

Are Lonely Undergraduate Students Avoiding Communicating in Real Life but Vigorous in Facebook?

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Abstract

The emergence of the social networking sites (SNSs), especially Facebook as a new communication tool has changed the way of communication today. However, little is known about the impact of using Facebook for communication and the psychology attribute. The present study aimed to examine: 1) the differences between lonely students and not lonely students in Facebook use, unwillingness-to-communicate, and 2) the effect of Facebook use and loneliness on unwillingness-to-communicate among undergraduate students. A total sample of 468 undergraduate students (age 19 to 25) was participated in this study. Facebook Use Measure, Unwillingness-to-Communicate Scale and UCLA Loneliness Scale were used to measure the variables. Overall, results showed that: 1) lonely students were more likely to fear and perceived less reward in communicating face-to-face and 2) loneliness was more dominant to predict face-to-face communication instead of Facebook use.

Keywords: Facebook Use Measure, Unwillingness-to-Communicate, Loneliness, Social Networking Sites

1. Introduction

The world is changed by internet in an extensive way. The most significant and obvious change is social networking sites (SNSs). Facebook.com (officially dubbed as Facebook) was officially launched on February 4, 2004 by Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz and Chris Hughes in which the originate idea was mainly created for college students to exchange idea in studies (Awl, 2011). For instance, Malaysia's social networking statistics showed that the total number of Facebook users in Malaysia is reaching 10.4 million, which are ranked 8 of all Facebook statistics by Asian country and the largest age group is 18-24 years old, with 3.5 million (Malaysia Social Media Statistics, 2014). The appearance of Facebook has increased the technological communication which is similar with face-to-face communication. First, Facebook is a central tool in the modern day communication. It plays a key role in creating and maintaining social capital and provides a virtual platform where users can "present" themselves, articulate their social networks, and establish or maintain connections with others (Ellison et al., 2007). Second, Facebook allows a user to create a profile, display personal information, upload pictures, access other users' profiles, accumulate online friends, and interact with those friends through messages, gifts' icons, and other applications. On the other hand, Facebook has transformed the way of communication; everything is just at our fingertips and the responding time is within seconds (Khoobchandani, in Reader Digest, March 2011). Although several researchers have been published about the Facebook uses (Sheldon, 2008), college students' social networking experiences on Facebook (Pempek et al., 2009), factors that why students used Facebook (Cheung et al., 2011), the consequence of excessive usage on Facebook and its effect to communication and the state of psychological attribute is still in infancy. Therefore, research question is formed:

RQ1: To what extent students' level of loneliness different in the usage of Facebook and unwillingness-to-communicate (approach avoidance and reward)?

On the flip side of using Facebook, it has gradually exchanged the real relationship of people in daily life.

Initially, earlier researchers (Ebeling-Witte et al., 2007; Cozzens and Potter, 2009; Bachrach et al., 2012) investigated whether the personality traits influenced the usage of internet or Facebook. More broadly, the results showed different personality traits would differ in usage of social networking sites; however the effect of using social networking sites, especially in interpersonal communication is still not clear. Researches showed that users who use internet for longer times, had insignificant relationship and minimized the verbal communication with their parents and friends, compared to those who use internet lesser (Kraut et al., 1998; Nie and Erbring, 2002; Subrahmanyam and Greenfield, 2008; Ong et al., 2011). To date, traditional communication is neglected while benefits of the social networking site have increased (Lampe et al., 2006; Ellison et al., 2007; Roblyer et al., 2010).

The absence of nonverbal cues in computer-mediated communication interactions led to impersonal and hostile communication (Walther, 1999). It restricts the exchange of auditory, visual and nonverbal communication cues which normally help individual to synchronize interaction with people, express information and then monitor feedback from others. In addition, the absence of various nonverbal and social context cues in computer-mediated communication may hamper the efficiency of task performance (Bordia, 1997). Nevertheless, some researchers argued that social networking sites were benefit in maintaining relationship. Donath and Boyd (2004) were among the first to hypothesize that online social networking may increase the weak ties because the technology helps to maintain these ties cheaply and easily. Ellison et al. (2007) found that use of Facebook would maintain existing offline relationships than meeting new people. Clearly, the precise correlations whether computer-mediated communication affects skillful interactions or benefits to maintain ties with friends and family has not been fully elaborated. Therefore, it is essential to examine how Facebook as a computer-mediated communication influences the willingness to communicate face-to-face.

Regardless, too much depending of social networking sites might evoke psychological attribute, for instance, loneliness, shy, low self-esteem and interpersonal communication. Kraut et al. (1998) was the pioneer to study the negative aspects on internet usage. Results stated that increased internet usage was associated with weakening participants' interactions with family members, reduced social circle, and a rise in levels of loneliness and depression. Nie and Erbring (2002) extended the research and found the similar result and internet users reported when the amount of internet use increased, lesser time spent with family and friends than non-users. Based on the recent studies, Kang (2007) and Ong et al. (2011) indicated that participants who had participated in online chatting or cyber chat were more likely displayed greater familial loneliness and increased loneliness and depression. Hu (2009) and Mashayekh and Borjali (2003) also added that the levels of mood loneliness will increased after online chat and found a significant positive correlation between feelings of loneliness and chatting on the internet. As a result, it was believed that the online chatting is similar with the features of Facebook that might increase the level of loneliness and ironically leads to a decline in the social lives of users. Based on all the statements,

RQ2: How Facebook as a computer-mediated communication and the level of loneliness influence the unwillingness-to-communicate face-to-face among students in real-life?

In sum, the objectives of the present study are to: a) identify the differences between lonely students and not lonely students in Facebook use, unwillingness-to-communicate and b) investigate the effect of Facebook use and loneliness on unwillingness-to-communicate face-to-face.

2. Methods

2.1 Participants and Location

A total of 468 undergraduate students from University Malaysia Sabah who aged 19 to 25 were participated in this study. Based on purposive sampling, students who have a Facebook account were invited to join the research. Undergraduate students were chosen as the target respondents because the usage of Facebook for this group (34%) is the highest compared to other groups of age.

2.2 Measures

a) Demographic

Respondents provided demographic information included gender and age. Additionally, the estimate amounts of time spend on Facebook and the amounts of friends on Facebook were required to answer in open-ended questions in order to understand the consequences of using Facebook.

b) Facebook Use Measure

Facebook Use Measure is adapted from Internet Addiction Scale by Young (1998) to measure the levels of Facebook use. There are 20 items (e.g., “How often do you neglect household chores to spend more time on Facebook?”; “How often do your grades or school work suffer because of the amount of time you spend on Facebook?”; “How often do you lose sleep due to late-night log-ins Facebook?”). Students were asked to rank the response with a rating from 1 (*rarely*) to 5 (*always*). The Facebook use level will be divided into three groups; 20-49 will be an average Facebook user, 50-79 will be experiencing occasional/frequent problems of Facebook and 80-100 will be causing a significant problem in life. The reliability and item reliability were high ($\sigma = 0.89$ to 0.91) in the present study and therefore, suitable to measure the level of Facebook use. In line with this, the questionnaire measured the degree to which the Facebook affects aspects of one’s daily life; daily routine, sleep pattern, productivity, social life and feelings.

c) Unwillingness-to-Communicate Scale

Unwillingness-to-Communicate Scale is developed by Burgoon, (1976) and consisted of 20 items with two sub scales; approach avoidance dimension (e.g., “I am afraid to speak up in conversation.”; “I feel nervous when I have to speak to others.” and reward dimension (e.g., “My friends and family don’t listen to my idea and suggestion.”; “I don’t ask for advice from family or friends when I have to make decision.”). The avoidance dimension assessed anxiety arising from communication in small group/interpersonal settings. Individuals who score higher in items reflect communication anxiety. The reward dimension measures how an individual perceives the valuable relationship with others. Higher scores reflect less reward value in communication face-to-face with others. According to Miczo (2004), the reliability for unwillingness-to-communicate scale was high and suitable to measure approach avoidance and reward ($\sigma = 0.79$ to 0.86) and the outcome of the reliability was similar to the present study ($\sigma = 0.74$ to 0.81).

d) UCLA Loneliness Scale

Loneliness is measured by the revised version of the UCLA Loneliness Scale (Russell, 1996). The 20-item UCLA scale is one-dimensional which measure an individual’s loneliness trait (e.g., “How often do you feel that there is no one you can turn to?”; “How often do you feel isolated from others?”). Students were asked to rank the response with a rating from one (1) indicating ‘never’ to four (4) indicating ‘always’. Reverse-scoring items done before running a reliability test in UCLA loneliness scale (item 1, 5, 6, 9, 10, 15, 16, 19, 20). The higher the scores, the higher the degree of the individual feels lonely in the life. The scholars found that the reliability of the UCLA Loneliness Scale was highly reliable ($\sigma = 0.89$ to 0.94). It is suitable for different types of groups (college students, nurses and elderly) and good construct validity of the scale (Russell, 1996; Tsai and Reis, 2009; BulutSerin, 2011).

3. Procedure

Questionnaires were distributed to the students who possess a Facebook account in the campus of University Malaysia Sabah. The students who own a Facebook account were asked to participate in a survey during daytime, especially lunch time in the library. The survey took approximately 15-20 minutes to complete the questionnaire and assisted by researcher. All participation was voluntary and has been informed that the responses only for academic use. Data were analyzed by using IBM Statistics Statistical Package for Social Science (SPSS) 20.00.

4. Results

4.1 Descriptive Data

Majority of the respondents were female participants and found to be significantly higher in using Facebook ($n = 344$, 73.5%) compared to male ($n = 124$, 26.5%). The age ranged from 19 to 25 ($M = 22.19$, $S.D = 7.72$). Respondents in this study reported that, on average, the times spent on Facebook were average one (1) to two (2) hours (48.5%). In addition, most of the students have 300 to 599 friends in their Facebook friends’ list (32.7%) and signed up as a member since three (3) to four (4) years ago (46.6%). Table 1 shows the summary of descriptive statistics.

4.2 Differences between Lonely Students and Not Lonely Students in Facebook Use and Unwillingness-to-Communicate

The results of the independent sample t test showed that there was a significant difference between lonely and not lonely students in Facebook use ($t = -3.653, p < .05$). Lonely students ($M = 44.807, S.D = 14.618$) scored higher than not lonely students ($M = 40.404, S.D = 11.346$) in Facebook use. Lonely students were more likely to report as frequent problems users compared to not lonely students. The results also indicated that there was a significant difference in unwillingness-to-communicate: approach-avoidance ($t = -8.126, p < .05$) and reward ($t = -11.499, p < .05$) between lonely and not lonely students. The lonely students reported higher score in unwillingness-to-communicate (approach-avoidance) ($M = 27.516, S.D = 4.521$) and reward ($M = 25.373, S.D = 4.193$) than not lonely students for approach-avoidance ($M = 23.969, S.D = 4.914$) and reward ($M = 21.009, S.D = 3.988$). The results explained that the lonely students were more likely to feel fear and perceived lesser reward in communication face-to-face than not lonely students. Table 2 shows the results of differences between lonely students and not lonely students in Facebook use and unwillingness-to-communicate.

4.3 Effect of Facebook Use and Loneliness on Unwillingness-to-Communicate Face-to-Face

The second objective aimed to examine the effect of Facebook use and loneliness on unwillingness-to-communicate face-to-face (approach avoidance and reward) by using Hierarchical Regression. The results showed that Facebook use was not a significant predictor on approach avoidance [$F_{(1,468)} = 11.108, p > .05$], however, loneliness was a significant predictor on approach avoidance [$F_{(1,468)} = 11.108, p < .05$]. Besides that, Facebook use ($\beta = .212, p < .05$) and loneliness ($\beta = .495, p < .05$) had a positive effect on reward. In sum, loneliness explained a total of 20.9% variance changing in approach avoidance and 33.2% variance changing in reward when control Facebook use as a predictor. Table 3 shows the Hierarchical Regression results of the effect of Facebook use and loneliness on unwillingness-to-communicate face-to-face for approach avoidance dimension and reward dimension.

5. Discussion and Conclusion

The descriptive statistics showed the undergraduate students spent average one to two hours per day to surf Facebook.com. In addition, most of the Facebook users possessed approximately 300-599 of friends (either met online or offline) in the friends' list and reported signed up as Facebook users with mostly more than three years ago. This finding indicated the usage of Facebook among undergraduate students was in the level of frequent problem users and it implied that students spent more time in surfing Facebook yet no significant problem occurred (refer Young, 1998). Similar results from Hardie and Tee (2007) outlined the younger ages were less experienced the internet and believed it was relative a new experience for them to discover the excitement. The statement also explained newer users tended to engage in over-used for some times, the individuals managed to wear off and shift toward consistently normal use. In the present study, students were in the medium stage of using Facebook in which students started to get use to the handy features of Facebook, utilized it for different motives after three years signed up as a member.

There was a significant difference between lonely students and not lonely students in Facebook use. Lonely students were more likely to occupy in Facebook use. This finding indicated that lonely students nurtured to gratify the needs for self-fulfilment by using Facebook, which treated it as an essential channel to stay connected with friends and family, entertainment and information seeking. The present study was supported by Morahan-Martin and Schumacher (2003) stated that lonely students who frequent used internet and e-mail were more likely to use internet for emotional support than not lonely students. Besides that, students who used social-networking sites to communicate with parents reported higher levels of loneliness, anxious attachment (Brown, 2013), as well as conflict within the parental relationship (Gentzler et al., 2011). Furthermore, participants who were frequently relied on network friends, the level of emotional loneliness were higher (Moody, 2001). Kim et al. (2009) also suggested that lonely students tended to use internet more and caused negative life outcomes. In other words, the usage of internet and social networking sites reported the similar results and lonely students were more enthusiastic to enjoy the benefits of internet and social networking sites to seek for satisfaction which could not be obtained in real world.

However, few of the researches were inconsistent with the previous studies that have had discussed. A three-year follow-up research by Kiesler et al. (2002) and McKenna et al. (2002) argued that individual's generally experienced overall positive effects in using internet to communicate with friends and family, community involvement and psychological well-being. It was believed the lonely students intended to reduce loneliness via cyber-friends (Ando and Sakamoto, 2008). The intensity of Facebook use helped to lower the students' perception on loneliness and modulated negative moods (Morahan-Martin and Schumacher, 2003; Lou, 2009). Another neutral finding from Moorman and Bowker (2011), found that there was no main effect of Facebook usage on psychological adjustment. The suggestion of the contrary results might be due to the participants' age and the rapid growing of new technology. The development of technology is speedy improved and brutal to evaluate in a limited time span. Besides that, the intentions to use social networking sites in the present study are crucial to be aware of instead of the usage of internet, which is too broad to comprehend the features. In short, lonely students tend to express the "true self" better on the social networking site and therefore the intensity of using is higher to satisfy the interpersonal needs (Tosun, 2012).

The finding concluded that there were significant differences between lonely and not lonely students in unwillingness-to-communicate (approach avoidance and reward). Lonely students were more likely fear communicating face-to-face and perceived lesser reward when interacted with society in new millennia. This is supported by Coget et al. (2002) and Brown (2013) stated anxious individuals preferred to send text message and students who uses technological communication have higher social anxiety. Besides that, Tsai and Reis (2009) also demonstrated lonely people exhibited negatively in social perception and believed other people distinguished them more negatively, especially perceiving own-self. Interestingly, Tong et al. (2008) proposed that individuals who have too few friends or too many friends in Facebook friends' list are perceived more negatively compared to individuals who have ideally a large group of friends. In line with this, previous researchers were consistent with the present study in which lonely students (too many friends or too few friends) were more likely to avoid face-to-face communication. Surprisingly, their social judgment about others were negative and pessimistic, feel fear to communicate with people, and verbally socialization was not rewarded in daily life.

Also, the finding demonstrated loneliness was a significant predictor to approach avoidance and reward whereas Facebook use was only significantly affect to reward. This is supported Papacharissi and Rubin (2000) stated that internet users who fear to communicate face-to-face and perceived lesser reward during face-to-face interaction will choose the internet as a functional alternative tool to satisfy interpersonal needs. By comparing loneliness and Facebook use, loneliness was the major contributor to unwillingness-to-communicate as suggested by NormahMustaffa et al. (2011), found that the acceptance to use the technology was still in the category of late majority in Malaysia. As a result, the rapid changing of social networking sites is barely denoted significant effects towards our daily communication but psychological aspect do significant influences our communication. For instance, the feelings of loneliness have evolved into a signal to that particular individual and alarmed that their social connections are indeed needed to repair (Cacioppo and Patrick, 2008). The present study revealed the effect of the psychological factor was significantly affect to fear communicating face-to-face and perceived lesser reward but the technology was only effect to the benefit of using it in social life.

In a nutshell, the present study summarized that most of the electronic media are considered more applicable for task-oriented activities (for exchange information in assignment), while face-to-face communication is more relevant for socially in psychological way and intellectually inspiring information (lower skill in face-to-face communication) (Bubas, 2001). This study clearly showed that psychology attribute (loneliness) is outstanding to affect our communication, more specifically effect to face-to-face communication. Additionally, social networking site, Facebook is a tool which helps to polish and maintain relationship, however, not a tool for socialization in real life.

6. References

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Table 1: Descriptive Statistics of the Total Respondents (N=468)

Variables	Total (N)	%	Male (n)	%	Female (n)	%
N	468	100	124	100	344	100
Age						
19	60	12.8	18	14.5	42	12.2
20	98	20.9	29	23.4	69	20.1
21	77	16.5	18	14.5	59	17.2
22	110	23.5	30	24.2	80	23.3
23	60	12.8	9	7.3	51	14.8
24	36	7.7	14	11.3	22	6.4
25	23	4.9	4	3.2	19	5.5
Hours spend per day						
Less than 1 hour	16	3.4	3	2.4	13	3.8
1 to 2 hours	227	48.5	57	46.0	170	49.4
3 to 4 hours	95	20.3	23	18.5	72	20.9
5 to 6 hours	110	23.5	31	25.0	79	23.0
7 to 8 hours	8	1.7	2	1.6	6	1.7
More than 9 hours	12	2.6	8	6.5	4	1.2
Amount of friends						
10-299	103	22.0	25	20.2	78	22.7
300-599	153	32.7	35	28.2	118	34.3
600-899	106	22.6	33	26.6	73	21.2
900 and above	106	22.6	31	25.0	75	21.8
Years of signed up as member						
Less than 1 year	2	0.4	-	-	2	0.6
1 to 2 years	192	41.0	40	32.3	152	44.2
3 to 4 years	218	46.6	68	54.8	140	40.7
5 to 6 years	48	10.3	13	10.5	35	10.2
7 to 8 years	8	1.7	3	2.4	5	1.5

Table 2: The Differences between Lonely Students and Not Lonely Students in Facebook Use and Unwillingness-to-Communicate (Approach Avoidance and Reward)

Dependent Variables	Independent Variable	N	Mean	S.D	t	Sig.
Facebook Use	Not Lonely	223	40.404	11.346	-3.653	.000
	Lonely	244	44.807	14.618		
Unwillingness-to-Communicate	Not Lonely	223	23.969	4.914	-8.126	.000
	Lonely	244	27.516	4.521		
Approach Avoidance	Not Lonely	223	21.009	3.988	-11.499	.000
	Lonely	244	25.373	4.193		

Table 3: Hierarchical Regression of the Effect of Facebook Use and Loneliness on Unwillingness-to-Communicate Face-to-Face (Approach-Avoidance and Reward)

Dependent Variable	Independent Variable	Constant	R ²	F	F Sig.	Beta	t	t Sig.	Durbin-Watson
Approach Avoidance	Facebook Use	11.108	.209	61.222	.000	.056	1.330	.184	1.891
	Loneliness					.442	10.502	.000	
Reward	Facebook Use	5.888	.332	115.296	.000	.212	5.472	.000	1.933
	Loneliness					.495	12.796	.000	