

## Students' Perception of Social Presence in Facebook

Nur Jannah Jamil<sup>1\*</sup>, Zaidatun Tasir<sup>2</sup>

<sup>1</sup>Pusat Pendidikan Asas & Liberal, Universiti Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia.

Email: [jannahjamil@umt.edu.my](mailto:jannahjamil@umt.edu.my)

<sup>2</sup>Sekolah Pendidikan, Fakulti Sains Sosial & Kemanusiaan, Universiti Teknologi Malaysia (UTM), 81310 UTM Johor Bahru, Malaysia.

Email: [p-zaida@utm.my](mailto:p-zaida@utm.my)

### ABSTRACT

#### CORRESPONDING

#### AUTHOR (\*):

Nur Jannah Jamil  
([jannahjamil@umt.edu.my](mailto:jannahjamil@umt.edu.my))

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Acquiring social presence promotes the degree of salience between two people using communication medium and development of interpersonal relationship. Nonetheless, research on social presence elements in social network system, such as Facebook, normally focuses on Facebook as general; considerably less is known about the relation between specific activities in Facebook towards the five dimensions in social presence: social respect, social sharing, social identity, open mind, and intimacy. Hence, this study uncovered students' perception of online social presence with relation to their experience, average time spent per day and activities done in Facebook by utilizing the questionnaire adapted from the study by [Sung and Mayer \(2012\)](#). The respondents of this study were a group of students who have similar experience of participating in academic discussion in Facebook on computer subject. Two-ways communication in Facebook, as in chatting, commenting, and sending message correlated positively with all dimensions in social presence. Those Facebook usages are also most frequently used by students, along with several other activities that signify students' interests to acknowledge themselves with any update or news from the society they choose as Facebook friends. Students might have regularly encountered with social presence instances through their vast experience on using Facebook with major usage of more than 2 years and minimum average of 1 hour per day. Hence, that could justify the high social presence the respondents believe they have perceived. These findings suggest that Facebook can be considered as a promising platform to utilize social presence to the most if the availability of its various tools and activities that support social interaction are put into the best practice to nurture student's social presence in online learning.

**Contribution/Originality:** The paper's primary contribution is finding that Facebook has promising potential as a platform for online learning to enhance students' social presence. This is reflected through the available features in Facebook that support social interaction between students, specifically on the functions that encourage them

to have two-ways communication.

## 1. Introduction

To date, online learning has provided vast opportunities for the users, both students and teachers or instructors, to maximize their role with the aim of generating the best learning outcomes. The main idea promoted by online learning is that learning can take place anytime and anywhere up to the students' availability and preferences. The common obstacle occurs in the previous setting of traditional classroom which required the teacher to always present in the same place and at the same time with students could no longer hinder the learning process when it comes to online learning environment. This is due to the freedom given to online learning user to access the learning material from distant. Furthermore, with the astonishing growth of social network system over the last few years, such as Facebook, transformative educational potential, especially via online learning in social media starts gaining attention from educators from all around the world.

A common concern among some educators with regards to online learning is the interaction process. This is due to the responsibility of the teacher or instructor to ensure that students get to interact with other members within the online learning environment ([Badrinathan & Gole, 2011](#)). In addition, although online learning environment is lack of communication cues compared to the traditional classroom setting, every student possesses the freedom of voicing out ideas without the fear of being dominated by others, even by the teacher or instructor ([Swan & Shih, 2005](#)). In other words, the interaction process in an online learning environment could be a great platform for students to share knowledge and views, and even provide feedback towards others' ideas actively.

Therefore, this situation signifies the vital need of improvised online learning environment that could serve as a platform to allow students to demonstrate social interaction with peers and instructor through academic activities. In order to achieve that particular conducive social interactive environment in online learning, [Anderson et al. \(2001\)](#) mentioned that the students need to be able to project oneself in the online community, until accepted as a 'real person' ([Gunawardena, 1995](#)), instead of just a virtual figure presented by a username. Students who are able to carry out such action are actually portraying the element of online social presence. Social presence has also been recognized as an element that has significant relationship with online learning ([Gunawardena & Zittle, 1997](#); [Tu, 2002](#); [Aragon, 2003](#); [Rourke, Anderson, Garrison & Archer, 2007](#); [Hall & Herrington, 2010](#); [Thurlings, Vermeulen, Bastiens & Stijnen, 2014](#); [Weidlich & Bastiaens, 2019](#); [Dahlstrom-Hakki, Alstad & Banerjee, 2020](#); [Andel et al., 2020](#)). It is the focus of this study to explore students' perception of social presence via their usage of Facebook.

## 2. Literature Review

The term social presence has been initially introduced from the work of ([Short, William & Christie, 1976](#)). They define social presence as "...the degree of salience (i.e., quality or state of being there) between two communicators using communication medium." In this case, social presence could be affected by two main elements, which include

immediacy and intimacy. Immediacy refers to the psychological measure in interpersonal communication (Bai, 2003). According to Woods and Baker (2004), immediacy can help reducing the psychological distance between people. This can be done through several verbal and non-verbal forms. Some of the non-verbal immediacy commonly used are facial expression, eye contact, smiling, posture and appropriate touching (Tu, 2002; Woods & Baker, 2004). Meanwhile, the verbal form of immediacy can be seen from the aspect of word choice such as the pronoun 'we', instead of 'I', while interacting with others. In other hand, intimacy focuses on the maintained eye contact, "...close proximity, body leaning forward and smiling..." (Tu, 2002).

Besides that, according to Short, William and Christie (1976), social presence perceived by a student depends on their perception towards being socially present in a learning environment and to what extent do they need the presence for. This argument is supported by Hall and Herrington (2010) who found that those who perceive low social presence experience "...cold and impersonal..." communication. In contradiction, the people perceiving themselves as needing high social presence take the communication medium as "...warm, inviting and responsive...". As in online learning environment, the social presence proposed by Sung and Mayer (2012) consists of five dimensions, which include social respect, social sharing, social identity, intimacy, and open mind. Social respect is defined by the act of appreciating, acknowledging, fast response and doing humor; while social identity is a dimension that consists of greetings, addressing name and learner's character. In other hand, social sharing refers to the activity of sharing relationship, info, and belief, and receiving motivation from teacher, whereas open mind can be seen from the act of agreement, positive view, and self-disclosure. Intimacy on the other hand is illustrated in the form of expressing personal stories and expressing emotion or feeling.

Nowadays, online learning environment is not only available via learning management system (LMS). Educators have started showing interest in social network systems (SNS) in conducting their teaching and learning process. The most dominant SNS that has practically been used by over one billion people throughout the worldwide is Facebook (Facebook, 2013). In the field of education, LMS has efficiently taken place in providing students with easier and constant access to academic materials related to their course, grades for both formative and summative evaluation throughout their classes and notification and reminders from their lecturers. Nonetheless, students frequently regard the system as a formal academic platform where every action is strictly attached to certain rules, which indirectly minimize the space for students to socially connect with peers and instructor. Eventually, the students will be discouraged to interact freely with their peers and the instructor. Thoms and Eryilmaz (2014) seconded this statement as they mentioned that LMS would limit the opportunity for students to have peer-to-peer interaction, which seems to be contradicted to several research (Aydin, 2014; Bowman & Akcaoglu, 2014) that have been highlighting the importance of interaction for productive learning.

In other words, Facebook can be a potential tool to engage students with learning process in the online social network since it could help in reducing the problem of missing social cues in computer-mediated communication. This solution of replacing the missing social cues is actually one of the benefits of practising social presence in online interaction, which can be observed with the use of nonverbal signals, such as emoticon, sticker and capital letter. Thus, this can be evidence for Facebook as a prospective tool to

support the development of social presence in online learning and consequently contributing in enhancing learning process.

### 3. Research Questions

Specifically, this study examines two research questions:

- i. What are the student's perceptions of social presence in Facebook?
- ii. Do experience in using Facebook, average time using Facebook per day, and Facebook usage correlate to student's perception of social presence in Facebook?

### 4. Method of Study

This study employed quantitative research design. The data was obtained from the distribution of questionnaire to the respondents. Descriptive statistics, which include frequency, mean and percentage was utilized for data analysis of this study. Conducted at one of the local universities in Malaysia, the respondents were a group of 36 postgraduates who were selected using purposive sampling. In this study, the purpose of respondents' selection is based on their same academic background. All the respondents have experience on enrolling in a course which required them to participate in Facebook discussion for every week along the whole semester.

The questionnaire, namely Online Social Presence Questionnaire (OSPQ), used for data collection was adapted from two different sources of instrument. The first instrument was previously developed by [Sung and Mayer \(2012\)](#) in their research on Online Distance Education. This instrument focuses on the social presence aspects of this study, which include social respect, social sharing, social identity, intimacy, and open mind. Meanwhile, another part of the questionnaire was adopted from a survey on the usage of Facebook adapted from [Junco \(2012\)](#) who studied on the relationship between frequency of Facebook use, participation in Facebook activities, and student engagement.

The mean value obtained from the data analysis were then categorized into several levels of evaluation to indicate the mean value as in [Table 1](#). From this level of evaluation, researcher would describe the analysis based on the three levels of evaluation, which include low, moderate and high ([Mohd Najib, 1999](#)). The level of evaluation would eventually signify the respondent's level of agreement towards the statement written in the item in the survey distributed.

Table 1: Evaluation level indicator according to the mean value

Level of Evaluation	Mean Value
Low	1.00 – 2.33
Moderate	2.34 – 3.66
High	3.67 – 5.00

Source: [Mohd Najib \(1999\)](#)

### 5. Findings of Study

#### 5.1. Experience In Using Facebook and Average Time Used Per Day

The first part of the questionnaire required students to provide information related to their usage and experience in using Facebook. Detailed report of the related data is displayed in [Table 2](#).

Table 2: Experience in using Facebook and average time used per day

Category	Frequency (%)	
<b>Experience in using Facebook</b>	4 weeks – 3 months	0
	3 months – 6 months	0
	6 months – 1 year	2.8
	1 year – 2 years	0
	More than 2 years	97.2
<b>Average time used per day</b>	1 min – 30 min	11.1
	31 min – 1 hour	22.2
	1 hour – 2 hours	27.8
	2 hours – 4 hours	25.0
	4 hours – 6 hours	5.6
	More than 6 hours	8.3

Based on [Table 2](#), out of 36 respondents, only 1 respondent was recorded to have less than 2 years experience as presented with the frequency percentage of 2.8%, while 35 other respondents (97.2%) stated that they acquired more than 2 years experience using Facebook. Moreover, from the table, the respondents can be classified as using Facebook frequently as it is shown that 66.7% respondents spent more than 1 hour per day using Facebook.

## 5.2. Facebook Usage

Other than experience and time spent on Facebook, the respondents were also asked on the specific function they used in Facebook which include all the items listed in [Table 3](#). Each Facebook usage is reported through the means of percentage and mean value of the analysed questionnaires distributed to the respondents.

Table 3: Facebook Usage

Item	N (%)	R (%)	S (%)	SF (%)	VF (%)	Mean
Playing games	52.8	22.2	11.1	8.3	5.6	1.92
Posting status updates	8.3	36.1	41.7	13.9	0.0	2.61
Sharing links	0.0	25.0	36.1	33.3	5.6	3.19
Sending private messages	0.0	13.9	55.6	25.0	5.6	3.22
Commenting	0.0	25.0	52.8	16.7	5.6	3.03
Chatting on Facebook chat	0.0	25.0	44.4	22.2	8.3	3.14
Checking in to see what someone is up to	2.8	11.1	27.8	33.3	25.0	3.67
Creating or RSVPing to events	52.8	27.8	8.3	11.1	0.0	1.78
Posting photos	2.8	36.1	38.9	13.9	8.3	2.89
Tagging photos	0.0	63.9	19.4	11.1	5.6	2.58
Viewing photos	0.0	11.1	22.2	58.3	8.3	3.64
Posting videos	13.9	50.0	22.2	11.1	2.8	2.39
Tagging videos	22.2	63.9	5.6	8.3	0.0	2.00
Viewing videos	0.0	11.1	38.9	41.7	8.3	3.47
<b>Overall Mean</b>	<b>2.83</b>					

N = Never, R = Rarely, S = Sometimes, SF = Somewhat Frequently, VF = Very Frequently

**Table 3** shows that out of 14 Facebook activities listed; only seven activities were frequent by the respondents. There are sharing links, sending private messages, commenting, chatting on Facebook chat, checking in to see what someone is up to, viewing photos, and viewing videos. From the seven most frequent activities, three of them represent activities that promote two-ways communication, which include sending private messages, commenting on statuses, wall posts, pictures, et cetera, and chatting on Facebook chat. This indicates that the respondents frequently use Facebook for the purpose of having interactive activity where they could communicate and gaining responses from other Facebook users. Furthermore, the highest mean on the usage of Facebook activity is illustrated from checking other Facebook users' activities, such as viewing their status. The similar analysis could be seen and implemented on the activities of viewing photos ( $\mu = 3.64$ ) and viewing videos ( $\mu = 3.47$ ). Besides that, from the table, the lowest mean value recorded is for created or RSVPing to events ( $\mu = 1.78$ ).

### 5.3. Students' Perception of Social Presence in Facebook

The findings for this subtopic highlights on students' perception of social presence in Facebook, which focuses on the five dimensions of social presence introduced by [Sung and Mayer \(2012\)](#) that include social respect, social sharing, social identity, open mind, and intimacy. The percentage recorded for each item for all social presence dimensions are presented in [Table 4](#).

Table 4: Students' Perception of Social Presence in Facebook

Item	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean
<b><i>SOCIAL RESPECT</i></b>						
Appreciation	0.0	0.0	13.9	66.7	19.4	4.06
Acknowledgment	0.0	0.0	11.1	75.0	13.9	4.03
Fast response	0.0	0.0	16.7	66.7	16.7	4.00
Humor	0.0	2.8	19.4	55.6	22.2	3.97
Conversation	0.0	2.8	13.9	61.1	22.2	4.03
<b><i>SOCIAL SHARING</i></b>						
Social relationship	0.0	8.3	22.2	58.3	11.1	3.72
Share information	0.0	2.8	13.9	66.7	16.7	3.97
Express values/belief	0.0	2.8	13.9	66.7	16.7	3.92
Encouragement	0.0	2.8	5.6	38.9	47.2	3.47
Close relationship	0.0	5.6	11.1	66.7	16.7	3.94
<b><i>OPEN MIND</i></b>						
Express agreement	0.0	0.0	13.9	77.8	8.3	3.94
Positive feedback	0.0	0.0	2.8	83.3	13.9	4.11
Exposing emotion, opinion, ideas	0.0	5.6	13.9	69.4	11.1	3.86
<b><i>SOCIAL IDENTITY</i></b>						
Greetings	0.0	2.8	11.1	27.8	52.8	3.47
Recognizing personal background	0.0	13.9	41.7	36.1	8.3	3.39
Variety characteristics via interaction	0.0	8.3	25.0	55.6	11.1	3.69
Addressing by name	0.0	2.8	8.3	47.2	41.7	4.28
<b><i>INTIMACY</i></b>						
Share personal life story	16.7	16.7	38.9	16.7	11.1	2.89
Share emotions and feeling	13.9	16.7	22.2	33.3	13.9	3.17

From the data in [Table 4](#), it was found that the mean value obtained from the analysis of all items in the first dimension of OSPQ indicates that the respondents perceived



themselves as acquiring high level of social respect (refer to [Table 4](#)). The highest mean of all items in this dimension is portrayed through the item that proposes appreciation on ideas and opinions via Facebook interaction. Meanwhile, under social sharing dimension, only one item that the respondents recorded as medium level (mean value is below than  $\mu = 3.67$ ) of perceived social presence, which is encouragement. On the other hand, the mean value for all items in the third social presence dimension has indicated that the respondents perceived themselves as having high open mind in Facebook. On contrary, result obtained for social identity dimension portrays that the respondents acquired medium level of social presence from the aspect of greetings and recognizing personal background. Nevertheless, they perceived themselves as having high social identity when having friends with variety characteristics and when friends addressing them by their name through Facebook interaction. Finally, for the fifth dimension, intimacy has been analyzed as the lowest perceived social presence dimension in Facebook by the respondents.

#### **5.4. Students' Perception of Social Presence in Facebook Regarding Experience in Using Facebook, Average Time Using Facebook Per Day, and Facebook Usage**

The findings for this subtopic focus on students' perception of social presence in Facebook. Based on the findings for respondent's experience in using Facebook (refer [Table 2](#)), it is recorded that majority of respondents have more than 2 years experience. Thus, the vast experience on using Facebook could directly lead to the high social presence which the respondents believe they have perceived.

Meanwhile, for the average time used on Facebook, the findings have portrayed that more than half of the respondents spent 1 hour and above per day, whereas only 11.1 % out of the total respondents used 1 to 30 minutes on Facebook. These findings indicate that majority of the respondents spend much time when they get access on Facebook. Since they have spent minimum of 1 hour and maximum of more than 6 hours on Facebook per day, they might have encountered with lots of social presence instances through the Facebook activities that they have utilized. Hence, that could justify the findings on the high social presence the respondents believe they perceived.

The analysis on student's perception regarding Facebook usage is tabulated in [Table 5](#). Based on [Table 5](#), the highest correlation of Facebook usage with social respect has been recorded for viewing video ( $r = .405$ ). According to [Zulkarnain and Hishamuddin \(2001\)](#), the value indicates moderate correlation between social respect and viewing photo. Although most of the correlations between social respect and Facebook usages are recorded as low (range between;  $r = .042$  to  $r = .405$ ), the positive relations are found regarding the usage of send message, commenting, view status, play games, share link, view photo, post video and tag video. On the other hand, social sharing shows positive significant correlation with tag video ( $r = .457$ ); and displays negative significant correlation with share link ( $r = -0.348$ ). Moreover, from the table, it can be seen that open mind illustrates highest positive correlation with commenting ( $r = 0.234$ ) compared to other Facebook usages. Besides that, intimacy is found having moderate positive correlation with tag video ( $r = 0.479$ ) and showing lowest positive correlation with send message ( $r = 0.026$ ). Finally, for social identity, the highest positive correlation is recorded with chatting ( $r = 0.596$ ), while the lowest positive correlation is displayed to be with the usage of post photo ( $r = 0.033$ ).

**Table 5: Student’s Perception of Social Presence in Facebook towards Facebook Usage**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Playing game	-																			
2. Posting status	-.132	-																		
3. Share link	.064	.340*	-																	
4. Send message	.144	.009	.182	-																
5. Commenting	.064	.587**	.210	.155	-															
6. Chatting	.296	-.228	-.165	.301	.005	-														
7. View status	-.081	.240	.057	.110	.315	.090	-													
8. Create event & RSVP	.142	.196	.256	.449**	.254	.248	.077	-												
9. Post photo	.330*	.287	.385*	.087	.171	.170	.129	.366	-											
10. Tag photo	.325	.227	.373*	.162	.061	.217	-.122	.442**	.751**	-										
11. View photo	-.088	.064	.264	.117	.288	.109	.344*	.035	.293	.054	-									
12. Post video	.280	.204	.187	.088	.002	-.232	.186	.144	.182	.176	.008	-								
13. Tag video	.247	.220	.094	.276	.193	.162	-.053	.226	.102	.130	.013	.567**	-							
14. View video	.343*	-.214	.225	.086	.140	-.014	.290	.091	.093	.049	.332*	.330*	.115	-						
15. Social respect	.157	-.146	.042	.263	.214	.048	.268	-.171	-.241	.306	.155	.163	.243	.405*	-					
16. Social sharing	.070	-.026	.348*	.157	.000	.309	-.044	-.020	-.187	.011	-.070	.168	.457**	-.188	.338	-				
17. Open mind	.121	.003	-.141	.200	.234	.113	.053	-.005	-.185	.084	-.016	.000	.206	-.110	.506**	.538**	-			
18. Social Identity	.071	.146	-.195	.252	.255	.596**	.211	.136	.033	.197	.134	-.146	.259	-.139	.221	.502**	.388*	-		
19. Intimacy	.157	.188	-.105	.026	.148	.288	.222	-.056	.073	.100	.182	.239	.479**	-.061	.303	.601**	.576**	.659**	-	

Note: N = 36

\* Correlation is significant at the 0.05 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed)



The analysis on student's perception regarding to the Facebook usage that focuses on two-ways communication, which only include chatting, commenting, and sending message is tabulated in [Table 6](#).

Table 6: Students' perception of social presence on two-ways communication in Facebook (chatting, commenting & sending message)

Variables	1	2	3	4	5	6
1. Two-ways Communication in Facebook ( <i>Chatting, Commenting &amp; Sending Message</i> )	-					
2. Social respect	.247	-				
3. Social sharing	.175	.338*	-			
4. Open mind	.224	.506**	.538**	-		
5. Social Identity	.520**	.221	.502**	.388*	-	
6. Intimacy	.136	.303	.601**	.576**	.659**	-

Note: N = 36, \* Correlation is significant at the 0.05 level (2-tailed).

\*\*Correlation is significant at the 0.01 level (2-tailed).

From [Table 6](#), it can be analyzed that although the correlation with social sharing and intimacy have been recorded as very low, all dimensions in social presence show positive correlation with two-ways communication in Facebook. The correlation of two-ways communication in Facebook with social respect ( $r = 0.247$ ) and open mind ( $r = 0.224$ ) display slight difference from the value for moderate correlation. Meanwhile, the highest positive moderate correlation tabulated can be found between two-ways communication in Facebook with social identity ( $r = 0.520$ ).

## 6. Discussion of Findings

This study investigated students' perceptions of social presence in Facebook, and its correlation to the experience in using Facebook and the average time using Facebook per day. From the obtained results all students have been recorded as having more than 2 years experience of using Facebook. In other words, the students can be classified as having strong prior knowledge on the use of Facebook and should be familiar with the facilities provided in Facebook. Furthermore, majority of the students use Facebook for more than 30 minutes per day. In other words, this finding portrays Facebook as a tool that students would use as part of their daily routine.

Besides that, the findings also show that the students frequently checking on other users' activities, commenting and viewing photos in Facebook. These results are parallel to the findings from studies carried out by [Junco \(2012\)](#) and [Pempek, Yermolaveya and Calvert \(2009\)](#). The students who frequently checking other users' activities, such as the status or wall post, might be due to the setting on Facebook itself, where the users will be automatically brought to the homepage that consists of newsfeeds based on the activity of the users' Facebook friends. Thus, instead of directly surfing on own Facebook page, the users will have the tendency to firstly check upon other users' activity or status. Eventually, they perceived themselves as frequently checking in to see what other users are up to. Nonetheless, [Deng and Tavares \(2013\)](#) argued that the feature of news feed where the students can check upon other users' activities, photos or status could enforce online social presence ([Akcaoglu & Lee, 2018](#); [Oh & Ki, 2019](#)). The status

and activity updated seems to represent their presence as members of the online community. Thus, such frequent act on Facebook could influence students to become more aware on the online social context of the updates shared within the community. Moreover, the high frequency on commenting in Facebook could also be related to its interface that promotes easy access in initiating interaction (Thoms & Eryilmaz, 2014; Deng & Tavares, 2013). This is supported by one of the respondents in the study carried out by Deng and Tavares (2013) admitted that posting a comment only required the user to just click and type since the comment button is provided right next to the post. Eventually, this feature provides opportunity for students to give fast response in the form of comment towards other users' status or activity. The act of fast respond or also known as immediacy in interaction is supported by Woods and Baker (2004) since they believe it can enhance social presence in the online environment. In addition, creating and RSVPing event in Facebook has been identified as the least frequent usage by the students. The reason for this analysis could be because of the function of that usage itself. Based on the norm of the respondents' culture background and trend, event creation and RSVPing via Facebook is usually done for the purpose of inviting and fulfill the invitation of wedding reception. Referring to the respondents' norm, it is not a normal situation for the wedding event to take place frequently. The reason for more than half of the respondents has the experience for this particular Facebook activity might be due to only RSVPing the event instead of creating one.

From the table displaying student's perception of social presence in Facebook, the highest mean of all items is portrayed by the item that proposes acknowledgement on ideas and opinions via Facebook interaction. Acknowledgement of ideas can be in the form of sharing the knowledge and assist the knowledge sharing process are part of the social source of an online community (Thoms & Eryilmaz, 2014). Although the low response is shown via Facebook usage, since only six out of 14 activities were frequent by students, the social presence they believe they perceived portrays the contradict findings. The overall results signify that majority of the students perceived themselves as acquiring high social presence. Therefore, high perceived social presence is not influenced by frequent utilization of all Facebook usages. One element that should be considered regarding the respondents is that they have prior experience on enrolling in a course which required them to participate in Facebook discussion for every week through the whole semester. The rich experience of learning via Facebook might accommodate the students with several skills and techniques in nurturing social presence in the online interaction. Thus, even without frequently utilizing all Facebook usages as priory mentioned, the students believe they still perceive high social presence in Facebook. In other words, the quantity on the frequency of utilizing Facebook is not as important as the quality of the social presence perceived.

The final analysis, which is on student's perception of social presence regarding the Facebook usage has illustrated that most of the Facebook usage show low and positive correlation with social presence dimensions. Surprisingly, view photo shows the most significant correlation to social presence compared to other usages. This result might occur due to the nature of human being who prefers graphic material more than text-based material, which leads to the desire of presenting socially in the online community for them to be acknowledged by other users who might share the same interest. Compared to video which has audio as extra elements, viewing photo could save them more time since they would not have to wait much for the material to be loading on the page. Furthermore, play game has portrayed the most insignificant correlation with the dimensions in social presence. The factor that lies beneath this scenario might be due to

the game setting in Facebook which does not promote social interaction to take place as much as in other usages. Most Facebook games can be played individually. Although chances to interact with other users, for instance to ask for extra lives as game player is there, the users can still choose not to interact and wait until the lives are automatically recharged by Facebook system. Other than that, student's perception of social presence displays positive correlation with two-ways communication in Facebook, which include chatting, commenting and sending message. In this context, two-ways communication refers to the Facebook usage that demands interactive response from both sender and receiver. The findings indicate that interaction plays important role for social presence to occur. This outcome is supported by [Woods and Baker \(2004\)](#) as they stated that interaction could promote "positive communication behaviour" which includes social presence. [Tu and McIsaac \(2002\)](#) also agree with the statement that interactivity is part of the vital element in social presence, which is also supported by [Aragon \(2003\)](#) and [Gunawardena and Zittle \(1997\)](#).

## **7. Conclusion**

The data presented here has shown that Facebook can serve as a platform to maximize the nurturing of social presence in learning process via online social network. This is based on the findings that portray the vast opportunities for social interaction to take place among students, as Facebook users, by utilizing the Facebook usage mentioned in the prior section of this paper. Besides that, data obtained also signifies that Facebook could provide the students with the experience of being in a community, especially with the characteristic of news feed where they can get latest news about their other Facebook users. The results also indicate that despite solely depending on the frequent usage of Facebook, social presence can be induced more when there is rich meaningful interaction within social context among the students. Future research should continue to induce and examine each social presence dimension independently in online social network, which include social respect, social identity, social sharing, and open mind, towards learning outcomes and academic achievement. Thus, the findings may contribute to explaining which dimension has strongest effect on learning outcome. Besides that, the present study focuses on a group of students who have experience in learning via online social network; hence, future research is needed to determine whether the same results would be gained from learners who never have the experience doing online learning, or those who only have experience on learning through formal online learning management system, such as Moodle.

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## **Conflict of Interests**

The authors declare no conflict of interest in this study.

## References

- Anderson, T., Rourke, L., Garrison, D. R., & Archer, W. (2001). Methodological Issues in the Content Analysis of Computer Conference Transcripts. *International Journal of Artificial Intelligence in Education (IJAIED)*, 12, 8-22.
- Andel, S. A., de Vreede, T., Spector, P. E., Padmanabhan, B., Singh, V. K., & De Vreede, G. J. (2020). Do social features help in video-centric online learning platforms? A social presence perspective. *Computers in Human Behavior*, 113, 106505.
- Akcaoglu, M., & Lee, E. (2018). Using Facebook groups to support social presence in online learning. *Distance Education*, 39(3), 334-352.
- Aragon, S. R. (2003). Creating social presence in online environments. *New directions for adult and continuing education*, 2003(100), 57-68
- Aydin, S. (2014). Foreign language learners' interactions with their teachers on Facebook. *System*, 42, 155-163.
- Bai, H. (2003). Student motivation and social presence in online learning: Implications for future research. 2714-2720
- Badrinathan, V., & Gole, A. (2011, December). Ablended-learning pedagogical model for French learning through an online interactive multimedia environment: Learner autonomy and efficacy. In 2011 World Congress on Information and Communication Technologies (pp. 717-721). IEEE.
- Bowman, N. D., & Akcaoglu, M. (2014). "I see smart people!": Using Facebook to Supplement Cognitive and Affective Learning in the University Mass Lecture. *The Internet and Higher Education*.
- Dahlstrom-Hakki, I., Alstad, Z., & Banerjee, M. (2020). Comparing synchronous and asynchronous online discussions for students with disabilities: The impact of social presence. *Computers & Education*, 150, 103842.
- Deng, L., & Tavares, N. J. (2013). From Moodle to Facebook: Exploring students' motivation and experiences in online communities. *Computers & Education*, 68, 167-176.
- Facebook. (2013). Key facts. Retrieved from <http://newsroom.fb.com/Key-Facts>.
- Gunawardena, C. N. (1995). Social presence theory and implications for interaction and collaborative learning in computer conferences. *International journal of educational telecommunications*, 1(2), 147-166.
- Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction within a computer-mediated conferencing environment. *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*, 26(7), 1012-1027.
- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162-171.
- Mohd Najib Abd. Ghafar (1999). *Penyelidikan Pendidikan*. Johor: Penerbit Universiti Teknologi Malaysia
- Oh, J., & Ki, E. J. (2019). Factors affecting social presence and word-of-mouth in corporate social responsibility communication: Tone of voice, message framing, and online medium type. *Public Relations Review*, 45(2), 319-331.
- Pempek, T. A., Yermolayeva, Y. A., & Calvert, S. L. (2009). College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology*, 30(3), 227-238.
- Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2007). Assessing social presence

- in asynchronous text-based computer conferencing. *International Journal of E-Learning & Distance Education*, 14(2), 50-71.
- Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications.
- Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computers in Human Behavior*, 28(5), 1738-1747.
- Swan, K., & Shih, L. F. (2005). On the nature and development of social presence in online course discussions. *Journal of Asynchronous learning networks*, 9(3), 115-136.
- Thoms, B., & Eryilmaz, E. (2014). How media choice affects learner interactions in distance learning classes. *Computers & Education*, 75, 112-126.
- Thurlings, M., Vermeulen, M., Bastiaens, T., & Stijnen, S. (2014). The role of feedback and social presence in an online peer coaching program for student teachers. *Australasian Journal of Educational Technology*, 30(3).
- Tu, C. H. (2002). The measurement of social presence in an online learning environment. *International Journal on E-learning*, 1(2), 34-45.
- Tu, C. H., & McIsaac, M. (2002). The relationship of social presence and interaction in online classes. *The American Journal of Distance Education*, 16(3), 131-150.
- Weidlich, J., & Bastiaens, T. J. (2019). Designing sociable online learning environments and enhancing social presence: An affordance enrichment approach. *Computers & Education*, 142, 103622.
- Woods, R. H., & Baker, J. D. (2004). Interaction and immediacy in online learning. *The International Review of Research in Open and Distance Learning*, 5(2).
- Zulkarnain, Z., & Hishamuddin, M. S. (2001). *Analisis data menggunakan SPSS Windows*. Universiti Teknologi Malaysia, unpublished.