Individual differences in motivations for using social media among university students

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This study aimed to examine individual differences in motivations for using social media among university students. Motivations were measured with a validated social media motives scale. Participants were 348 undergraduate students studying in a university in Hong Kong. Results from a series of MANOVAs showed that there were in general no significant differences in the five motivation variables (entertainment, personal utility, information seeking, convenience, and altruism) with respect to a group of demographic variables (gender, faculty, year of study, experience in using computers or the Internet, and IT proficiency). However, given that students mostly agreed that they used social media to seek free information and to know what is happening recently, educators may encourage students to develop their own personal learning environments and integrate informal and formal learning activities with social media.

Keywords: individual differences, motivations, social media, university students

Introduction

The use of social media has been prevalent in our society. In Hong Kong, results from an online survey with 387 residents indicated that 92% of them visited Facebook, 77% read blogs every week, and 52% wrote blogs (Li, 2011). A recent survey conducted by Pew Research Center in the US showed that nearly 65% of American adults used social networking sites in contrast to only 7% back in 2005 (Perrin, 2015). A number of studies have been performed to understand social media usage patterns of college students (Jesse, 2013) and why people use certain social media platforms (Cheung, Chiu, & Lee, 2011). However, researchers have paid much less attention to investigate the motivations that drive people to use social media in general. It is argued that knowing motivations for using social media is crucial nowadays. Motivations can be defined as "reasons that underlie behavior that is characterized by willingness and volition" (Lai, 2011, p. 2). Participation and interactions that lead to more user-generated contents in social media are increasingly common online behaviors among the youth (Jenkins, Purushotma, Weigel, Clinton, & Robinson, 2009) but it is not always clear about what causes such behaviors. For university students, social media enable them to build their own personal learning environments (PLEs) that enhance academic motivation, engagement, and achievement. Social media also provides a good opportunity for informal learning and the integration of informal and formal learning activities (Deng & Tavares, 2015).

The uses and gratifications theory (UGT) has been widely adopted to study motivations in media research since it was introduced in early 1970s (Katz, Blumer, & Gurevitch, 1974). UGT is "concerned with (1) the social and psychological origins of (2) needs, which generate (3) expectations of (4) mass media or other sources, which lead to (5) differential patterns of media exposure (or engagement in other activities, resulting in (6) need gratifications and (7) other consequences, perhaps mostly unintended ones" (Katz et al., 1974, p. 20). The key premise of the theory is that people choose specific media to satisfy their different needs. It is believed that differences in needs affect how and why media are consumed.

Although UGT has been extensively researched in many studies, there are studies that pointed out the limitations of prior work. Qiao and Zhu (2011) asserted that previous research efforts using the theory "pay little attention to internet new media with various features which have rich recreation and interpersonal communication characteristics" (p. 235) and the theory "has not yet systematically studied users' important individual differences' impact on usage motives and usage behavior" (p. 236). Against this background, this study aimed to examine individual differences in motivations for using social media among university students in which motivations are framed within the UGT. It is hoped that this study contributes to the growing literature that attempts to understand the reasons why university students use social media and their demographic differences if any.

Method

Procedure

In order to recruit participants for the present study, all the undergraduate students in a university in Hong Kong received mass emails to invite their participation. Data were collected anonymously through an online survey website. Participants first completed questionnaires measuring their motivations for using social media. Then they proceeded to provide some demographic information such as gender, age, faculty, major, year of study, experience in using computers or the Internet, and IT proficiency.

Participants

Three hundred and forty eight undergraduate students took part in the study on a voluntary basis. The sample consisted of 109 males and 232 females with ages ranging from 17 to 28 (Mean = 20.252; SD = 1.565). They came from the Faculties of Arts (n = 51), Business Administration (n = 73), Education (n = 19), Engineering (n = 29), Law (n = 8), Medicine (n = 53), Science (n = 47), and Social Science (n = 62). In terms of year of study, there were 123 first year, 85 second year, 75 third year, 57 fourth year, and 2 fifth year students respectively. On average, they possessed 12 to 14 years of experience in using computers or the Internet. They perceived their IT proficiency to be good. Missing data accounted for 1.4 to 2.0% in the above demographic variables.

Measures

The Social Media Motives Scale developed by Al-Menayes (2015) was adapted to measure undergraduate students' motivations for using social media. It was designed with reference to the UGT. Respondents were asked to indicate the extent to which an item describes the reason for using social media. The original scale has 18 items in 5 subscales, namely entertainment (ENT), personal utility (PU), information seeking (IS), convenience (CON), and altruism (ALT), which are rated on 5-point Likert scale (5 = Exactly true, 1 = Not at all true). According to the author, alpha reliability of the subscales ranged from .61 for CON to .84 for ENT. One item in the IS subscale was deleted because it is about finding information for research and homework and its content is quite different from the others. As such, a 17-item scale was used instead.

Results

Fabrigar and Wegener (2012) suggested that the factor structure of a validated scale needs to be explored when the scale is used in different cultural context. As such, exploratory factor analysis using the principal component method with promax rotation was conducted on the 17-item scale that measures the motivations for using social media. Table 1 shows the results of the analysis. Five factors with eigenvalues greater than 1 were extracted and they collectively accounted for 70.98% of the variance of the original item variables. Two items from the ENT subscale ("Because it entertains me" and "Because I enjoy using it") were dropped because they had high cross loadings greater than .50 with items of the CON subscale. All the items had high loadings in their own factors and the factors had high alpha reliability ranging from .77 to .90.

Table 1: Results of exploratory factor analysis on 15 items adapted from the Social Media Motives Scale

Item	Factor				
	1 (ENT)	2 (PU)	3 (IS)	4 (CON)	5 (ALT)
1. I use it to kill time	.89				
2. When I have nothing else to do	.88				
3. To occupy my time	.85				
4. To join groups		.93			
5. To join conversations		.89			
6. I enjoy answering questions		.64			
7. To listen to other's opinion		.42			
8. To search for information			.84		
9. To get free information			.84		
10. To know what's going on			.81		
11. It's easier than meeting				.90	
12. Communication can take place anytime				.75	
13. Because it's free				.61	
14. To encourage others					.91
15. To help others					.88
Cronbach's alpha	.83	.79	.85	.77	.90

Descriptive statistics of the five major constructs are presented in Table 2. It was evident that with the exception of ALT, all the other constructs had a mean value over 3 and thus the participants agreed to a large extent that the items in the respective constructs represented their motivations for using social media. The participants mainly used social media for IS, which was followed by CON, ENT, PU, and ALT.

Table 2: Descriptive statistics of the five constructs obtained from exploratory factor analysis

Construct	Minimum	Maximum	Mean	SD
ENT	1.00	5.00	3.43	.88
PU	1.00	5.00	3.06	.80
IS	1.00	5.00	3.98	.74
CON	1.00	5.00	3.78	.79
ALT	1.00	5.00	2.92	.91

A series of MANOVAs were performed with gender, faculty, year of study, experience in using computers or the Internet, and IT proficiency as independent variables, and with the aforementioned five constructs as dependent variables. Results revealed a marginally significant multivariate main effect for gender, Wilks' $\lambda = .97$, $F (5, 335) = 2.24$, $p = .05$, partial eta squared $= .032$. Because of this significant result, the univariate main effects were examined but no such effects were found after considering Bonferroni correction for multiple tests. For faculty, no significant multivariate main effect was found, Wilks' $\lambda = .87$, $F(35, 1390.61) = 1.38$, $p > .05$, partial eta squared $= .028$ and so did year of study, Wilks' $\lambda = .93$, $F(20, 1105.39) = 1.19$, $p > .05$, partial eta squared $= .017$. There was a significant multivariate main effect for experience in using computers or the Internet, Wilks' $\lambda = .87$, $F(30, 1322) = 1.57$, $p < .05$, partial eta squared $= .028$ but not the subsequent univariate main effects. Finally, a significant multivariate main effect for IT proficiency was found, Wilks' $\lambda = .91$, $F(20, 1105.39) = 1.68$, $p < .05$, partial eta squared $= .024$ and so did a significant univariate main effect for IS, $F(4, 337) = 3.74$, $p < .01$, partial eta squared $= .043$. Post-hoc pairwise comparisons using Tukey's HSD test showed no significant differences in IS for different levels of IT proficiency.

Discussion and implications

This study revealed that among the different reasons for using social media, university students mostly agreed that they used social media to seek free information and to know what is happening recently. It further showed that there were no significant demographic differences in their motivations for using social media. This means that demographic factors including gender, faculty, year of study, experience in using computers or the Internet, and IT proficiency have insignificant effects on the motivation measures. Future research should explore other potential factors such as personality traits that have been shown to influence media preferences and motivation differences (Qiao & Zhu, 2011). On the other hand, it is also worthwhile to consider other research model that may help explain motivations to use social media. For instance, Hallikainen (2015) developed a value and need based research model to analyze what drives a user to utilize social media platforms.

To capitalize on the use of social media for learning purposes, educators may encourage university students to establish their PLEs with the aid of social media tools. PLEs refer to "a collection of loosely coupled tools, including Web 2.0 technologies, used for working, learning, reflection and collaboration with others" (Attwell, 2010). Li (2015) highlighted five features of social media that help learners create their PLEs to achieve personal learning goals. These include the openness of social media that allows learners to construct their learning spaces and environment on their own in a bottom-up manner, the generation of user contents using appropriate web resources with respect to individual learning goals, the networking functionality of social media that facilitates learners to enlist support from experts or peers, the sharing feature of social media that makes the dissemination of PLEs more efficient than before, and the collaborations and interactions afforded by social media that foster knowledge generation and management among learners.

There are also advocates who support the notion of integrating informal and formal learning with social media. Greenhow and Lewin (2016) contended that because pedagogical practices focusing on aspects of formal and informal learning have become very common, it is necessary to understand learning in terms of varying attributes of formality and informality. Despite of the fact that the boundary between the two learning approaches is blurred, social media offer a possible avenue to bridge formal and informal learning through participatory digital cultures (Jenkins et al., 2009) in which there is no longer a clear distinction between "self-directed, intentional learning and spontaneous, incidental and experiential learning" (Greenhow & Lewin, 2016, p. 13). The authors further proposed a model of learning attributes in four categories (purpose, process of learning, location/context, and content) that theorized social media as a learning space with varying formal and informal attributes, and illustrated with two cases on how to make sense of learning from the model's perspective.

Conclusion

This study set out to answer the question of why university students use social media and how their use may differ across some demographic variables. Although individual differences in social media motives are not apparent, it is clear that university students are motivated or self-motivated to participate in social media for various reasons. This study represents an initial step in advancing this line of research. While recognizing the complex nature of motivations as a psychological construct, it is imperative to gain a more comprehensive understanding of the antecedents and consequences of students' motivations for using social media in future studies.

Acknowledgments

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