FREQUENCY OF ACCESSING FACEBOOK AND LEARNING EFFECTIVENESS PERCEPTIONS AMONG STUDENTS OF BERJAYA UNIVERSITY COLLEGE OF HOSPITALITY

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ABSTRACT

Without doubt, Facebook represents a huge potential audience. With over 1.44 billion monthly active users worldwide and 4.5 billion likes generated, this powerful tool has definitely influenced most university students' lives especially in this generation. These students are called the 'Digital Generation' as their lives revolve around the Internet and social media. However, since Facebook was built largely for recreational purposes, it is not clear how it can contribute towards learning, if at all. Hence, the main aim of the study is to determine the frequency in accessing Facebook and the learning effectiveness among a sample of students from BERJAYA University College of Hospitality. In addition to traditional lectures and tutorials, an online group was created in Facebook to facilitate communication and academic sharing and the students' feedback was gathered for analysis. In a nutshell, this research does not show evidence of association between frequency of accessing Facebook and their learning effectiveness.

Keywords: *Facebook, access frequency, learning effectiveness*

INTRODUCTION

The Internet has revolutionised our communication since its humble beginnings in 1962. Back then, the early Internet was mainly used by computer experts, engineers, scientists, and librarians (Kahn et al., 1997). However, Internet usage and users have since evolved. The Internet technology that provided a vast amount of information to its users now also provides a platform to socialise. As the Internet has become ubiquitous, faster, and increasingly accessible to non-technical communities, social networking and collaborative services have grown rapidly, enabling people to communicate and share interests in many more ways. The Web 2.0 technologies saw a rapid growth in social networking sites like Facebook, Twitter, Linked-in, YouTube, Flickr, blogs, wikis and many more.

Many previous studies have focused on measuring students' acceptance of e-learning technologies (Ismail, 2010; Fewkes & McCabe, 2012). Recently, researchers have identified the main determinants for the use of a course's FB group in a learning context (Demartini & Dossena, 2016). Some studies have identified relationships between certain factors and student proficiency but mainly based on traditional learning methods. For example, Farbman

(2015) has found that spending more time in school can have a meaningfully positive impact on student proficiency. However, few studies have investigated the relationship between the time spent on e-learning platforms and the ability to learn better. Therefore, in this research, the researchers will like to find out the frequency of assessing Facebook and its relationship to learning effectiveness.

LITERATURE REVIEW

In higher education, today's students are predominantly from Generation Y, whose lives are centred on the Web 2.0 technologies. The generally accepted range of Generation Y are those born between 1978 and 2001 (Barron, 2008; Kueh & Boo, 2007; Chen & Choi, 2008). According to Prensky (2001), Generation Y, also known as *Digital Natives* or *Netizens,* spend their entire lives surrounded by computers, videogames, digital music players and cell phones and this has influenced their environment. Specifically in the learning environment, Generation Y is hungry for stimulation and new challenges as opposed to structured classroom-based learning (Weyland, 2011). In a broad sense, web-based learning seems to be the most appropriate platform to engage these students.

Facebook, created in 2004, is currently the most used global social networking website with over 1.44 billion active users (Noyes, 2015). The most common age demographic of its users is the 18 to 49 age group (eMarketer, 2013). However, Facebook was not created with the purpose of education and hence the applications were not developed for learning purposes. Moreover, the function of Facebook is more geared towards recreation, for social interaction, gaming and entertainment purposes (Crook, et al. 2008). Yet, Facebook was selected as the learning support tool in this study because of the advantages of its functions compared to other social networking sites and its immense popularity among university students from Generation Y.

BERJAYA University College of Hospitality (BERJAYA UCH) specialises in Hospitality, Tourism, Culinary and Business programmes that emphasise on experiential learning. This is coined as *'BERJAYA Immersion Methodology',* which aims to engage the students with practical hands-on experience that addresses the industry standards. The 'Strategy and Innovation for the Service Industry' course is a compulsory subject offered during the second year of all the degree programmes. This subject was pre-selected to implement the 'Immersion Methodology'. Instead of following the usual weekly schedule comprising a two-hour lecture and one-hour tutorial per week, the two-hour lecture session was replaced with Strategic Meetings, chaired by the students acting the roles of Chief Executive Officer (CEO), Vice Presidents and others to discuss and implement strategically and operational plans for a troubled company. The second group of students are diploma students who are currently also in the second year of their studies at BERJAYA UCH. The 'Introduction to Business' course is a compulsory subject for the Diploma in Culinary programme and students undertaking this subject are also required to play the role of future entrepreneurs and develop a business plan by the end of the semester. As such, a Facebook Group was set-up for each of these two subjects, Strategy and Innovation for the Service Industry and Introduction to Business, to facilitate discussion among the students. As the privacy was set to '*Closed Group'*, only approved members could see the other group members and their postings. These students, being in the second year of the diploma and degree programmes, are expected to be more focused and have the right mind frame to be exposed to an experiential learning setting.

According to Liu (2010), social media tools are wonderful communication tools that if integrated in teaching process can leverage students' technological skills and even cut back on local technological investment as students can take full advantage of this public resource to facilitate learning rather than relying on on-campus e-learning systems. However, many

higher education institutions including BERJAYA UCH may have already invested in a professional e-learning system and they might find it difficult to use or switch to another system. From the academicians' point of view, many still believe that the traditional classroom setting and teacher-centred teaching style are the most effective way to deliver knowledge to students. Nonetheless, the challenges for higher education institutions are becoming more evident as the educational needs of Generation Y students nowadays are rapidly changing. Thus, to keep abreast, it is imperative for higher education institutions to explore the usage of other supporting e-learning platforms such as Facebook.

Prior studies have focused on measuring students' acceptance of e-learning technologies (Ismail, 2010; Fewkes & McCabe, 2012) and identifying the main determinants for the use of a course's FB group in a learning context (Demartini & Dossena, 2016) but few were found to relate between the time spent on e-learning platforms and the ability to learn better. Farbman (2015) mentioned that "adding time to the school day and year can have a meaningfully positive impact on student proficiency". In his study, he cites many examples showing that spending more time in classroom and other learning environment does help to improve learning. In addition, in another research conducted by the American Institutes for Research, the researchers discovered that learning time is associated with higher study skills and academic motivation (Kidron & Lindsay, 2014).

As stated by Swan (2003), "Learning effectiveness means that learners who complete an online programme receive education that represents the distinctive quality of the institution. Besides, effectiveness is deemed as being able to understand the course contents and perhaps being able to attain a particular level of learning outcomes (Wong, 2008). Some variables which have been used to measure learning effectiveness are criteria such as "assessment measures level of understanding", "understanding of the subject" and "multimedia improves learning" (Wong, 2008). In a nutshell, learning effectiveness is always related to achieving certain learning outcomes of the course, particularly understanding of course content.

Thus, this study seeks to discover whether the frequency of accessing the Facebook learning group is associated with the students' learning effectiveness, which is measured by their responses on the following six variables: 1) their understanding of the subject matter; 2) their ability to learn more about a particular subject; 3) their ability to recall the content of the subject matter; 4) sharing of materials such as video increases learning capability; 5) thinking critically in replying posts; and 6) interactions in FB group that are helpful for assignment.

METHODOLOGY

Through the review of literature, the authors identified a range of influences that will most likely influence the students' preferences in using Facebook as a learning tool. Using this information as a guide, a questionnaire was developed. This study used an online questionnaire as the main data gathering tool and the target sample were university students. A total of *forty three (43)* students who enrolled for the 'Strategy and Innovation for the Service Industry' and 'Introduction to Business' courses from September 2012 to March 2014 joined the respective Facebook Groups as members and they participated in this survey at the end of the semester. Only students who attended these two classes were solicited as respondents because the delivery of these two courses was considered more practical and the students were required to be active in discussions. They were added into two separate Facebook learning groups respectively by the instructor, who is also one of the researchers, based on the enrolment in the beginning of the semester. The intention and objective of this study were explained to the students at the beginning of the semester. Their participation in the learning groups was moderated by the instructor and the online

questionnaire link was posted in the FB group for all the students to fill in at the end of their semester to gather their feedback. The instructor's role was to monitor the online discussions and the students' usage in a non-intrusive manner and provide relevant materials related to the subject content. The participation rate of the students in these FB groups for these two courses was not included as part of the assessment of the course in order to gain non-biased feedback from the students.

The researchers adopted Google Forms as the online questionnaire tool as it is user friendly (Huang & Liaw, 2005). In the first section, respondents were asked to provide their personal information such as age, gender and their programme of study. Additionally, question pertaining the frequency of accessing the course Facebook group is asked in section 1, it is measured using 3 major options namely "few times in a month", "2-3 times in a week" and "at least 1 time in a day". In the second section of the survey, questions were asked in the areas related to the effectiveness perceptions of using the Facebook learning groups and their responses were measured using a Likert Scale (on a scale of 1-Strongly Disagree to 5-Strongly Agree & 3 is Moderate).

To analyse the collected data, Fisher's Exact test was applied to determine whether the frequency of accessing Facebook is associated with their learning effectiveness (McDonald, 2009). Fisher's Exact test is seen as more appropriate for this study compared to Chi-Square because this study does not meet one of the requirements of Chi-square, that is each cell in the contingency table must be at least 5 (McDonald, 2009; Sanders & Smidt, 1999). Besides, Fisher's Exact test is more suitable for a small sample size and could derive a more accurate result compared to Chi-square test (McDonald, 2009). Therefore, the Fisher's Exact 3 x 3 contingency table was used in this study. The final results are presented with contingency tables and probability values using Fisher's Exact Test formula in the following section. To suit Fisher's Exact test 3 x 3 contingency table, responses in strongly disagree and disagree are combined into the disagree category, likewise for strongly agree and agree responses. Therefore, the contingency table has 3 major categories: Disagree, Moderate and Agree with the table rows presenting frequencies in accessing Facebook.

FINDINGS

Table 1: Frequency of Accessing Facebook and understanding of the subject

	Disagree	Moderate	Agree	Total
Only a few times in a month	2	0	2	4
Only 2-3 times in a week	3	7	1	11
At least 1 time in a day	9	10	9	28
Total	14	17	12	43

Table 1 depicts the frequency of accessing Facebook and understanding of the subject, showing that the majority of the students were in the categories of moderate to agree (total=29; moderate=17, agree=12) especially those who only accessed the learning group in Facebook once in a day (total=19, moderate=10, agree=9). However, since there are more students in the moderate category (n=17), the overall result of Fisher's Exact Test does not render a significant result (p=0.1622). Therefore, the frequency of accessing Facebook is not associated with the students' understanding of the subject matter. However, in an almost similar study by Irwin et al. (2012) on a group of university students in Australia, they concluded that more than half of the students (51%) who were active Facebook users stated that the course Facebook page was an effective learning tool and majority (76%) would recommend using Facebook learning group for future courses. Clearly, this depends on the engagement level of students in the Facebook group rather than the quantity or the

frequency of their usage. This is also supported by Dyson, Vickers, Turtle, Cowan, and Tassone (2015), who stated Facebook did not yield higher self-report of course engagement or understanding of the course.

Table 2: Frequency of Accessing Facebook and Ability to Learn More about the Subject

	Disagree	Moderate	Agree	Total
Only a few times in a month	0	3	1	4
Only 2-3 times in a week	2	4	5	11
At least 1 time in a day	2	14	12	28
Total	4	21	18	43

Table 2 shows the frequency of accessing Facebook and learning more about the subject, with most students in the moderate category (n=21) especially those in the 'at least 1 time a day' category (n=14). Overall, many students agreed with this statement that Facebook improves their abilities to learn more (n=18). Again, since there are more students in the moderate category (n=21), the overall result of Fisher's Exact Test does not produce a significant result (p=0.6513), so their frequency of accessing Facebook is not associated with their ability to learn more about the subject. Social platforms like Facebook may increase the users' ability to communicate but the inability to separate between logging-in to socialise and to learn or exchange views on academic matters may impede the usefulness of this e-learning tool.

Table 3: Frequency of Accessing Facebook and Ability to Recall Subject Matter

	Disagree	Moderate	Agree	Total
Only a few times in a month	1	2	1	4
Only 2-3 times in a week	3	6	2	11
At least 1 time in a day	11	8	9	28
Total	15	16	12	43

The frequency of accessing Facebook and ability to recall or remember the subject matter is shown in Table 3. Most students are in the categories of moderate (total = 16). However, there are many respondents who disagree with the statement (total = 15), especially those in the 'at least 1 time a day' category (n=11). Nevertheless, since there are more students in the moderate category (n=16) and 15 students disagree with the statement, the overall result of Fisher's Exact Test does not give a significant result (p=0.6925), showing that students' frequency in accessing Facebook is not associated with their ability to recall the subject content. In relation to this finding, Junco (2012) found that number of logins and time spent on Facebook were related to lower overall academic performance and that there was even a negative relation between time spent on Facebook and time spent preparing for class.

Table 4: Frequency of Accessing Facebook and Sharing Materials Such As Video Increases Learning Capability

	Disagree	Moderate	Agree	Total
Only a few times in a month	1	0	3	4
Only 2-3 times in a week	2	1	8	11
At least 1 time in a day	4	9	15	28
Total	7	10	26	43

The frequency of accessing Facebook and sharing materials such as video increases learning capability is shown in Table 4 indicating that most students responded in the Agree category (total=26). A few respondents responded moderately to this statement (total =10), especially those in the 'at least 1 time a day' category (n=9). Nevertheless, since there

students in the moderate category (n=10) and 7 students who disagree with this statement, the overall result of Fisher's Exact Test does not give a significant result (p=0.4339), showing that accessing Facebook frequency is not associated with sharing materials such as video increases learning capability.

Table 5: Frequency of Accessing Facebook and Thinking Critically In Replying Posts

	Disagree	**Moderate**	**Agree**	**Total**
Only a few times in a month	0	2	2	4
Only 2-3 times in a week	2	4	5	11
At least 1 time in a day	6	10	12	28
Total	8	16	19	43

Table 5, on the frequency of accessing Facebook and thinking critically in replying posts, shows that most students agreed with this statement (n=19) especially those in the 'at least 1 time a day' category (n=12). Many students responded moderately on this statement (n=16). Since the results are quite spread out across the three categories, the overall result of Fisher's Exact Test is not significant (p=0.9812). Therefore, frequency of accessing Facebook is not associated with thinking critically in replying posts.

Table 6: Frequency of Accessing Facebook and Interaction in FB group is helpful for assignments

	Disagree	**Moderate**	**Agree**	**Total**
Only a few times in a month	0	2	2	4
Only 2-3 times in a week	1	2	8	11
At least 1 time in a day	3	7	18	28
Total	4	11	28	43

Table 6 depicts the frequency of accessing Facebook and interaction in FB group is helpful for assignments, with the majority of students responding in the categories of moderate to agree (total=39; moderate=11, agree=28), especially those who accessed the learning group in Facebook at least once in a day (total=25, moderate=7, agree=18). However, since the result is spread out, the overall result of Fisher's Exact Test is not significant (p=0.8999). Therefore, the frequency of accessing Facebook is not associated with student's responses to the statement that 'interaction in FB group is helpful for assignments'.

CONCLUSION

All six variables did not show that the frequency in accessing Facebook will affect perceptions in learning effectiveness. While previous research has proven otherwise as shown in the studies by Farbman (2015) and Kidron and Lindsay (2014), this does not mean the time spent in using learning applications will not result in better learning proficiency. This study indicates that successful integration of social media such as Facebook in the course delivery can be rather challenging and complicated. Further, students may not perceive that their time spent on e-learning platforms such as Facebook learning groups are beneficial towards their academic performance. In fact, effective time management in using Facebook is key to improving academic achievement (Tsai & Lu, 2015).

One of the limitations of this study is the use of the term 'number of times' rather than evaluating the total time that the students spent on this learning application. Besides, the frequencies of accessing are self-reported by students rather than based on actual accessing frequencies recorded by researchers, it may not be as accurate as actual records.

Due to the limitation of the sample size also, the findings cannot be generalised throughout the whole institution but this study may trigger further exploration in terms of other courses and programmes, in an institution-wide study to gain a more significant result. Furthermore, students' perception prior to the usage of Facebook learning group during the start of the semester can be gathered to compare their pre and post evaluations to determine if there are any changes in the results. The number of questions in measuring effectiveness of Facebook is limited more questions should be adopted in the next study to gauge the overall learning effectiveness. Future research, may measure time spent against the learning effectiveness in using different tools.

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