

## Students' Social Presence in Online Learning System

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**Abstract** – The purposes of this study are to identify students' perceptions on social presence on online learning and to investigate students' social presence in online learning. Next, this study will also identify students' social presence in online learning in relation to their academic performance. The respondents for this study will be 33 undergraduate students who enrolled in Authoring Language course. One of the most highlighted issues in online learning is interaction process that takes place between either learners and learners or learners and teacher. As mentioned by Badrinathan and Gole [1], online learning requires the teacher or the instructor to be responsible in ensuring that the learners interact with one another. The interaction will encourage the students to voice out their thoughts and respond towards others' idea through computer mediated communication (CMC). Given that social presence is likely related to feeling rather than reason [2], the sense of connectedness among learners would stimulate them to become more interactive in online learning. Hence, rather than trying to acquire the knowledge individually, learners would have much experience in sharing and cooperating with their peers in the whole process of learning. Furthermore, social presence is considered as one of the keys to the success of online learning [3] when it has great influence in online interaction, user satisfaction, depth of online discussions, online language learning and critical thinking [4]. This study will be implementing quantitative approach with triangulation of data from questionnaire and students' online transcript. Quantitative data from questionnaires will be analyzed using SPSS (Statistical Package for the Social Science). As for the online transcript, the data will be analyzed through content analysis technique. With the findings of this study, it is hoped that students, teachers or instructors and the administrations of higher educational institutions will be more aware towards the importance of social presence in inculcating effective learning process via online system.

**Keywords** – online learning system; social presence; interactive online learning

### I. PROBLEM STATEMENT

In online learning, interaction has been identified as an essential element especially in promoting effective learning process. Woods and Baker [5] mentioned the importance of interaction in online learning by highlighting its role in nurturing social engagement within each student and instructor in the online learning system. The students can be strongly motivated to contribute and perform more for learning when

they are actively and socially engaged with their peers [5].

Nevertheless, online learning system still has its own flaws. Previous researches have shown that in online learning, learners might encounter problem from the aspect of the lack of social engagement with other learners or the instructor [6]. Stein and Wanstreet [7] revealed that learners could hardly express emotion in online learning, especially when interrupting others. For the learners, a major way to deliver emotion particularly in a discussion is by interrupting others, which they believe could not be done in online learning forum. The respondents of the study are basically dissatisfied with the online learning environment since they cannot socially present themselves as much as they believe they could do when they are in traditional face-to-face courses. The inability of online learning to portray the real emotion of the participants is another argument from another group of researchers. Stodel *et.al* [8] found that the participants felt that the online course they enrolled was lack of humor and they hardly use emoticon to show their true feelings.

The inability of the learners to express their emotions portrays the importance of effective interaction in an online learning. Besides that, interaction in online learning could also influence the learners' satisfaction in online learning such as in the online course they are enrolling [9]. Lapadat [10] mentioned that online learning should be satisfying to the students when it promotes a comfortable and safe platform for the participants to interact. It is essential to have social interaction among the online learning users as it should motivate the students to learn better and become more satisfied with the learning itself.

Social aspect in online interaction is related to an important concept, which is known as social presence [2]. In a traditional classroom environment, social presence indicates any behaviour that inculcates the element of immediacy among students and teacher via interaction process. According to Aragon [11], the behaviour can be in the form of verbal and nonverbal, which include "...gesturing, smiling, using humor and vocal variety, personalizing examples, addressing students by name, questioning, praising, initiating discussion, encouraging feedback, and avoiding tense body positions". Interactivity, as supported by [4] would include active communication via receiving feedback from other members. In other words, social presence defines situation where

interaction takes place in order to provide and deliver meaningful context to people in the same environment. A study by [22] shows that one of the reasons that makes students feel reluctant to post in the forum is because they worried that nobody would give feedback and would only make them feel shameful of the posting. Thus, providing feedback to other members' postings would contribute in the interactivity of the discussion. Therefore, the importance of being socially present in a learning process is required for the students to interact actively with one another.

However, similar behaviours that signify social presence can also be found in online learning interaction. Compared to a traditional classroom environment, students in an online learning environment could also have interactive meaningful communication using several types of responses such as Affective responses, Cohesive responses and Interactive responses [12]. Furthermore, in a computer conference, participants use emoticon to replace the nonverbal cues in written form [13] [14] [15] [16]. The use of these types of responses symbolizes the behavior of initiating social presence in online interaction. Besides that, sufficient interaction is necessary in nurturing social presence or otherwise, students will find that learning is dull and uninviting [22]. Nonetheless, the point is not on the frequency of the interaction, but more towards the types of interaction. They added that the degree of social presence could be improved using affective language as they are indicators of intimacy and immediacy in online environment. Indirectly, it shows that social presence is indeed an important concept for an interaction to be meaningful.

Therefore, not being in a same place at a same time physically does not mean that the learning would not achieve the learning outcome successfully. The main issue here is, are the students realize and aware of social presence concept and do they fully utilize the concept in online learning to obtain the best learning outcome? These matters are considered as tough challenges for online learning practitioners to ensure that the learning undergo smooth and effective process. Both students and instructors need to have great awareness on their responsibilities and roles to sustain social presence in online learning [17]. The instructor needs to ensure that the students in the online learning have knowledge regarding social presence, and therefore gain the element of "...warm, personal, sensitive, and sociable..." throughout the whole online learning activities especially via the interaction with other students and also with the instructor [18]. Nyahchae [19] extended the explanation by mentioning the importance of having the feel of community in order to create social presence in online learning, particularly in distance education course.

Accordingly, this study seeks to identify the utilization of social presence elements by students based on their perceptions on social presence as well as their learning behavior in online learning.

## II. RESEARCH QUESTIONS

The present research extends the investigation of students' perceptions on social presence in online learning and the students' social presence in online learning itself. Next, this study will also identify students' social presence in online learning in relation to their academic performance. Thus, the following questions are addressed:

- 1) What are the students' perceptions on social presence in online learning?
- 2) What are the dominant students' social presences in online learning?
- 3) What is the relationship of students' perception on social presence with their actual online learning behavior?
- 4) What is the relationship between social presence and student's academic performance?

## III. RESEARCH DESIGN

This research employs a quantitative research design to identify students' perceptions as well as their awareness on social presence in online learning. The quantitative data will be obtained from the questionnaire distributed to the respondents. The data will be triangulated with the analysis from the respondents' postings in the online forum. This research embeds data triangulation in order to enhance the validity of the study. According to Jick [20], data triangulation is a combination of methodologies of a same phenomenon, which would provide several viewpoints and lead to a greater accuracy of the findings. In this study, descriptive statistics will be implemented in analyzing the questionnaire. Meanwhile, content analysis will be used to analyse data from the respondents' responses in a selected online learning forum to support the findings of the quantitative data.

## IV. DATA COLLECTION

This study will be conducted at one of the local universities in Malaysia. The target respondents will be a group of 33 undergraduate students, who are currently in their third year on pursuing Bachelor of Science with Education. The respondents will be selected using purposive sampling. In this study, the purpose of selecting the respondents is based on their academic background. All of the respondents have the same academic course and enroll in the same subject that requires them to participate in an academic e-learning forum. Moreover, all of the respondents are acknowledged for already have prior knowledge in participating in online learning. The data will be collected from two sources. The first source will be from the questionnaire. This questionnaire is adapted from an instrument, which was previously used by Sung and Mayer [2] in their research on Online Distance Education. The Online Social Presence Questionnaire (OSPQ) used in this study are divided into two main parts including the five dimensions of social presence, which are; Social Respect, Social Sharing, Open Mind, Social Identity and Intimacy. Meanwhile, the online transcripts will be the secondary source of data. The questionnaire, which consists of two parts; Part A (Demographic Profile) and Part B (Perception on Online Social Presence), will be distributed to the respondents in order to obtain their perception regarding social presence in online learning.

The online transcript, which is in the form of written messages between the respondents posted in the academic e-learning system, will be collected from the online forum participated by the respondents. The forum is developed based on the academic requirement of the subject, which they have enrolled. Since the course instructor makes it compulsory for the students to participate in the forum discussion every week, there are several online transcripts that can be collected from the forum.

## V. DATA ANALYSIS

Data analysis of this study will involve the data gathered from questionnaire and online transcripts. Since most of the data analysis is quantitative in nature, descriptive analysis will be implemented for the questionnaire. The quantitative data will be analysed using Statistical Package for Social Study (SPSS). The results obtained from this analysis will be presented in the form of frequency, mean and percentage.

Meanwhile, the online transcripts will be coded using content analysis based on Rourke, Anderson and Archer's Social Presence Coding Scheme [14] upon completion of the inter-rater reliability procedure. Using the coding scheme, the online transcripts will be analysed into three dimensions of social presence, which include Affective, Interactive, and Cohesive. In Affective Codes dimension, the online learning behaviour is coded based on the emotional connections shown among the students and teacher or instructor of the online learning system, such as through emotion, paralanguage, humor, sarcasm and self-disclosure codes [16]. On the contrary, Interactive codes record all active communication and learning activities involving students in CMC including the communication styles they are using, such as compliment or agreement, acknowledgment and inquiry [4] [16]. Meanwhile, Cohesive responses signify the behaviour shown by students in sustaining the sense of group commitment [12]. Thus, [16] it refines the result by producing cohesive codes that can be analyzed through the presence of behaviour in the form of additional resources, experiential sharing, greetings or salutations, social sharing, group reference, and vocative. The results of this qualitative method will then be transformed into quantitative data in the form of frequency, percentage and average mean.

The primary source of data, which is the questionnaire will be triangulated with the data obtained from the content analysis of the online transcript. The data triangulation will be implemented in this study because it provides a better understanding and judgment as well as offers supportive information for the researcher [21].

## VI. SIGNIFICANCE OF THE STUDY

The result of this study is expected to elucidate the importance of requiring knowledge on social presence, specifically social presence in online learning. From the result of the questionnaire, we anticipate to obtain the information on the students' awareness of social presence. Meanwhile, the online transcript is expected to show the actual social presence occur during the online discussion. Therefore, with these findings, student, who participate in online learning could utilize the social presence elements in a more interactive and meaningful interaction with their peers and course instructors. There will be a higher possibility for the students to be satisfied with online learning with social presence [3]. Thus, the effectiveness of online learning program could be seen from the success of achieving students' learning outcome. Moreover, the result of this research is hoped to be beneficial for the course instructors themselves as they would be more aware towards their ability in improvising the online learning, as taking the benefits of social presence elements. This research is also expected to be significant to the higher institutions as it may provide the best online learning platform by considering the implementation of the best lesson plan that promotes social presence in the interaction of the participants.

## VII. EXPECTED FINDINGS

The findings expected from this study are the analysis of student's awareness on social presence in online learning. Their awareness on social presence can be identified from their perception on social presence that they might perceive and the actual social presence they would show in the forum via e-learning. Besides that, various results can also be gauged by referring to gender difference and time based (weekly) data collection. In other words, the time and gender factors are expected to have effects on social presence occurrence in the e-learning forum. Moreover, the data collected in this research are also expected to fulfill the requirement of this research in order to compute the relationship between students' social presence and their academic performance. The results will be displayed through bar and pie charts, as it will portray the difference of frequencies of data in the form of mean and percentage. Therefore, these findings may result as a great opportunity for the online course instructors to improvise the learning strategy in order to nurture social presence during the online discussion to the most. Eventually, it may lead to a better online learning enhancement and becomes beneficial for the students to obtain the best learning outcomes as well as excellent academic performance.

## VIII. CONCLUSION

One of the facilities offered by online learning is a medium for the users to held discussion, share and transfer information. By having these types of activities, mostly in the Forum section, students are exposed to many interactions with other participants. Thus, in order to meet the students' learning outcomes, it is vital to make the interaction beneficial for their learning needs. Social presence has been recognized as an important factor in a successful interaction. Nonetheless, the problem regarding this study is strongly related to the awareness of social presence among learners in online learning.

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