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Students' Emotional Engagement in Lecturers' Personal Facebook Account

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Abstract

Facebook serves as an excellent platform for student-lecturer to connect. The rise in the use of Facebook by academics is expected, given the positive features of Facebook. Past studies have indicated the benefit of using Facebook in teaching and learning. One salient issue concerning Facebook usage in teaching and learning is students' emotional engagement in lecturers' personal Facebook accounts. While there have been substantial studies examining how lecturers use Facebook in teaching and learning, the question of the impact of lecturers' personal Facebook account on students' emotional engagement has not been examined. This research examined the level of students' emotional engagement in lecturers' personal Facebook use for teaching and learning. The study defined the pre-test and post-test difference before testing the hypotheses difference relating to these factors. The quasi-experimental research design was used for this research, and a total of 60 students connect with their lecturers via lecturers' personal Facebook account. Participants fill out the self-administered questionnaire on week one (pre-test) and week fourteen (post-test) of the semester. The questionnaire contained questions on the perceived breadth of students' emotional engagement. The results revealed that students' emotional engagement is significantly different in pre and post-test of lecturer personal Facebook account. This study contributes to the growing body of knowledge on the use of Facebook in teaching and learning by clarifying the association of students' emotional engagement on Facebook.

Keywords: Emotional Engagement, Personal Facebook Account, Facebook, Quasi-Experimental.

Introduction

Social media dominates emerging pedagogical methods and systems. Information and communication systems have creatively incorporated social media into the everyday use of technology. Social media includes various web-based tools and services to facilitate community development through user interaction and information sharing (Arnold and Paulus, 2010; Junco et al. 2011). According to Arnold and Paulus (2010) personal interactions and connections with other users are obtained from social media, including forums, Wikipedia, media (audio, image, video, text), resource sharing, and networking (including Facebook, Instagram) virtual worlds. With this

advancement, current studies have shown that using social media as an educational tool could increase student engagement (Collins and Halverson, 2018; Saha and Karpinski, 2018; Johnson et al. 2016). Despite the above situation, most lecturers and students are familiar with using digital media, specifically Facebook for personal (informal communication) and impersonal (formal or team communication) use (Cunha and Kontopodis, 2016).

Nevertheless, the familiarity of lecturers with Facebook's use of personal and impersonal communities opens up the possibility of emotional interaction and communication skills with their students. Although several studies demonstrate Facebook's educational potential through lecturer-student engagement, several research gaps need to be addressed regarding students' emotional interaction with their lecturer in using Facebook (Manca and Ranieri, 2017).

Impact of Lecturers' Personal Facebook account access on Students' Emotional Engagement

Engagement is divided into cognitive, behavioural, and emotional. For this research, the researcher focused on emotional engagement. According to commonly used concepts by Fredricks et al (2004), student involvement consists of three distinct but interlinked elements, namely physical, emotional and cognitive engagement of students in their commitment and participation in education (see also Wang et al., 2011). Behavioural engagement refers to students' constructive behaviour and acts in the course of teaching and learning (e.g., attending classes, focusing and completing schoolwork) and to their participation in college and school activities in particular (e.g.) (Fredricks et al. 2004; Wang et al. 2011). Cognitive participation includes the independent and strategic approach to students' education, such as exploring complex ideas and mastering challenging skills (Appleton et al. 2008; Archambault et al. 2009). Additionally, the third aspect, called emotional engagement, focuses on students' feelings of joy, curiosity, anxiety, and sense of belonging to other students, lecturers, and schools. This aspect also involves support for students viewed by others in some concepts (Appleton et al. 2006; Finn, 1989; Skinner and Belmont, 1993).

Emotional engagement is divided into pleasure, arousal, and dominance (PAD) to describe physical environments (Mehrabian and Russell, 1974). Pleasure deals with whether the individual perceives the environment as enjoyable or not, in this case, the lecturers' personal Facebook account. Arousal reflects the extent to which the environment stimulates the individual. The post and chat that happens on the Facebook platform. Dominance captures whether the individual feels in control or not in the environment when communication occurs between students and lecturers (Mehrabian and Russell, 1974).

On the contrary, emotional engagement can be identified by indicators such as academic recognition (Finn, 1989) and signs of affective responses (e.g., interest) in classrooms (Fredricks et al. 2004; Skinner et al. 2008). The role of emotional engagement in affecting academic results (e.g., Handelsman et al. 2005; Skinner et al., 2008; Skinner et al., 1990) has been demonstrated the past studies. As a measure of an individual's academic ability, the achievement is typically measured by examination grade and standardised achievement test (McLean, 2001). In contrast, learning is the way a person learns (McLean, 2001).

One of Furrer and Skinner (2003) research was the role of engagement in shaping people's achievement rather than learning. The emphasis was mainly on behavioural and cognitive components that showed that they play a crucial role in influencing academic achievement (Fredricks et al., 2004; Ladd and Dinella, 2009). For instance, Ladd et al (1999) found higher levels of cooperative and independent participation (i.e., behavioural engagement) to be predictive of higher achievement

among kindergarten children. Besides, several cognitive participation indicators have been found to forecast academic achievement (e.g., self-regulation, commitment, and effort) (Miller et al. 1996). Nonetheless, as a predictor of academic achievement, emotional engagement has provided mixed evidence with primary support for its role in testing this component as part of a general or combination assessment (i.e., behavioural or cognitive involvement) of the building (Fredricks et al. 2004). For example, in African-American youth (ages 10-16), a combined degree of emotional and behavioural involvement was found to predict school performance (Connel et al., 1994). Nevertheless, given that the different effects of these components have not been studied, there is no proof of the role of emotional involvement in school performance. This component was also supported by research on quality emotions (Pekrun et al., 2002). Such emotional reactions displayed in the classroom include excitement, optimism, and frustration related to achievement results (Frenzel et al., 2007; Pekrun et al., 2002). Pekrun et al (2011) have been supportive of this with positive emotions such as happiness, which positively impact the average grade point of graduate students in psychology. Based on past studies, as stated above, the result's associational significance failed to support the role of emotional commitment as a predictor of academic achievement. In contrast to the above, other studies have found some evidence suggesting the importance of emotional engagement as a predictor of learning rather than academic performance. For example, Handelsman et al (2005) created a student engagement instrument comprising psychological, knowledge, understanding, and involvement/interaction. While all four subtypes have been associated with academic achievement (for example, assignment grade), only skills (similar to cognitive engagement) are essential predictors (Handelsman et al., 2005). Also, emotional engagement predicted the intrinsic consequences of learning (e.g., the value of learning in its own right) (Handelsman et al., 2005). Similarly, Ainley and Ainley (2011) found that students who like science (i.e., achievement emotions) are interested in learning more about science topics positively. This reflects an insufficient understanding of the role of emotional engagement in predicting educational results, such as success and achievement. Therefore, the following hypothesis is developed.

H1: There is a significant difference between the pre-test and post-test scores of students' emotional engagement in lecturers' personal Facebook account.

H1a: There is a significant difference between the pre-test and post-test scores of pleasure dimension in students' emotional engagement in lecturers' personal Facebook accounts.

H1b: There is a significant difference between the pre-test and post-test scores of arousal dimension in students' emotional engagement in lecturers' personal Facebook accounts.

H1c: There is a significant difference between the pre-test and post-test scores of dominance dimension in students' emotional engagement in lecturers' personal Facebook accounts.

Quasi-Experimental Design

This study uses a case-study approach with a quasi-experimental design to resolve the research questions. The study focuses on a case study with a university in Malaysia. In addition, this study emphasised students' emotional engagement in lecturers' personal Facebook account. The researchers' interests in educational change and teaching experience brought the notion of conducting this research. A quasi-experimental design was used as a means of generating the main data of the study. Case studies promote understanding of real-life situations directly linked to daily experiences and form the basis for implementing new teaching methods in the classroom.

Students were assigned to lecturers' personal Facebook account group at one of the private universities. As mentioned earlier, the students' groups were chosen to assess their emotional engagement via lecturers' personal Facebook account. The task was split into two phases (pre-testing and post-testing) to achieve the study's aims.

Pre-Test

Quasi-experiment (pre-test) was conducted in Week 1 of the semester by distributing questionnaires (Set A) to all 60 selected students. All sixty students are in the lecturers' personal Facebook account. Just before the survey was distributed, the students were briefed about taking part in the experiment, the conditions under which the analysis was carried out, and what to do with the information provided. Students were allowed to consider all lecturers that they are connected via personal Facebook account even though only one class was used for this experiment. The pre-test was conducted for a personal Facebook account to assess students' emotional engagement in the lecturer's personal Facebook account.

Post-Test

Upon completing 14 weeks of Lecturers' personal Facebook account intervention, the post-test quasi-experiment was tested. The post-test measured the differences in the interaction between students' emotional engagement in lecturers' personal Facebook account access. Ultimately, the pre-test and post-test results explain the scores on Facebook, for lecturers' personal account. Data were then analysed using SPSS software discussed in the following section. In addition, as described above, there are various methods for analysing data for quantitative approaches. The next section details the process and instrument selected for this analysis.

Measurement of Students' Emotional Engagement

Groccia (2018) describes students' emotional engagement as the level of attention, enthusiasm, interests, excitement, and passion that students display when they learn or are taught, to the degree of motivation and success in learning. Throughout recent decades, on the other hand, the engagement of students is growing in popularity, mostly because of an increased understanding of the role of certain cognitive, psychological, behavioural, physical, and social factors in education and social development (Garrosa et al. 2017). Therefore, in this study, students' emotional engagement involves interests, boredom, happiness, anxiety, and other affective states within the dimension of pleasure, arousal, and dominance.

Students' emotional engagement was measured with 16 items on a seven-point Likert scale, ranging from (1) being the least to (7) being the most. The respondents' (students) answers are based on how they are emotionally engaged with their lecturers in the lecturers' Facebook account. Items are structured under three dimensions which are pleasure, arousal, and dominance. The 16 items are divided into six items for pleasure and arousal each and four items for dominance. Some examples of the items on the scale include: "contented-melancholic" (pleasure), "satisfied-unsatisfied" (pleasure), "important-awed" (arousal), "excited-calm" (arousal), "in control-cared for" (dominance) and "influential-influenced" (dominance). Answers on 16 items from respondents were then added and then divided by the total number of items to calculate the mean score. A higher mean score indicates students' emotional engagement is more and favourable within the dimensions given.

Findings

Table 1: Students' Emotional Engagement in Lecturers' Personal Facebook Account – Paired Sample T-Test

Item	Pre-Test	Post-Test	t-value	Sig
Pleasure	24.46	27.48	-2.278	0.026
Arousal	21.96	24.00	-1.715	0.092
Dominance	14.60	16.43	-2.280	0.026
Overall	61.02	67.91	-2.296	0.025

Table 2: Students' Emotional Engagement in Lecturers' Personal Facebook account

Item	Lecturers' Personal Facebook Account			
	Pre-Test		Post-Test	
	Mean	Standard deviation	Mean	Standard deviation
Pleasure				
relaxed/bored	4.23	1.598	4.38	1.342
pleased/annoyed	4.17	1.607	4.73	1.260
happy/unhappy	4.12	1.391	4.87	.947
satisfied/unsatisfied	4.08	1.639	4.53	1.112
contented/melancholic	3.93	1.448	4.55	1.141
hopeful/despairing	3.93	1.401	4.42	1.094
Arousal				
wide-awake/sleepy	3.95	1.534	4.33	1.349
frenzied/sluggish	3.93	1.425	4.40	1.108
important/awed	3.87	1.490	4.73	1.148
jittery/dull	3.63	1.390	3.77	1.155
excited/calm	3.48	1.490	3.67	1.469
aroused/not aroused	3.10	1.492	3.10	1.602
Dominance				
influential/influenced	4.17	1.531	4.63	1.164
autonomous/guided	3.65	1.459	3.85	1.351
dominant/submissive	3.43	1.320	3.98	1.347
in control/cared for	3.35	1.527	3.97	1.518

Table 2 illustrated the analysis of students' emotional engagement in lecturers' personal Facebook account in three dimensions, namely pleasure, arousal, and dominance for both Pre-Test and Post-Test analysis. Overall, there is a significant difference between the Pre-Test and Post-Test scores ($t = -2.296$, $p < 0.05$) between students' emotional engagement in lecturers' personal Facebook account. Therefore, H1 is accepted. Nevertheless, further analysis was done based on the three dimensions, and the following sub hypotheses were constructed and tested.

Pleasure Dimension of Student Emotional Engagement in Lecturers' Personal Facebook Account Access

H1a: There is a significant difference between the pre-test and post-test scores of the pleasure dimension of students' emotional engagement in lecturers' personal Facebook account.

Based on Table 2, all pleasure (Pre-Test) items showed students having high positive pleasure on their lecturers' personal Facebook account. This finding suggests that the student's pleasure continuum high on 'satisfied,' 'pleased,' 'hopeful,' 'relaxed,' 'happy' and 'contented' when communicating with their lecturers via personal Facebook account. In Post-Test outcomes, prominently, the pattern for all items suggested in the student's pleasure dimension in lecturers' personal Facebook account provided higher mean scores compared to the Pre-Test results. Furthermore, the SD dispersion for all items in pleasure was found to be in the range of 1.094 to 1.342 except for 'happy,' indicating a relatively lower distribution from the mean values in pleasure continuum on students' pleasure in lecturers' personal Facebook account (Post-Test). Perceived to the lower range of 'happy' in Post-Test, the data shows that the students have conflicting emotions in answering the particular questions between the Pre-Test and Post-Test.

The Paired Sample T-Test Statistics results show in Table 1 above indicate that the score for pleasure dimension in students' emotional engagement in lecturers' personal Facebook account Pre-Test is 24.46 and Post-Test is 27.48 with ($t = -2.278$, $p < 0.05$). This result confirmed that students' pleasure dimension in students' emotional engagement in lecturers' personal Facebook account (Post-Test) is significantly different when compared to students' pleasure dimension in students' emotional engagement in lecturers' personal Facebook account (Pre-Test). The students' pleasure dimension in students' emotional engagement in lecturers' personal Facebook account (Post-Test) gives higher values on self-rated questions, indicating that students are generally happy communicating with their lecturers via lecturers' personal Facebook page. Overall, there is a significant difference between the Pre-Test and Post-Test scores of students' pleasure dimensions in students' emotional engagement in lecturers' personal Facebook account. Therefore, H1a is accepted.

Arousal Dimension of Student Emotional Engagement in Lecturers' Personal Facebook Account Access

H1b: There is a significant difference between the pre-test and post-test scores of arousal dimension of students' emotional engagement in lecturers' personal Facebook account.

Given student's arousal, the Pre-Test result in Table 2, showed the students having high positive arousal on their lecturers' personal Facebook account as the mean score between 3.10 to 3.95. This finding suggests that the student's arousal continuum high on 'important,' 'frenzied,' 'wide-awake,' 'jittery,' 'excited' and 'aroused' when communicating with their lecturers via personal Facebook account. In the Post-Test outcomes, the pattern for all items suggested in the student's arousal on lecturers' personal Facebook account provided higher mean scores compared to the Pre-Test results. Furthermore, the SD dispersion for all items of arousal found, indicating a somewhat lower dispersion from the mean values expect for aroused/non aroused item in arousal continuum in students' emotional engagement in lecturers' personal Facebook account (Post-Test).

Additionally, the Paired Sample T-Test Statistics results show in Table 1 above indicate that the score for arousal dimension in students' emotional engagement in lecturers' personal Facebook account Pre-Test is 21.96 Post-Test is 24.00 with ($t = -1.715$, $p > 0.05$). This result confirmed that students' arousal dimension in students' emotional engagement in lecturers' personal Facebook account (Post-

Test) is not significantly different from students' arousal dimension in students' emotional engagement in lecturers' personal Facebook accounts (Pre-Test). The students' arousal dimension in students' emotional engagement in lecturers' personal Facebook account (Post-Test) gives lower values on self-rated questions. This indicates that students are generally not aroused communicating with their lecturers via lecturers' personal Facebook page. Overall, there is no significant difference between the Pre-Test and Post-Test scores of students' arousal dimension in students' emotional engagement in lecturers' personal Facebook account. Therefore, H1b is rejected.

Dominance Dimension of Student Emotional Engagement in Lecturers' Personal Facebook Account Access.

H1c: There is a significant difference between the pre-test and post-test scores of dominance dimension of students' emotional engagement in personal Facebook account.

Given student's dominance, the Pre-Test result in Table 2 showed the students having high positive dominance on their lecturers' personal Facebook account. This finding suggests that the student's dominance continuum high on 'influential,' 'dominant,' 'in control,' and 'autonomous' when communicating with their lecturers via personal Facebook account. In the Post-Test outcomes, the pattern for all items suggested in the student's dominance on lecturers' personal Facebook account provided higher intensity compared to the Pre-Test results. In dominance, the item 'influential' seemed to be highly agreed in students' emotional engagement, judging by the mean value of 4.63. Further, the Paired Sample T-Test Statistics results show in Table 1 above indicate that the score for dominance dimension in students' emotional engagement in lecturers' personal Facebook account Pre-Test is 14.60 Post-Test is 16.43 with ($t = -2.280$, $p < 0.05$). This result confirmed that students' dominance dimension in students' emotional engagement in lecturers' personal Facebook account (Post-Test) is significantly different when compared to students' dominance dimension in students' emotional engagement in lecturers' personal Facebook account (Pre-Test). The students' dominance dimension in students' emotional engagement in lecturers' personal Facebook account (Post-Test) gives higher values on self-rated questions. This indicates that students are generally dominant in lecturers' personal Facebook pages by posting questions and seeking guidance from their lecturers. Overall, there is a significant difference between the Pre-Test and Post-Test scores of students' dominance dimension in students' emotional engagement in lecturers' personal Facebook account. Therefore, H1c is accepted.

Despite this, the result confirmed that overall, the students' emotional engagement (a combination of students' pleasure, arousal, and dominance) in lecturers' personal Facebook account (Post-Test) is significant, and H1 is accepted, even though H1b (arousal dimension) was rejected.

This study compared students' emotional engagement before and after accessing lecturers' personal Facebook account. Students have been interacting for 14 weeks with their respective lecturers via lecturers' personal Facebook account. By the end of week 14, students had expressed emotions such as Pleasure, Arousal, and Dominance after the interaction period. The study found significant changes in students' emotional engagement after weeks 14. Thus it confirms lecturers' personal Facebook account access is an effective medium for improving students' positive emotions, creating harmonious learning situations.

Discussion and Conclusion

Overall, it found that lecturers' personal Facebook account helped the development of emotional engagement. The results further indicated students were satisfied, pleased, hopeful, relaxed, happy,

contented, important, frenzied, wide-awake, jittery, excited, influential, dominant, autonomous, and in control and when communicating with their lecturers via personal Facebook account. Therefore, although lecturers' personal Facebook is always used for unofficial purposes, its use is essential to generate stable emotions in learning. Stable emotions will encourage learning in the classroom or outside the classroom to become more effective because there is no significant gap between student relationships and lecturers. The use of lecturers' personal Facebook account as a learning tool cannot be ignored in today's technological world because it is part of educational technology pedagogy.

This research showed the pedagogical potential of using lecturers' Facebook account disclosure to manage larger courses and enhance lecturers and students' commitment beyond the physical classroom in virtual spaces (Low and Warawudhi, 2016). As the use of Facebook is always widespread, it is effortless for the lecturer to create an online community and ask the students to join and become members because they all use Facebook. The results of this research show that the lecturers' personal Facebook account can be a class leadership scheme, which enables the university to build an exclusive virtual space, design and use this as an extension to a physical classroom. Furthermore, the lecturers' Facebook account functions as a convergence point where lecturers and students are connected with the force of the Internet at any moment.

The results from this study further confirm Shih's (2013) earlier study by using Facebook as a blended learning scheme, such as the Flex Model for Horn and Staker (2014). It combines face-to-face or in-class instruction with off-line or non-class interactions, increasing students' overall interests and motivations and assisting students in pursuing their classroom operations. At the same time, Madge et al. (2009) argued that Facebook is only personal and sometimes casual for teaching. Lecturers can capitalise on Facebook's social strength and use its features to provide a learning aspect that co-exists its social function. Selwyn (2009) says that learners use Facebook as an intruding social field, for educational reasons "suitable," or "valid," but cannot discredit their educational potential, as the respondents of the study claim that it is helpful and useful to teach. Other issues continue to be raised concerning Facebook account: infrastructure accessibility and readiness of the lecturers to innovate their pedagogy, students' participatory capacity, curriculum flexibility, and learning context.

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