the word "being" ^[10]. Presence is associated with self-awareness and distinct presence as a psychological outcome of producing agency and control ^[11]. According to Riva and Waterworth ^[12], if people can express their intentions and feelings in the external world, they will be viewed as "being".

Gunawardena proposed the notion of social presence, which states that it is a structure made up of many characteristics related to interpersonal contact ^[13]. It is the subjective experience of communicators' presence in a series of exchanges. Garrison and Cleveland-Innes proposed a concept of social presence: social presence refers to the ability to emotionally project personal qualities onto the community and form meaningful and purposeful interpersonal relationships ^[3]. On the other hand, many scholars have turned social presence into a sense of community or belonging. Social presence is a sign of community awareness that online learners create ^[14].

2.2. Computer-mediated communication and social presence

Computer-mediated communication systems like Zoom increase psychological participation by making instructors appear more genuine, real, and familiar, resulting in cooperative learning performance on par with face-to-face instruction. Furthermore, because it can reduce the distance, eliminate social and cultural barriers, and give a more flexible schedule, the Zoom meeting system can largely imitate the campus education community.

The social presence provided through CMC interaction is influenced not just by oral information but also by a variety of social cues and the communication environment. The medium's ability to convey information regarding facial expressions, gaze directions, posture, attire, and nonverbal clues all affect the social presence. Even two-way interactive video and audio tools that allow for the transmission of visual and auditory information have a significantly different engagement mode

than in a face-to-face (F2F) context ^[13].

However, as a result of the loss of the shared physical and social context that defines the nature of communication and the relative position of participants, Bozkaya believes that contact in CMC is merely an artificial experience that may cause alienation and isolation^[15]. As a result, F2F communication is seen to be better for developing a clear impression of people than the generally clueless CMC conversation ^[16].

2.3. Chinese students' social presence

Student-led online chat is now commonly used in blended and online education to communicate, share knowledge, and facilitate collaborative learning ^[17]. According to social constructivism, peer interaction and cooperation are conducive to the occurrence of social learning. Students can ask questions, listen to others' perspectives, sort out different options and outcomes, and decide what is best for all stakeholders in a loving and open community where they can ask questions, listen to others' perspectives, and decide what works best for all stakeholders. Peer facilitation strategies produce meaningful debate, mutual understanding, and a strong sense of community, and students perceive student-led conversations as more important and engaging ^[18].

However, culture has been demonstrated to influence people's perceptions of and adoption of information technology in previous studies ^[19]. Each person's cultural background is also directly linked to their social life, which has a big impact on how they accept new technologies.

Chinese students receiving higher education in Western countries usually lack interaction and social presence ^[20,21]. Western educators have encountered the problem of "quiet Chinese students" ^[20]. According to traditional Chinese education, students' classroom behavior must be submissive and teachers must be authoritative. There is little social interaction between students and teachers. In addition, Chinese students are labelled as dumb in English classes due to their weak language skills, making it difficult to participate in discussions.

Therefore, based on the above discussion, in the context of completely online learning, it is particularly important to explore how Chinese students view their social presence in online courses.

2.4. Research gaps and research questions

Research on how Chinese students perceive their social presence, especially in the UK's higher education and online environment, has received less attention. This qualitative study will fill research gaps and provide data to understand Chinese students' emotional attitudes towards student-led online seminar experiences. It will address the following research questions:

- 1) How do Chinese postgraduate students perceive their own social presence in Zoom-based online student-led projects?
- 2) What factors influence Chinese students' social presence in Zoom-based online student-led projects?

3. Methodology

3.1. Context of the current study

Given the research questions, this study is qualitative in nature. All of the above issues are based on telling personal stories and thinking about specific situations or thoughts. Real-life experience was used to gather evidence, which led to a deep understanding of how social presence works in a computer-based learning environment. Qualitative data, on the other hand, focuses on how a person sees their situation and is a great way to find out how they interpret events and processes.

The research was carried out at a UK university with a fast-growing international student population, particularly from China. The data for this study came from a graduate online course unit called "Holistic Academic and Research Reflective Practice" (HARRP), where students reflected on their academic and research experiences during their master's studies through group discussion. There was a seminar every week, but students could choose whether to attend according to their own arrangements. More importantly, it gives students the chance to talk to each other and create a good learning environment. This makes it easier for them to make friends and become more social.

3.2. Theoretical framework

Tu and McIsaac [14] define social presence as three dimensions (see Figure 1): social background, online communication, and interaction. The model is built around two aspects of social presence (intimacy and immediacy). After being further subdivided into three dimensions, these components can then be expanded individually in the online environment. We use these three dimensions as the theoretical framework for the next step of developing instruments and figuring out what the data mean.

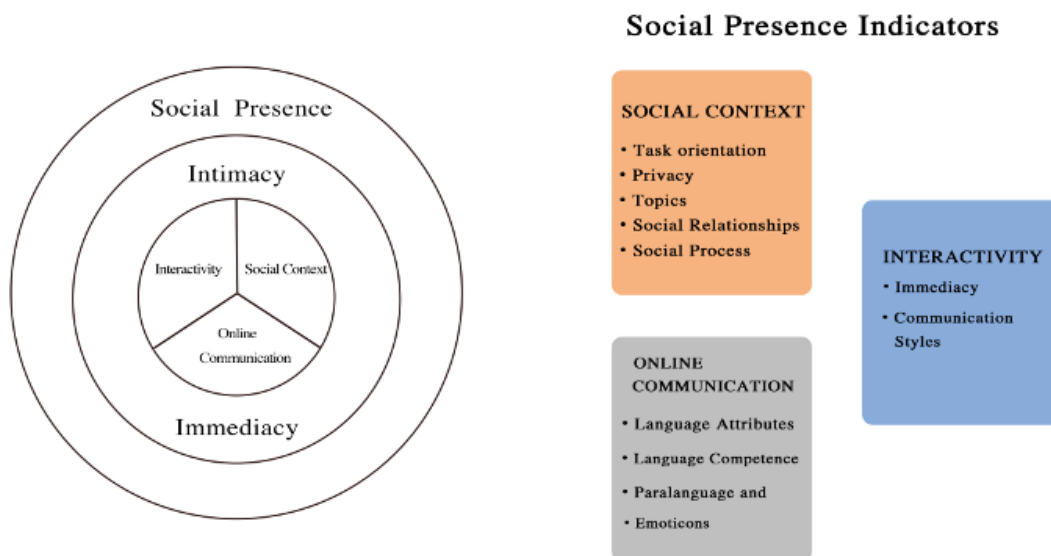


Figure 1: Social Presence’s three dimensions by McIsaac (Tu & McIsaac, 2004)

In particular, this research is also affected by what Australian philosopher Jeff Malpas [7] calls the "non-autonomy of virtual experience." This shows that the teaching and learning that happens in the virtual conference classroom, like any other virtual experience, is not a separate reality that competes with the real world. It is, in fact, an extension of our daily lives, and it is always dependent on the reality that it contains [22]. The Internet is both an intermediary and a representative medium. People never forget their daily lives when dealing with others on the Internet. They just relocate the activity to a virtual location. As a result, in order to properly comprehend online learners, we must examine their entire life experience through the lens of their particular time and place.

3.3. Data collection

Participants were recruited within two postgraduate programs with a convenience sampling method, by emailing and recruiting in Microsoft Teams colleagues' group chat. Finally, 3 participants from program A and 4 participants from program B agreed to attend the study.

We used a semi-structured interview method with 15 open-ended questions that asked how they interact with others, how much social presence they feel, and how they build an online community at student-led HARRP seminars.

To preserve the anonymity of participants, the study was done in a secure manner. Seven HARRP participants were emailed a consent form and participant information sheet in advance to brief them on the procedures to be followed and to clarify the study content, ensuring that they fully grasped the nature and aim of the research. We called the participants and set up the Zoom meeting once they had completed and returned the documents with their signatures.

3.4. Data analysis

The data analysis follows Braun and Clarke's theme analysis instructions ^[23]. First, we reread the interview data to get familiar with it. Then, a manual coding method was used to create a central database so that data could be put into meaningful groups. After the same code has been grouped into categories, it is folded into themes that are meaningful.

4. Findings

The research questions are used to organize the themes and categories that make up the conceptual framework of social presence. The responses to research question 1 can be grouped into three themes: conceptualization of social presence; the level of perceived social presence in the online HARRP Seminars; and the perceived importance of social presence in Chinese learning experiences. The results of the data analysis for research question 2 were interpreted as three dimensions of social presence: social context, online communication, and interactivity. The answers to the second question show how people build and keep up their social presence in online learning environments.

4.1. Conceptualisation of social presence

Even though many of the participants have never heard of social presence before, they try to explain it using what they know.

Participant A: The sense of social presence seems difficult to put into words, but I think it has to do with the atmosphere in the classroom.

Participant B: I have never come across this theory before. I guess it might be close to the concept of a "learning community". With a social presence, we can work with our classmates together, share learning resources, and complete common learning tasks.

Participant C: I had learned this theory in another course during my MA studies. I remembered that it refers to the extent to which a person is perceived to be real. There will be a feeling of social presence when I am aware that I am talking to a real person and not a machine.

Except for participant C, none of the other participants know the concept of social presence. All of the participants, however, agreed that social presence is a concept that is directly linked to community and interpersonal contact in the learning environment. The participants' definitions appear to be in line with some of Garrison & Cleveland-Innes's viewpoint, social presence is defined as the ability to project personal qualities and feelings into the intermediary environment ^[3], or the sensation of "being with others" ^[24].

Participant G: Social presence involves an emotional dimension in learning. If I can feel the presence of my classmates and teachers, as well as know each other well, I will perceive that they are approachable and real in the classroom.

Clearly, the development of emotional bonds is critical to increasing social presence. When working on group projects, team members not only share their knowledge and abilities but also make contacts ^[25]. The person on the HAARP project team said that it was fun to work with the other people on the team because they all got along well.

Participant A: I had fewer worries while conducting group discussions online. I am afraid to interact with my peers and establish relationships with them in real life. But I found that communication on Zoom was safe, so I'm happy to develop online friendships. I have made many friends in the HARRP classes, and they come from different majors. Although we meet each other once a week, we have a great time together.

4.2. The level of perceived social presence in the online HARRP seminars

This subtheme comes from an interview question that was meant to find out what people thought about the social presence, collaborative learning, and emotional learning of Chinese students in HARRP seminars. One of them said they were satisfied with the overall social presence level of the HARRP seminar. For example, participant A pointed out that her learning experience in HAARP allowed her to master her own learning and provided sufficient opportunities to establish social relations with other students. Therefore, he seems to have formed a strong sense of social existence.

Participant A: Discussions in HARRP seminars were entirely the responsibility of our students. In this course, we have more opportunities to work with classmates and share knowledge and learning experiences than in didactic-based lectures. Therefore, I can feel a high level of social presence.

One participant embraced the discussion group as a community of learners since it had a specific function of enabling, creating, and confirming understanding and developing competencies that led to further learning ^[3]. "I have a social relationship with my team members," remarked participant D.

Lastly, participants D and E create a community of learners and a sense of social presence because they learned how their cognitive and social skills are linked at the same time in the HARRP classroom.

Several participants were happy with the level of social participation in the HARRP seminar as a whole. However, some of them had a negative view of their own participation and admitted that they were sometimes unwilling or hesitant to take part in group discussions, which could cause their level of social presence to change.

Participant F: Sometimes my group members didn't turn on their cameras and microphones. They seldom speak, but just observe silently behind the screen. In this case, my opinion was often ignored and, thereby, my social presence could be extremely low.

On the other hand, they are worried about going to an open and formal academic debate forum because they think that their shyness makes it hard for them to interact with others.

Participant A: I am afraid to speak in public or in front of a lot of people, and it makes me nervous. I'll keep quiet if the situation permits. In most cases, I liked to be a quiet listener and hardly ever initiated a discussion in the HARRP class. So, my participation rate was relatively low, and others may not have perceived my presence.

Additionally, participant E emphasized that discussions in breakout rooms created a higher sense of social presence than those in public rooms. She stated that breakout rooms may be psychologically safer for some learners as they allow for the creation of smaller groups that facilitate interaction and questioning.

Participant E: I can feel more of a social presence in the breakout room discussions. In smaller groups, I feel more secure, and I can have my opinions heard more carefully and get fast responses from others. Speaking in the main meeting room makes me nervous, as if

I'm standing on a big stage facing a large audience.

From the beginning, these participants portrayed themselves as professional educators and serious students. They expressed concern about the dominance and competitiveness of other participants, as some "bossy" participants may force their views to be expressed in the discussion without giving others the opportunity to participate.

Participant B: Some group members were overly expressive and aggressive in discussions and may have been perceived by us as not being able to work easily with others. These students mistook the HARRP classroom sharing experiences for a competitive type of debate, which can create conflict and tension and thus weaken social presence. To conduct a successful group discussion, we must take the stance of collaborators and problem solvers rather than competitors.

However, participant F also expressed the relevance of prior experiences in student-led online group discussions and the level of social presence. Students with prior student-led online group collaboration experiences in CMC are likely to be more comfortable with peer-facilitated group discussions than those who are new to this pedagogical approach.

Participant F: Student-led learning is not new to me. I used to participate in these peer discussions during my undergraduate years... I am familiar with this classroom format so I feel comfortable and at ease in the HARRP classroom, so I could feel a higher level of social presence

4.3. The perceived importance of social presence

The analysis of this theme refers to how Chinese students perceive the important role social presence played in and the benefits that social presence brought to their online learning experiences. The seven research participants shared some of their beliefs about the positive effects of social presence, such as how it leads to inclusion (establish social and self-identity), control (prove one's abilities), and affection (develop relationships with others) [26].

Participants are very positive about whether or not social presence helps the online Zoom learning community's social awareness and ability to work together with other people.

Participant A: Social presence in the HARRP sessions is important to me as it helps us communicate effectively and amicably as well as resolve interpersonal conflicts.

Participant B: Social presence is meaningful to me because when I perceive a lot of social presence in the HARRP class, I know that my instructor and classmates have spent a lot of time and effort building a learning community. Without it, I felt like I was not taking a class.

Participant F: The classroom without social presence is cold and impersonal. We are just passing through to complete the task of learning and talking.

From what they said, we can figure out that if people don't have a healthy social presence, they won't be able to trust each other and depend on each other. This could make people less likely to join group projects. So, making emotional connections with teachers and other students can make the classroom more appealing, which can lead to more people finishing their courses and being happy with them.

Even though social presence is important, participant F thinks there should be the right amount of it. Because "too much or too little social presence raises a number of issues related to learning." This point of view is similar to that of, who says that while a lack of social presence can make it hard to build learning communities, too much social presence can hurt students' learning by making it hard for them to have critical conversations.

4.4. Social context

4.4.1. Social relationship

Chinese students believe that the relationship between professors and themselves is critical to the degree of social presence. The student-led learning method weakened the influence of teachers' power at the HARRP seminar. The seven students unanimously agreed that they all hoped the lecturer would enter the group room to offer them guidance. More importantly, teachers' responses are also helpful in forming close social bonds with them. Also, positive feedback acts as a motivator and shows how important their work, whether it's done alone or in a group, is.

Participant A: Praise given by instructors serves as an acknowledgement of our efforts.

Participant C: I was willing to respond to messages that demonstrated interest and concern in my views, and it made me realize that I was not isolated in the community. Because I know that someone is paying attention to what I said, noticing my presence, and admitting that the ideas I put forward were valuable.

4.4.2. Face-saving issue

Face (Mian zi) has a special cultural meaning for the Chinese, and it can be linked to a person's sense of self-worth [27, 28]. Face-saving refers to “an individual’s aspiration to sustain a positive self-image or prestige/reputation in interpersonal contexts” [27 (p. 888)].

Face-saving issues can be a factor that influences students’ perceived social presence. When talking with teachers or team members, Chinese students are worried of making a terrible impression or being laughed at for their presentation quality or their dissatisfied English accent, causing them to lose face.

Participant D: I don't mind what people think of me. Despite my desire to open up, I'm afraid that if I'm not right, people will think my opinion is ridiculous.

Participant E: My speaking is not very good. I'm worried that my accent will cause confusion for others.

One of the participants said that the chat box's text-based communication gave them what they needed and gave them the freedom to talk about their ideas. However, they were still afraid to make mistakes and then lose face.

Participant C: Although the chat box was perceived as casual written communication, I still worry about my grammar and vocabulary mistakes. So, almost every time before I post, I use spell check and grammar check tools to fix my mistakes.

Participant E: I need time to prepare and review my posting in the chat box, so I won't lose face.

In short, the synchronous zoom environment offers a greater threat to Chinese student culture because they lack the time to create their ideal self-image in order to save face.

4.4.3. The authority of teachers

Chinese students believe that teachers’ authority has ultimate influence over the learning process and is a factor influencing social presence. Due to the need for respect in their culture, they just pay attention and stay quiet in class. However, due to the student-led nature of the HARRP seminars, Chinese graduate students reported that they were more interactive and social.

Participant A: The conversation on HARRP is taking place between our students. Teachers rarely initiated questions or participated in discussions. This put me at ease because I was always very nervous, even panicked when facing instructors, especially when I received unexpected chat invitations from them.

4.5. Online communication

4.5.1. Language competence

The most consistent idea in this study is that language makes it hard for Chinese students in HARRP classrooms to make friends. Although Chinese students have passed IELTS and other English proficiency tests and can communicate in English, the language barrier is still the biggest obstacle for Chinese students to socialize. They spend most of their time on wording and linguistic arrangement. It is difficult to strike a balance between ideas and linguistic accuracy. Therefore, students may miss the discussion in HARRP classrooms. Participant D said, "I found myself cut off from the debate because when the topic shifted, I still focused on typing and entering materials."

Likewise, another participant added,

Participant E: I was always careful about how I put my words together because I don't trust what I say out loud. As a non-native English learner, the language poses a major barrier to my interpersonal interactions, but I must ensure that there are fewer errors and more accuracy in my language anyway.

4.5.2. Visual and verbal cues

The findings suggest that text information lacks the immediacy of other types of information. Only a mix of visual and verbal cues can give a more complete and wide-ranging impression of a person, which gives off a stronger sense of social presence.

Participant A: I really disliked posting or replying to messages in the chat-box of Zoom. Text-only information in the chat box was cold and unfriendly. I can't capture the emotions and feelings behind someone's words.

At the HARRP seminars, participant G talked about how he could make a clear personal impression of some course participants by using visual communication:

I was only impressed by those students who turned on their cameras and microphones. If my remote group members share their surroundings with me, I can feel socially present with them.

4.5.3. Usage of paralanguage, emoticons, pronouns and humor

According to the findings, utilizing creative emoticons in text-based communication can help promote the perception of social presence. Participants found reading and responding to information that used "emoji" languages to be more enjoyable because the information was more vivid, warm, friendly, personalized, and casual.

Participant E shared her experience of how the incorporation of informal language such as emoticons into interaction made her feel inspired, warm, respected, and trusted.

Once in the HAARP class, I was praised by the teacher and my classmates when I worked as a reporter to summarize the results of our group discussion. What struck me was how they used the "thumbs up" emoji. At that moment, I was very proud of the support and recognition I had received from so many people.

Participant D realized that pronouns like "we," "our," and "us" can foster camaraderie and social standing among people.

When my teammates used "we" or "our", there would be feelings of association and closeness with one another because it means that he sees each of us as part of the group in which we have a common goal.

The use of humor is also an important indicator of Chinese students' social ability. Weinberger and Gulas concluded that humorous information can not only reduce social distance and convey goodwill but also attract attention ^[29]. In short, it improves the emotional atmosphere of a social

group. During the oral interview with participant G, humor was brought up as a way to make communication more "personal."

Participant G: I found that laughter can alleviate anxiety. When some students are afraid to join a discussion, humor works much better than prodding or asking them directly to join in.

4.6. Interactivity

4.6.1. Immediate response

Immediate response is one of the indicators of interactivity. The conversation with two Chinese students shows that the importance of social presence can change depending on how quickly other students in the course respond to them. Participants B, E, and F also mentioned that when the feedback time exceeded the expected limit, the level of social presence decreased significantly. If text messages or oral messages are not responded to or received late, students will naturally have negative emotions.

4.6.2. Self-disclosure

Self-disclosure can be seen as an intention of letting people know about oneself and is an element that can affect one's social presence ^[30]. Self-disclosure involves affective ways that students express their emotions. Participant E talked about her views on being proactive in exposing one's emotions and experiences in group communication and proved that disclosure within groups contributes to facilitating trust between members and strengthens resilience.

Participant B: We were asked to share our academic experiences in the HARRP classroom. And I realized that when we open ourselves up to expose our learning difficulties, share ideas, and seek help, we can perceive that the psychological distance between us will be brought closer, and thus our social presence can be enhanced.

4.6.3. Equality of participation

Almost everyone who took part in the survey showed a strong desire for equal participation. It includes two dimensions that are important in the debate: "equal contribution" and "equal consideration." Because of the concept of "mutual respect," participant D emphasized the need to recognize that everyone in the group is an equal member with equal rights.

Participant D: I would feel respected if my ideas could be listened to carefully.

Participant G: When everyone participates with an equal number of words, there would be a higher level of social presence. Besides, "no person completely dominates the discussion" also needs to be ensured.

Participant C: I want communication with my classmates to be based on mutual respect and understanding. I would feel very uncomfortable if someone spoke to me in a commanding tone.

Participant B: I admire those students who are confident. They were bold enough to express themselves, but I was always cringing. When I find myself lagging in a discussion, negative emotions such as "frustrated", "nervous" and even "self-resentful" grow inside me.

We can deduce from the foregoing responses that different learners' personalities and learning styles will influence their impression of equality, hence altering their social presence. A self-assured student is more sociable, speaks more, types more, and contributes more content than acquiescent students. Students may feel "stressed, timid, uneasy, and unequal" when speaking with more

confident people because they claim they cannot keep up with the pace of the conversation.

5. Discussions

This study focused on two research questions to learn more about Chinese students' experiences in online learning environments. First, I examined how Chinese students perceive social presence and how they define the term "social presence." According to the findings, the students tended to interpret the concept in terms of what makes a person "exist" in a real way. When their classmates and teachers came to help and care for them, they felt like they were part of a group. Participants in the study were asked to rate and explain how they felt when working in groups or having discussions. Participants in the study saw the need for social presence in collaborative discussion sessions and liked how care, encouragement, and warmth were shown. Another thing I learned was that people in the online classroom worked on building and improving their social presence. In addition, seven participants discussed how their social presence influenced their academic life. Few questioned whether social interactions were important to their learning. They seemed to think that social presence in Zoom-based classrooms was important for controlling the classroom environment, setting up relationships, and improving motivation and performance.

Second, we found that factors that influence Chinese students' social presence in student-led HARRP sessions were diverse. Based on the qualitative data, the thematic analysis created three types of learner perspectives: social context, online communication, and interaction.

Chinese students had to get to know each other and be friendly, or else they would be afraid to talk to each other in an online learning environment. In the oral interviews, participants said that they were eager to get to know their professors better through student-led discussions. It can be inferred from their comments that dialogue between peers and instructor guidance works together to create a supportive learning environment that promotes good information transfer and emotional learning^[31]. As one participant noted, classrooms where additional instruction is available interact more frequently.

Also, giving students advice on how to talk to each other in the right way in Zoom-based classes can help them make more friends. Chinese students were unfamiliar with the format and process of online communication, and they often used an overly formal style of language in group discussions, which negatively impacted their online engagement. Since the dominant culture and classroom culture in China are very different from those in other countries, social norms may affect how they see participation in the classroom. Therefore, implementing cross-cultural consideration and etiquette strategies is crucial to developing positive social relationships with Chinese students and gaining their trust^[32].

Furthermore, participants affirmed that the social presence they experienced was inextricably linked to the language features utilized in online discussions and the use of online language. Users' computer communication skills, such as typing, reading, and writing, can increase the effectiveness of interactions and have an impact on their social lives. In addition, Chinese students, as a population with a strong history of contextual communication, are more likely to access information through social and cultural cues^[31]. Therefore, they argue that including more emoticons and humor in formal online communication can help them get closer to their feelings and strengthen emotional ties.

6. Conclusions

Gherardi distinguished between learning in pursuit of problem solving and learning in the face of mystery^[33]. The learning that occurs in the HARRP workshops, to quote Gherardi, is a more natural and intuitive kind of mystery-driven learning, sustained by the aesthetics of relationships^[33].

HARRP is a platform for sharing academic experiences and is a model of learning based on collaborative inquiry. In this environment, the relationships and connections between members seem to be more important than the learning itself. Through the implementation of semi-structured interviews, this research project made me realize that a learning community must have some kind of "glue" that binds its members together. The glue here could be some shared beliefs of the group members, such as a common vision, a shared understanding, or a common goal^[34]. Together, these elements form the dimension of social presence. An online learning community includes not only tangible knowledge and participants but also some intangible universal values, whether it is an enduring commitment, a sense of belonging, a sense of solidarity, a caring interaction between members, or something else^[35]. For this reason, students must always be aware of the impact of emotional values and interpersonal interactions in the online learning environment, in order to have a positive learning experience.

Overall, the people who took part in this study stressed how important social presence was for learning in their online student-led seminars. This study also identified a number of factors that influenced the level of online social presence exhibited by Chinese students. It goes without saying that the levels of social presence of Chinese students are affected not only by the features of the different CMC systems (the online communication dimension), but also by the students' subjective impressions (the social context dimension) and how we engage them in positive online interactions (the interactivity dimension). An in-depth study of social presence is relevant both from the perspective of future educators and online learners, as it not only enriches the educational experience but also brings us closer together psychologically and transitively. Therefore, to engage Chinese students in a more interactive online learning environment, fostering a healthy sense of social presence is something that must be considered.

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