Social presence in synchronous video conferencing: a case study at the Lebanese University Faculty of Education/ Pedagogy

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Abstract. The Lebanese University was forced to adopt online learning after the Covid-19 pandemic, and the need has emerged to examine social presence in synchronous teaching. Adopting a collective case study design, the study examined online social presence in 18 videos of 9 instructors from the Lebanese university, Faculty of Education/ Pedagogy (Spring 2020). Specifically, it examined to what extent instructors could maintain affection, interaction and cohesion. A 23 item customized and validated checklist based on social presence categories of was used to analyse three social presence categories: Affective Response (represented through emotional expressions, use of humor, …), Interactive Response (statements to continue discussion thread, quoting from others' messages,), and Cohesive Response (such as expressions that address participants by name, addressing group using inclusive pronouns …). Results have shown that instructors managed to establish high social presence, manifested in their ability to maintain affection as seen in their facial expressions and sensed in their voice tone and sympathy. It was also shown that cohesion was highly present as teachers shared their tangible experience with students and humoured with them, for example. However, interaction was seen to be relatively low as some students did not participate unless they were called upon.

Key words: social presence, higher education, Covid-19, synchronous learning.

1 INTRODUCTION

The education system in Lebanon had been facing challenges before the Covid-19 outbreak as schools were shutting down and families were struggling to afford private schooling while public schools were becoming overcrowded (Abu Habib, 2020). When the Ministry of Education and Higher Education launched a National Distance Learning Project to provide e-learning support for public schools and universities, teachers used different methods to transmit course information such as sending content via WhatsApp or emails, using Zoom or google meet to hold classes. Despite the struggle with connectivity issues (Wazzan, 2020), classes were held and live meetings were a possibility, most of which were recorded for students to watch later at their convenience. The transition from face to face to online has brought about concerns associated with students' optimal learning, motivation and interaction as mediated by an instructor's social presence.

Instructor social presence is a new construct based on the Community of Inquiry (COI) framework described by Garrison, Anderson, and Archer (2000), which indicates that social, cognitive and teaching presence are essential components of the educational experience. The construct has been developed to describe the overlap between teaching presence and social presence that is essential to online learning (Lowenthal, 2016). It refers to the ability of students and teachers to be perceived as "real" by demonstrating their personalities and other characteristics to the community and includes instructor attributes conveyed in a course that go beyond the structural organization and execution of the content (Sheridan & Kelly, 2010), including the way an instructor "positions him/herself socially and pedagogically in an online community" (Richardson, Koehler, Besser, Caskurlu, Lim & Mueller, 2015, p. 259).

An instructor's use of social presence in an online community creates an atmosphere of open communication, group cohesion, and effective expression (Garrison, Anderson, & Archer, 2010; Pollard, Minor & Swanson, 2014). Through instructor social presence, humanization of the instructor allows students to develop a deeper connection to the learning community and feel motivated by their interactions with a real individual (Estepp & Roberts, 2015; Glazier, 2016; Weiss, 2000). It may also significantly alter the student's experience of the course, which then impacts their engagement and their likelihood to persist. Kahu's (2013) framework of student engagement points to the importance of instructor social presence as a predicting

factor in the development of student as student engagement manifests itself in affective, cognitive, and behavioral ways within a course. The framework illustrates the relationship between the communication medium (structural influences), the instructor-student relationship (psychosocial influences) and the effect of both on student engagement.

Mode of communication (including text and video) is said to influence how non-verbal immediacy behaviors is perceived, and it ??? essential to developing of interpersonal relationships between the instructor and student (Borup, Graham, & Velasquez, 2011; Borup, West, & Graham, 2012). In computer mediated communication (CMC), three categories represent Social Presence (Rourke et al. ,2001):   Affective response (represented through emotional expressions, use of humor, and self-disclosure), interactive response (represented through statements to continue discussion thread, quoting from others' messages, referring to others' messages, asking questions and expressing appreciation, agreement with others, and complimenting), and cohesive response (the expressions that address participants by name, addressing group using inclusive pronouns (we, us), and finally salutation and expressions that serve pure social function).

  A recent development in collaborative working and learning has been the use of synchronous tools which allow instructors to connect with students and allows students to be engaged in the learning process rather than being passive (Rudd & Rudd, 2014). Verbal forms of teacher immediacy behaviors, such as facial expressions, body language, and vocal inflections, which are not easily conveyed through text-based communication, do help motivate students to participate (Estepp & Roberts, 2015). Web video conference (one example of CMC) is one of these tools, whereby learners meet online at a fixed time (synchronous) in an online classroom. Video conferencing is also a form of increasing instructor presence in the online classroom, a vital step in online education. It enriches the learning environment by including audio-visual information such as face expressions, the collaborative use of a whiteboard and chat. Weiss (2000) asserts that through interpersonal relationships, the online learning environment becomes humanized and allows students to feel they are connecting with real people behind the computer screen. Having visual contact with the instructor gives students the opportunity to read facial expressions and hear the tone of voice, two components that are missing or often misconstrued in an online environment (Rudd & Rudd, 2014). Video conferencing also allows instructors to reach multiple students at once and more immediately than email or messaging in the online classroom. Therefore, the use of Web videoconferencing is likely to have a positive effect on social presence since it is defined as 'the ability of participants [. . .] to project their personal characteristics into the community, thereby presenting themselves to the other participants as ''real people''' (Garrison *et al*, 2000, p 89). If learners are able to be seen and heard simultaneously and use a shared workspace through Web videoconferencing while being physically separated, social presence is increased since the participants are more able to express themselves socially and emotionally in a group. Because the facilitator is present during synchronous communication and both course design and course material can be presented in a more direct way, teaching presence is enlarged.

Research contextualizing online learning amidst Covid -19 has been robust examining challenges and opportunities as reported by students and teachers. Of interest is research that has been conducted in the Arab world. These include a study done in Qatar examining engineering students' initial readiness to transition to emergency online learning (Naji, . et al, 2020). Another study revealed the obstacles to achieving quality in distance learning as reported by professors and students of universities in the Arab world --Algerian, Egyptian, Palestinian, and Iraqi (Lassoued, , Alhendawi, & Bashitialshaer,2020). In Lebanon, published research has assessed online learning in intermediate and secondary schools (Rouadi, & Anouti, 2020). The focus in Higher Education was also on assessment of the experience itself the Department of Biological and Chemical Sciences at the Lebanese International University(LIU) carried out a SWOT analysis evaluating the strengths and weakness of the process, which eventually helped the university develop a good model of online learning (Hallal, HajjHussein, & Tlais, S.,2020). The views of language instructors at Lebanese American University, Notre Dame University, Haigazian University, Antonine University, and the American University of Beirut were also evaluated in an attempt to compare face to face and online experience (Mouchantaf, ,2020). To date, only two published studies have focused on Lebanese Higher Education and the Lebanese University in particular as one described the impact of the shift to online education, highlighting the role of technology in the process (Khaddaj, Fayyad, & Moussallem,2020) and another examined teachers' perception of online assessment in the Faculty of Pedagogy/Education at the Lebanese University (Mirza, 2021).

The above research clearly focuses on the assessment of the experience itself in different countries; however, none focuses on the social presence of an instructor, regardless of the mode of communication used. With research suggesting a significant relationship between the role of the instructor and student engagement in an online classroom, along with the important long-term consequences of student retention based on student engagement levels (Bowers & Kumar, 2015), there is a need to do so as the social presence of a teacher is linked to both teaching presence and student engagement and retention. Therefore, the purpose of this paper

is to examine to what extent instructors have managed to maintain social presence at the Lebanese University (Faculty of Education/ Pedagogy) when providing synchronous learning. Specifically, it aims to answer the following research questions:

1. To what extent is 'interaction' established during online learning?
2. To what extent is 'cohesion' established during online learning?
3. To what extent is 'affection' established during online learning?

2 METHOD

This research adopts a collective case study design, examining online social presence in 18 videos (14 recorded and 4 live) of 9 instructors from the Lebanese university, Faculty of Education/ Pedagogy (Spring 2020) who used Microsoft Teams as they gave synchronous online sessions. Three instructors teach Psychology for Early Childhood Education, and they use English as a medium while the others teach language courses either as major requirement or they teach core Education courses. As for students, attendance ranged between 5 to13 in each online session.

For both, recorded and live sessions, a 23 item customized and validated checklist was used, based on the social presence categories of   Rourke, Anderson, Garrison & Archer (2001), and tailored to synchronized medium of online teaching. Accordingly, three categories of social presence were measured: Affective Response (AR), Interactive Response (IR), and Cohesive Response (CR). Indicators of Affective Response included the presence of a camera or a profile picture, using varied facial expressions and speaking enthusiastically (assessed by both the researcher and a body language/ voice expert). Listening to students actively responding to them with empathy and allowing them to express themselves, using humour and self-disclosure are other important indicators of Affective Response.Interactive Response was measured based on indicators that included posing /answering questions, continuing a thread of discussion, building on others' answers or quoting them, expressing agreement / disagreement and giving feedback . As for indicators of Cohesive Response, these included participants' taking time to greet each other and responding to greetings, referring to others by names, referring to group as US or WE, inviting feedback and responding to it, sharing tangential information or experience and finally if the session is in English, code switching to Arabic exists.

3 RESULTS

Results have generally shown high social presence as the majority of the participants have shown affection and cohesion though less interaction. To measure affection, the 10 point checklist showed that six out of nine instructors exhibited affection, which is considered quite distinctive .Still, it would be fair to say that three of the teachers who did not show much affection did not also promote interaction. Six out of nine teachers had their cameras on, but cameras of students were on only with one teacher as the task required that they had to role play something. Only half of the students had a personal profile, whereas the rest either had their initials or nothing as an indicator of who they are. All six teachers who turned their cameras on used varied facial expressions. Almost all used different tones and pitch of voice. For example, one teacher had a really low voice, but the intonation was quite engaging to students. Another had a high voice with high pitch and varied intonation. One teacher changed tone and intonation according to task.

It was also evident that the majority of teachers (6 out of 9) responded with sympathy. One teacher gave so much time to a student's complaint though it was not directly related to her material (Psychology teacher), and another tried to help out with a particular deadline meeting. These were the same teachers who basically listened actively and intensively when students were reporting their answers, were quite relaxed and confident throughout. They simply took their time and were quite patient. This is not to say that other teachers did not, but the time given for listening and pausing was greater. Self-disclosure was also apparent as one teacher gave her previous experience as an example; another said how she would have felt if asked a similar question and a third reported how she used to feel when one of her teachers mispronounced a word. Only three teachers did not use self-disclosure, and they were the same ones who did not use humour throughout. They might be typically described as more serious.

A similar number of instructors (6 out of 9) exhibited cohesion throughout the teaching sessions , with the three teachers who did not exhibit affection and interaction portraying less cohesion (not sharing tangible personal experience and referring to others by their first names) . Generally, all teachers took time to greet students at the beginning and the end of the session, but only one of them called on individuals' names to greet as she was waiting for others to join online. The majority referred to others by names and used WE most of the time when referring to materials previously explained or discussed, often inviting others to provide feedback as well. Five teachers

shared personal experience in an attempt to help students find a solution to a particular issue, to further explain a misunderstanding, or help seeing things from a different perspective. The experiences ranged from their past as students or present suffering with lockdown or frustration with connectivity and online experience teaching. All six teachers who were using English as a medium of instruction codeswitched as they were explaining, greeting, humouring, to Arabic language, a sign of solidarity.

Measured using a 6 item checklist, student teacher interaction of four instructors out of nine only was evident, which is relatively low when compared with the other two dimensions. It is noteworthy that the same teachers who manifested low affection exhibited low interaction (especially with items related to giving feedback, praise and expressing agreement); they did not in fact call students by names. However, generally, all teacher posed questions that required participation to which students responded to from time to time or when they were called upon only. When a discussion ran, four teachers continued the threads and built on students' answers, often expressing agreement or justifying disagreement or posing the debate to all to settle. Feedback was quite an essential factor and it was provided by all; it was tinged with a motivational tone with the majority, with one particular teacher saying: I love what you say, I am proud of you (role play task). Only two of the teachers quoted a student's say (X has just said that, what do you think ?)

4 DISCUSSION and CONCLUSION

With research consensus on how communication between students and instructors has been hindered basically by connectivity issues during Covid-19, and given that the infrastructure for online learning has been at its infantry stage in Lebanon, results have not been surprising.   The results of the current study have verified the social presence of instructors, creating an atmosphere of open communication, group cohesion, and effective expression (Garrison, Anderson, & Archer, 2010; Pollard et al., 2014. . . .). Humanization of the instructors could allow students to connect deeply to the learning community and feel motivated by their interactions with a real individual (Estepp & Roberts, 2015; Glazier, 2016; Weiss, 2000). It is likely to predict student engagement, fostered by the audio-visual information   available in synchronous video conferencing. Because the instructor- facilitator has been present during synchronous communication and both course design and course material have been present in a more direct way, teaching presence is more likely to have been enlarged as well.

A thorough look at the three subcategories of social presence reveals interesting findings as well. As noted earlier, the three teachers who did not show much affection or cohesion were the same whose online teaching was not interactive. These were the same teachers who did not turn their cameras on (regardless of the reason- as it can be connectivity issue). This might suggest the powerful impact that visual information might have on social presence. However, the fact that these same teachers did not respond with sympathy or use humor might suggest that this might be linked to personality factors as well. It might as well be attributed to the psychological effect of the lockdown on some instructors=especially that, within the same household, different scenarios were available. Some instructors are married and have kids who also needed to be using the same device- laptop- to receive their learning online. It is the hidden factor that could have been investigated but was not.

The current research has only investigated the social presence of the instructors in the Lebanese University (Faculty of Pedagogy), and as such results cannot be generalized. Many variables could have played a key role in interpreting the results, especially those associated with interaction. Future research, for example, could investigate students' motivation, delving deeper into why or why not they did not interact (interviews with these particular students would help). There is also a need to examine what role other variables such as gender, marital status, number of kids, number of devices, internet connectivity play. Personality trait, burnout and stress coping strategies are an additional area of interest that could explain how the psychological well-being, of both students and instructors, being at stake during lockdown, could have had an impact.

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