

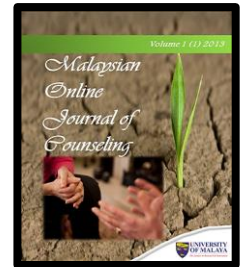
RELATIONSHIP BETWEEN ONLINE AND FACE-TO-FACE CONNECTEDNESS AND GENERAL HEALTH AMONG UNDERGRADUATE STUDENTS IN MALAYSIA

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ABSTRACT

This study was aimed at examining the relationship and differences between online connectedness and face-to-face connectedness and general health among undergraduate students in Malaysia. A quantitative research design was used and 419 participants completed the self-administered questionnaires including social connectedness scale-revised, Facebook social connectedness scale, and general health questionnaire (GHQ-12). Results of Pearson Correlation showed that social (face-to-face) connectedness and online connectedness have significant positive correlation with general health. Moreover, Multiple Regression analysis showed that social connectedness is significant predictors for general health. This study may have implications for mental health professionals.

Keywords: *Online Connectedness, Social Connectedness, Mental Health*



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INTRODUCTION

Mental health plays an important role in a person's life as it determines how the person lives and how was the quality of the person's life. According to World Health Organization (2011), neuropsychiatric disorders are estimated to contribute to 16.8% of the global burden of disease in Malaysia. People suffering from depression, stress, and anxiety among adolescents and young adults are increasing in Malaysia (Mohammed, Hayati, & Salmiah, 2015). Having knowledge about the factors that can affect mental health offers major advantage for individuals and professionals. This research focuses on online and face-to-face connectedness is worth to investigate and potentially become the solutions that can decrease the current issue or solve the problem. Hence, this research intends to improve this society issue by finding out the relationship between online and face-to-face connectedness and general health among undergraduates in Klang Valley, Malaysia.

LITERATURE REVIEW

Previous studies found that undergraduate students experiences mental disorders due to the environmental changes factor, learning pattern changes factor, academic stress, personal issues and financial issues (Mohammed et al., 2015; Shamsuddin et al., 2013; Wong, Cheung, Chan, & Tang, 2006; Wyatt & Oswalt, 2013). Some undergraduate students even tend to have suicidal ideation due to they unable to cope with the problem they met. 9.5% of college student had been found that they experienced serious suicidal ideation during their study life, 16.4% had suicidal ideation and 1.5% college student had to take action to try to suicide (Kisch, Leino, & Silverman, 2005; Sonawalla et al., 2001). Mental health issues are getting serious in different region among undergraduates.

Studies showed that one of the factors that can maintain an individual's health is staying connected with people (Arango, Opperman, Gipson, & King, 2016). People with sense of belonging were less likely to have suicidal ideation and perceive higher social support compare to who were not (Hill, 2009; Arango et al., 2016). Studies also showed that undergraduates can adapt a new environment well with social connectedness and decrease their homesick feeling (Hendrickson, Rosen, & Aune, 2011). In addition to the mentioned studies, a research done by Ward, Bochner, and Furnham (2001) showed that social connectedness is related to an individual's psychological well-being.

Studies showed people can perceive social connectedness and social support through online social networking by messaging with others and it enhances an individual's health directly (D'Alba, 2014; Goswami, Köbler, Leimeister, & Krcmar, 2010; Köbler, Riedl, Vetter, Leimeister, & Krcmar, 2010; Pittman & Reich, 2016). Study also showed that greater social media usage correlated with higher level of social connectedness (Riedl, Köbler, Goswami, & Krcmar, 2013). Thus, internet serve as a platform for people to connect with people as online communication become one of the primary method for people to maintain important social relationships (Allen, Ryan, Gray, McNerney, & Waters, 2014; Beyens, Frison, & Eggermont, 2016). Moreover, Pittman and Reich (2016) found that loneliness might decrease when people use image-based social media. It can explain as social media can enhance mental health indirectly. Moreover, results shown there was no relationship between social networking sites use and depression among late adolescent (Jelenchick, Eickhoff, & Moreno, 2013; Tandoc, Ferrucci, & Duffy, 2015).

Previous studies put their attention on the social connectedness and face-to-face connectedness on the population of elder and adolescent's connectedness. Thus, this research aimed at exploring the relationship and the differences between online and face-to-face connectedness and general health among undergraduate students. According to this aim, the research questions are as following:

1. Is there any significant relationship between online social connectedness and general mental health?
2. Is there any significant relationship between social connectedness and general mental health?
3. Are social and online connectedness significant predictors for general mental health?
4. Is there any difference between social and online connectedness in general mental health?

METHOD

Participants

Four hundred nineteen undergraduate students who met inclusion criteria as Internet user and Malaysian undergraduate students. Exclusion criteria were non-internet user and international students.

Based on the demographic questionnaire, respondents were aged from 17 to 33 years with a mean age of 20.95 years old (SD = 1.704). From them, the number and valid percent of 247 (58.9%) were female, and 172 (41.1%) were male. In term of ethnicity, 354 (84.5 %) were Chinese, 34 (8.1%) were Malays, 26 (6.2%) were Indian, four (1%) were Bumiputera Sabah or Sarawak, and one (.2%) were other ethnicity. According to the current academic year reported by respondents, 38 (9.1%) were Foundation, 90 (21.5%) were Year 1, 126 (30.1%) were Year 2, 138 (32.9%) were Year 3, 12 (2.9%) were Year 4 (2.9 percent), 15 (3.6%) were Year 5. There were 281 (67.1%) Buddhists, 35 (8.4%) Muslims, 60 (14.3%) Christians, 25 (6%) Hindus, and 18 (4.3%) other religions. Furthermore, 301 (71.8%) were single, 116 (27.7%) were in a relationship, two (.5%) were married.

Instruments

The General Health Questionnaire (GHQ-12) was development by Goldberg (1970) and testing the reliability and the factor structure among university students in Malaysia by Prashanth Talwar and Mohd Fadzil bin Abd Rahman (2015) in a research entitled, "Factor Structure of General Health Questionnaire and Assessment: A Cross-Sectional Study among University Students in Malaysia". The General Health Questionnaire is a 4-point Likert-type scale consists of 12 items, ranged from 1 (not at all) to 4 (much more than usual). An example question in the scale, such as "Lost much sleep over worry". The researchers test the scale from data collected in Malaysia's University. The reliability and validity of the General Health Questionnaire that consists all 12-items is Cronbach's Alpha .78. In current scale, items 2, 5, 6, 9, 10 are reversed items, such as "Lost much sleep over worry". All the items are included in current study. The higher scores representing higher levels of mental health.

The Facebook Social Connectedness is developed by Rachel Grieve, Michaelle Indian, Kate Witteveen, Anne Tolan, and Jessica Marrington (2013). This scale modified from the Social Connectedness Scale-Revised (Lee, Draper, & Lee, 2001). All 20-items consist in this research. This 20-items is using six point Likert-type scales, ranged from 1 (Strongly disagree) to 6 (Strongly agree). An example question in this scale, such as "I feel comfortable in the presence of strangers when I'm on Facebook". The reliability of Facebook Social Connectedness scale were tested and the Cronbach's Alpha of this Facebook Social Connectedness scale is .92. This scale demonstrates appropriate convergent and discriminant validity. Negatively worded items are reverse-scored such that higher scores reflect greater perceptions of Facebook social connectedness. In current scale, items 3, 6, 7, 9, 11, 13, 15, 17,

18, 20 are reversed items, such as “Even among my Facebook friends, there is no sense of brother/sisterhood”.

The Social Connectedness Scale-Revised will use in this research. The Social Connectedness Scale-Revised was developed by Richard Lee, Matthew Draper, and Sujin Lee (2001). All 20-items consist in this research. This 20-items is using six point Likert-type scales, ranged from 1 to 6, which 1 represent as strongly disagree and 6 represent as strongly agree. An example for this scale, such as “I feel close to people”. The reliability of this Social Connectedness Scale-Revised was tested and the Cronbach’s Alpha of this Social Connectedness Scale-Revised is .92. This scale demonstrates appropriate convergent and discriminant validity. In current scale, items 3, 6, 7, 9, 11, 13, 15, 17, 18, 20 are reversed items, such as “Even around people I know, I don’t feel that I really belong”. Negatively worded items are reverse-scored such that higher scores reflect greater perceptions of Facebook social connectedness. A demographic questionnaire included questions concerning age, gender, marital status, ethnicity, religion, and current academic year.

Procedure

Researcher been approved from the faculty of Social Sciences and Liberal Arts before distribute the questionnaire to the targeted population by using online survey and paper survey. Researcher distributes the online survey to targeted sample through different social media and approach the undergraduate students who met the inclusion criteria in different university. The participants completed the questionnaires after signing the consent form.

Data Analysis

The Pearson Correlation method is the data analysis method in this study in order to determine the relationship between online connectedness and general health as well as the relationship between face-to-face connectedness and general health. Linear Multiple Regression was used to explore the contribution of each type of connectedness to general health in participants. To investigate the differences between online and face-to-face connectedness and general health, ANOVA analysis method was used.

RESULTS

The assumptions underlying the statistical methods of the research were explored and met the requirements. As the Table 1 shows, there was a moderate positive significant relationship between social (face-2-face) connectedness and general health ($r=.488, p<.001$). In addition, there was a small positive significant relationship between online connectedness and general health ($r=.185, p<.001$) in participants.

Table 1

Pearson correlation between online connectedness, social connectedness and general health (N=419)

	General Health	
	Pearson Correlation	Sig. (2-tailed)
Social Connectedness	.488**	.000
Online Connectedness	.185**	.000

Noted: ** $p<.01$

As Table 2 shows, social (face-2-face) connectedness ($\beta = .471, p < .01$) is making a significant contribution to the prediction of the general health. However the online connectedness ($\beta = .066, p > .05$) is not making a significant contribution to the prediction of general health level in this study.

Table 2

Summary of Multiple Regression Analysis for General Health (N=419)

	General Health						
	B	SE B	β	t	Sig	Tolerance	VIF
Social Connectedness	.179	.017	.471	10.678**	.000	.936	1.069
Online Connectedness	.031	.021	.066	1.490	.137	.936	1.069

Noted: ** $p < .01$

The results of the research showed that there were no significant differences between online connectedness and social connectedness and general health in the participants.

DISCUSSION

Finding indicated that, both social connectedness and online connectedness was found to be significantly positive correlated with general health. Online connectedness found to be positive correlated with general health, which mean that people own better mental health with higher online connectedness. This finding supported by the statements made in other research as they stated image-based social media might decrease loneliness and enhance people feeling of connected with one another (Pittman & Reich, 2016). Thus, individual's mental health can be enhancing by using Internet to communicate with each other. There is a research showed online connectedness can even enhance an individual's social support (Banjanin, Banjanin, Dimitrijevic, & Pantic, 2015). A study found that people would perceive social supportiveness through online by giving paralinguistic digital affordances cued (Carr, Wohn, & Hayes, 2016).

In another research conduct by Beyens, Frison, and Eggermont (2016), they found out higher Facebook usage will cause increasing in fear of missing out and affect adolescent well-being by perceives stress because the fear of missing out. This differed from the finding in this research; it mentioned that when people using social media to connect with others will lead to poorer mental health. Moreover, greater social media uses lead to poorer sleep quality, anxiety and depression (Woods & Scott, 2016; Jang, Park, & Song, 2016).

Social connectedness related to an individual's psychological well-being (Bochner & Furnham, 2001). One of the finding shown that social connectedness positive correlated with general health. It is similar to another research stated that an individual's social connectedness is related to positive psychological outcomes (Lee & Robbins, 1995). Besides, social connectedness has a negative correlated with bulimic symptoms (Vartanian & Hopkinson, 2010). It showed social connectedness can prevent bulimic symptoms. There is also an interest finding that young people used social media to connect with peers and manage physical location to gather in real life (Allen, Ryan, Gray, McInerney, & Waters, 2014). Thus, there is a relationship between online connectedness and social connectedness indirectly as young people will use internet as the way to connect with friends and schedule a time to hangout and enhance their social connectedness.

According to Hendrickson, Rosen, and Aune (2011), they stated that homesick feeling and social connectedness has negatively correlated with each other, which students feel less homesick with

higher social connectedness. Homesick lead to negative emotion, so, social connectedness can reduce negative emotion indirectly. Other than that, people with higher social connectedness were found to be less likely to have suicidal ideation (Hill, 2009). People also found to can resist bully with lesser suicide ideation when they own higher social connectedness (Arango et al., 2016). People with higher social connectedness own a better condition of mental health. Thus, they able to release the negative emotion perceive from bully, solve problem, and do the right decision.

The major limitation in this study was the ethnicity balance does not achieve due to the samples were 84.5% are Chinese. Moreover, some of the respondents have problem in understanding the questionnaire because the language used in the questionnaire is not their mother-language. Besides, researcher could not fully make sure that every respondent answered the questionnaire seriously due to a part of the questionnaire spread through Internet.

The results of this study might have implications for different groups of mental health professionals such as psychologists, counselors, and occupational therapists. This study links connectedness to undergraduate students and provides the knowledge about how the individuals' connectedness might relate to their general health.

It is recommended that future studies can investigate on adulthood due to adulthood is one of the categories that suffer from mental problem due to work stress. Moreover, future research may further study or explore the relationship between online connectedness and general health in same or different age population.

CONCLUSION

This study was another attempt to know more about individuals' mental health factors. Based on the results, both online connectedness and social connectedness are significantly related to general health in undergraduate students. Therefore, mental health professionals should consider the individuals' connectedness when they are exploring the possible factors related to their general mental health. Other studies are recommended to explore this construct more deeply.

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