STUDENT'S SOCIAL PRESENCE IN ONLINE LEARNING: A REVIEW

Nur Jannah Jamil; Zaidatun Tasir

1.0   INTRODUCTION

One of the most highlighted issue in online learning as mentioned by Badrinathan and Gole (2011), is the teacher or instructor is responsible to ensure that interaction occurs among students. The interaction plays important role to encourage students to share opinion, think and argue critically, and respond towards peer's reflection via computer mediated communication (CMC). To support the idea of having interactive and meaningful communication, Short et al (1976) had promoted a theory called social presence. This theory has then been frequently implemented and selected to be the core subject experimented in previous studies (Richardson & Swan, 2003; Rourke et.al, 1999; Wenger, 1998; Tu, 2001; Saenz, 2002; Lapadat, 2003; Sung & Mayer, 2012). As a result, Cobb (2009) clarifies that social presence should be nurtured for the successful of online learning.

2.0   PROBLEM STATEMENT

Although online learning has been recognized as an impressive platform to promote learning, it still has its own challenge. The setting of online learning has been normally known as having the students and instructor in different places. Eventually, communication among students and instructors could be great indicator of the online learning. By having teacher and students in different places as promoted in distance learning, the students would have high probability to feel isolated and lack of social connection with others (Sung and Mayer, 2012). In this case, the aim of online learning in providing the best means of learning would be hindered. Therefore, in order to overcome this matter, online learning system has to accommodate the students especially with conducive learning environment with vast opportunities for them to engage socially with other students and the teacher.

Previous researches have shown that, in online learning, learners might encounter problem from the aspect of lacking in social engagement with other learners or the instructor (Bullen, 1998; Stodel et.al, 2006). The findings from a research carried out by Stein and Wanstreet (2003) show that students encountered difficulties in portraying their actual emotion via online learning environment. This problem normally took place when they intended to interrupt others in any online discussion.

Eventually, this situation illustrates that practicing effective and meaningful interaction in learning, especially in online learning environment is vital in determining student's learning satisfaction (Sampson et.al, 2010; Lapadat, 2002). In another study, Cobb (2009) concludes that students who empower better social interaction in learning would have higher tendency to be more satisfied with their learning. The concept of social presence has been recognized to be well-connected to the social elements in traditional classroom environment, as well as in the online

interaction (Sung & Mayer, 2012). Aragon (2003) has listed several behaviours that indicate social presence, which include "…both verbal and nonverbal actions such as gesturing, smiling, using humor and vocal variety, personalizing examples, addressing students by name, questioning, praising, initiating discussion, encouraging feedback, and avoiding tense body positions". Accordingly, extensive description and explanation on social presence will be deliberately provided in the following subtopics.

3.0   INTERACTION IN COMPUTER-MEDIATED COMMUNICATION   (CMC) VIA ONLINE LEARNING SYSTEM

For the past few years, CMC has been widely used by those in educational field and lots of articles have been written about the role of technology in the 21st century (Crystal, 2001). In Malaysian Higher Education Institutions (HEIs), the implementation of e-learning as part of CMC is a step taken by the Ministry of Higher Education (MOHE) as an effort to promote effective learning through technology (Mohamed Amin et al. 2011). In other words, technology via CMC is no longer an uncommon subject in Malaysia especially in online learning system.

 Nonetheless, there are several issues have been highlighted by previous researchers on the effectiveness of online learning system as a learning platform. Whiteside (2007) argues the efficiency of online learning system to contribute in meeting the students' learning outcomes. Meanwhile, Nyahdusei (2011) also points out the competence of online learning in giving learning satisfaction to the students. Another issue occurs regarding online learning system is that whether it can support content-related interactions among

the students and the instructor (Walker & Brian, 2007).

According to Walther (1992), many of the early researchers came to the conclusion that CMC was antisocial and impersonal because of the lack of social context in the interaction process. Although those problem arose in the previous decades, they might still continue nowadays since some online learning obstructs are still pointed out. Mykota and Duncan (2007) found several past reviews on online learning's lack of enhancement towards achieving the learning outcomes and higher drop out of the subject compared to traditional face-to-face instruction.

In contradiction, Kehrwald also states that a numerous numbers of online learning system participants including students and teachers cite positive experience with online learning. The positive ambience of online learning is also agrees by Walker and Brian (2007). They mention that discussion in online learning "…promote critical thinking, egalitarian participation and contributions from students…" who have difficulties to speak up their thought during face-to-face class session. The participation from both students and instructors in the online learning would develop interaction among them. Brinthaupt et al. (2011) proposed the opposite idea of interaction as he mentioned that the quality and quantity of interaction among the members of the online discussion, which include students and instructor, are important in determining the success of online education.

4.0 SOCIAL LEARNING THEORY

Learning occurs through social interaction and social learning is the principle introduced by Vygotsky in 1896 through his theory of social development theory (Riddle & Dabbagh, 1999). According to Vygotsky, cognitive development never occurs by itself; rather, it is lead by social interaction and social learning. The gist of

Vygotsky's theories has been the essential role of social interaction in the development of cognition (Vygotsky, 1978). This is parallel to his strong belief that in order to "making meaning", the community of the student contributes a lot. The phenomenon of cognitive growth is also widely known as Zone of Proximal Development (ZPD) (Chaiklin, 2003). In ZPD, the term scaffolding is seen as a concept related in the development of students' learning process. This is supported by Verinikina (2003) when she mentions that as part of Vygotskian socio-cultural psychology concept, ZPD is highly related to learning development.

Anderson and Krus (2007) have also mentioned that in social learning environment, the people of the same community have high tendency to replicate and model the behaviour they observe. Therefore, by implementing social learning theory in online learning environment, the students will gain lots of benefits in order to perform better in their learning. The benefits come through their experience in communicating and interacting with other students and also with the teachers in online learning. With vast experience in social communication, the students will gain more insights in controlling the interaction process in order to obtain the knowledge or fulfilling their social needs to the most.

Moreover, social learning theory introduced by Bandura also promotes that human behavior is learned, or in other words, it is "…acquired than innate." (Bandura, 1973). According to Anderson and Kras (2007), the learning process is related to the study of the effect or circumstance of a behavior, then connects a stimulus to respond. The response produced after being stimulated is the behavior which is sought to be learned.

In online learning system, socialization is totally based on online interaction among students and the instructor of the online course. Online interaction that occurs such as in the form of forum, chat,

discussion board, blog and so on will provide learning environment that allow students to construct meaningful learning with the support from peer and expert. Through social presence model introduced by Whiteside (2007), the role of students and instructor in online interaction will be acknowledged in establishing the overall social presence within the course (Whiteside & Dikkers, 2008).

5.0   SOCIAL PERSPECTIVE OF COMPUTER-MEDIATED COMMUNICATION

Learning itself is a social process (Lowenthal, 2009). Harasim (2002) states that one of the important keys in the social process of learning is through discourse. In CMC, the major form of discourse is produced via the social interaction process that takes place between students and students and teacher and students. Gunawaderna and Zittle (1997) declare that social presence is established when people connect with one another in new settings. Nyahdusei (2011) proposes that communication that occurs in online group discussions has proven to be one of the supporting element in an excellent online learning system. In other words, all means of communication in online learning system are considered to present and nurture social presence among the users which include students and teacher or instructor.

Paradoxically, Eastmond (1995) objects the idea that CMC provides platform for interaction, but instead is reliant on constant postings by students to the group board, email and chatting in the regular interval. Nevertheless, based on research carried out by Ruberg et al (1996), they go against Eastmond's idea and arguing that CMC does support the development of social environment. The creating of social environment is nurtured in the activity of

information sharing, discussing ideas and cooperating and collaborating in solving problems (Ruberg et al., 1996; Hall & Herrington, 2010; Tu, 2001).

6.0   SOCIAL PRESENCE

The original definition of social presence is introduced by Short, Williams and Christie in 1976. As the initial investigators of social presence, Short et al (1976) identify social presence as "…the degree of salience (i.e., quality or state of being there) between two communicators using communication medium." The aim of this theory is to provide vast explanation on the effects of the way people communicate on the communication medium they use. Tu (2002) defines social presence as the "…degree of awareness of another person in an interaction and the consequent appreciation of an interpersonal relationship…in CMC"

The genesis of social presence lies in the conceptualization of social psychology of immediacy and intimacy in face-to-face interaction (Mykota & Duncan, 2007). According to Rettie (2003), in the context of face-to-face communication, immediacy refers to the "…psychological distance between two speakers…", meanwhile, intimacy explains the "…closeness obtained, verbally and non-verbally, among the individuals and maintained by immediacy behaviours." In previous researches, both pairs of researchers which include Argyle and Dean (1965), and Wiener and Mehrabian (1968) introduced intimacy and immediacy as the concept of social presence separately. However, Short et al. (1976) came out with another concept on social presence that combined both immediacy and intimacy. In other words, immediacy and intimacy are equally important in determining social presence.

Short et al (1976) also mentioned that social presence could be varied according to the variety of peoples' perception on it as to the amount of presence they need. In their article, Hall and Herrington (2010), supports Short's et al statement as they mention that if low social presence in needed, the people might see the communication medium as "…cold and impersonal…", while it is perceived as "…warm, inviting and responsive…" if the social presence is high. There are several factors contribute to increment of social presence degree in interaction such as facial expression, direction of gaze, posture, dress, non-verbal and vocal cues (Tu, 2001).

7.0   SOCIAL PRESENCE IN ONLINE LEARNING

Several studies have shown significant impact of social presence development in classroom social networks (Wegerif, 1998; Swan, 2005; Mykota & Duncan, 2007; Tu, 2001; Shin 2002). However, according to Aragon (2003), most of the researchers have only concluded that there is significant relationship between social presence and learning development. They did not really mention whether the relationship would exactly benefit students from the aspect of academic performance or learning outcomes.

Nevertheless, sufficient interaction is necessary in nurturing social presence or otherwise, students will find that learning is dull and uninviting (Hall & Herrington, 2007). Nonetheless, the point is not on the frequency of the interaction, but more towards the types of interaction. Hall & Herrington (2007) add that the degree of social presence can be improved using affective language as they are indicators of intimacy and immediacy in online environment.

Another factor that also has strong influence in social presence in online learning is through online leaders (Tu, 2001).

Online leaders or sometimes can be a student who has been appointed as group leader, or the teacher himself would help in facilitating the interaction. This provides opportunity for other students to develop trust in the relationship. Eventually leads to feeling of belonging to the group. Therefore, the possibility to perceive higher degree of social presence will occur. Gunawaderna (1995) also agreed with the importance of online leader's role in nurturing social presence since the leader will provide the platform to initiate the interaction with introduction and salutation.

Gunawaderna and Zittle (1997) argue that "…in reviewing social presence research, it is important to examine whether the actual characteristics of the media are the causal determinants of communication differences or whether users' perceptions of media alter their behavior…" They found that social presence could be nurtured among students since social presence is recognized as the main attribute in success communication medium. Thus, in the context of CMC, the communication or interaction that occurs among students and teacher could be a good initiator on nurturing social presence in their learning environment.

Besides that, social presence in online learning is also connected through the notion of community. Hughes et al. (2007) mentions that neo-Vygotskyan approach to learning, where the focus is on developing community in learning, is being implemented to stimulate social elements among the online system participants. In other hand, Oubenaissa et al. (2002) induce element of social and culture in their learning model to obtain collaborative learning. Hughes et al (2007) also highlight that it is important for teacher or instructor to grasp the ideas on developing social dynamic within the interaction among the online learning participants.

Those issues and elements in building community in online

learning system are actually converging to one matter, which is the necessity to develop strong relationship among participants with excellent sense of community. The relationship will be on trust-based that enough to make them become comfortable in personally sharing their ideas.

8.0 FACTORS IN ONLINE SOCIAL PRESENCE

Online social presence has been recognized as a significant factor in providing interactive and effective learning platform for online learning system. Thus, several researchers have showed high interest in identifying the indicator within online social presence (Sung & Mayer, 2012). Table 8(a) illustrates the finding from several researchers on the indicator of online social presence.

Table 8(a): Dimensions and Indicators of online social presence
(Adapted from Sung & Mayer, 2012)

Researcher(s)	Dimensions/ Indicators
Tu and McIssac (2002) and Yen and Tu (2011)	1) Social Context 2) Online Communication 3) Interactivity 4) Privacy
Rourke et al. (2001)	1) Affective indicators 2) Interactive Indicators 3) Cohesive Indicators
Polhemus et al. (2001)	Affective use of language and person's ability to be perceived as real 1) Personal address 2) Acknowledgement 3) Closing 4) Feeling 5) Paralanguage 6) Humor 7) Social sharing 8) Social motivators 9) Value 10) Invitation 11) Negative responses

	12) Self-disclosure
Aragon (2003)	1) Course design strategy
	2) Instructor strategy
	3) Participant strategy
Sung and Meyer (2012)	1) Social sharing
	2) Social Identity
	3) Social respect
	4) Open mind
	5) Intimacy

9.0   ONLINE SOCIAL PRESENCE QUESTIONNAIRE (OSPQ) as RESEARCH INSTRUMENT

Online Social Presence Questionnaire (OSPQ) is a survey developed by Sung and Mayer (2012). This survey consists of five dimensions of social presence which include; Social Respect, Social Sharing, Open Mind, Social Identity and Intimacy, selected by Sung and Mayer from previous studies carried out by Aragon (2003), Polhemus et al. (2001), Rourke et al. (2001), Tu and McIssac (2002), and Yen and Tu (2011) (Sung and Mayer, 2012). Those previous studies tested on the best indicators of aspect of social presence in online learning.

Table 9(a) below shows the distribution of items for each dimension according to its indicator of social presence.

Table 9(a): Distribution of items in OSPQ (adapted from Sung & Mayer, 2012)

No.	Dimension	Item	Indicator of Social Presence
1	**Social Respect**	1	Express of appreciation
		2	Acknowledgement
		3	Timely response

		4	Use humor
		5	Strike up communication
2	**Social Sharing**	6	Social relationship
		7	Sharing learning information
		8	Express belief or value
		9	Social motivation from facilitator
		10	Close relationship
3	**Open Mind**	11	Express agreement
		12	Express positive view
		13	Self-disclosure
4	**Social Identity**	14	Use greetings title
		15	Address learner by team name
		16	Learner's characteristic
		17	Address learner by name
5	**Intimacy**	18	Express personal's stories
		19	Express emotion or feeling

10.0 DISCUSSION AND CONCLUSION

Based on the review that has been carried out on social presence, there are still several issues related to social presence in online learning that are not being much explored. Social presence could be a great mechanism in providing lots of opportunities for online learning to be improved and studied from the aspect of online interaction. In order to ensure that social presence benefits both learners and instructor of online learning courses, they need to be aware of each elements comprised in social presence.

Besides that, social presence itself requires in-depth understanding for it to be meaningfully utilized for the sake of better learning outcome. In an online interaction, the frequency of social presence occurrence could be increased tremendously for the sake of effective and resourceful interaction if the

students and teacher were given knowledge on it. In other words, further research on the role of students to their peers, and the role of instructors to the students in nurturing social presence should be done. Thus, the findings could give a new insight on the implementation of social presence in enhancing online learning.

In conclusion, as we are studying and doing research to find the best approach, tool, strategy and method to improvise online learning, the interaction process that takes place among students and teachers should not be neglected. Hence, social presence should also be prioritized and be seen as an element that plays a central role in ensuring success for students in online learning courses.

REFERENCES

Anderson, J. F., & Kras, K. (2007). Revisiting Albert Bandura's social learning theory to better understand and assist victims of intimate personal violence. Women & Criminal Justice, 17(1), 99-124.
Aragon, S. R. (2003). Creating social presence in online environments. New Directions for Adult and Continuing Education, (100), 57-68.
Badrinathan, V. & Gole, A. (2011). *A Blended-Learning Pedagogical Model For French Learning Through An Online Interactive Multimedia Environment: Learner Autonomy And Efficacy.* 2011 World Congress on Information and Communication Technologies. IEEE.
Bandura, A. (1973). Aggression: A social learning analysis. Englewood Cliffs, NJ: Prentice Hall.
Bullen, M. (1998). Participation and critical thinking in online university distance education. Journal of Distance Education, 13(2), 1 - 32.
Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. Vygotsky's educational theory in cultural context, 39-64.

Cobb, S. C. (2009). Social presence and online learning: A current view from a research perspective. Journal of Interactive Online Learning, 8(3), 241–254.
Crystal, D. (2001). The language of Chatgroups. Language and the Internet. Cambridge: Cambridge University Press.
Eastmond, D. V. (1995). Alone But Together: Adult Distance Study by Computer Conferencing.Cresskill, N.J.: Hampton Press,
Garrison, D. R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. In J. Bourne & J. C. Moore (Eds.), Elements of quality online education: Practice and direction. Volume 4 in the Sloan C Series. (pp. 29–38). Needham, MA: The Sloan Consortium.
Gunawardena, C. N., & Zittle, F. J. (1997). *Social presence as a predictor of satisfaction within a computer-mediated conferencing environment*. The American Journal of Distance Education, 11(3), 8–26
Hall, A. & Herrington, J. (2010) *The development of social presence in online Arabic learning communities.* Australasian Journal of Educational Technology 2010, AJET 26(7), 1012-1027.
Harasim, L. (2002). What makes online learning communities successful. Distance education and distributed learning, 181-200.
Hughes, M., Ventura, S., & Dando, M. (2007*). Assessing social presence in online discussion groups: A replication study*. Innovations in Education and Teaching International, 44(1), 17–29.
Lapadat, J. C. (2002). Teachers in an online seminar talking about talk: Classroom discourse and school change. Language and Education, 17(1), 21-41.
Lowenthal, P. R. (2009). Social presence: What is it? Does it make a difference? Paper presented at the 2009 AECT International Convention, Louisville, KY.
Mohamed Amin, Zaidan A. W, Abdul Halim, Hanafi, A. Mahamod, I., Supyan, H. Norazah, N., Afendi, H. (2011). E-learning in Malaysian Higher Education Institutions: Status, Trends & Challenges. Department of Higher Education, Ministry Of Higher Education 2011: Malaysia
Mykota, D., & Duncan, R. (2007). Learning characteristics as predictors of online social presence. Canadian Journal of Education, 30(1), 157-170.
Nyahdusei, J. N. (2011). The Effect of Social presence on Students' Perceived Learning and Satisfaction in Online Courses. UMI Disertation Publishing. ProQuest LLC: Ann Arbor.
Polhemus, L., Shih, L. F., & Swan, K. (2001). Virtual interactivity:

The representation of social presence in an online discussion. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
Rettie, R. (2003). Connectedness, awareness and social presence. 6th International Presence Workshop. Aalborg.
Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. Journal of Asynchronous Learning Networks, 7(1), 68–88.
Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. Journal of Asynchronous Learning Networks, 7(1), 68–88.
Riddle, E. M., & Dabbagh, N. (1999). Lev Vygotsky's social development theory. Retrieved from funwithfcs.uvjvs.wikispaces.net
Rourke, L. A., Terry, G., D, R., & Archer, W. (1999). Assessing Social Presence in an Asynchronous Text-Based Computer Conferencing. Journal of Distance Education, 14(2), 50-71.
Sampson, P. M., Leonard, J., Ballenger, J. W., & Coleman, C. (2010). Student satisfaction of online courses for educational leadership. Online Journal of Distance Learning Administration, 13(3).
Short, J., William, E., & Christie, B. (1976). The social psychology of telecommunications. Toronto, ON: Wiley.
Stein, D. S., & Wanstreet, C. E. (2003). Role of social presence, choice of online or face-to-face group format, and satisfaction with perceived knowledge gained in a distance learning environment. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.
Stodel, E. J., Thompson, T. L., & MacDonald, C. J. (2006). Learners' perspectives on what is missing from online learning: Interpretations through the community of inquiry framework. The International Review of Research in Open and Distance Learning, 7(3).
Sung, E & Mayer, E. R. (2012). Five facets of social presence in online distance education. Computers in Human Behavior 28 (2012) 1738–1747.
Tu, C. (2002). The measurement of social presence in an online learning environment. *International Journal on E-Learning 1*(2), 34-45.
Tu, C. H. (2001). How Chinese perceive social presence: An examination in online learning environment. Educational Media International, 38(1), 45-60.
Verenikina, I. (2003). Understanding scaffolding and the ZPD in

educational research. Retrieved from ro.uow.edu.au
Vygotsky, L. (1978). Interaction between learning and development. From: Mind and Society (pp. 79-91). Cambridge, MA: Harvard University Press.
Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. Communication Research, 19, 52–90.
Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, England: Cambridge UP.
Whiteside, A. L . (2007). *Exploring social presence in communities of practice within a hybrid learning environment: A longitudinal examination of two case studies within the School Technology Leadership gradute-level certificate program.* Ph.D dissertation, University of Minnesota, United States – Minnesota. ProQuest LLC: Ann Arbor.