

DEVELOPING SNS FACTORS STRUCTURES TOWARDS CONSTRUCTING SNS SURVEY QUESTIONS

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ABSTRACT

*This research aims to explore factor loadings associated with Social Networking Sites factors scale following principle component analysis. To study the questionnaire, literature reviews of SNS factors were conducted. The literature review emphasized 5 principles in Social Networking Sites factors which are interaction, involvement, quality and intimacy. The minimum sample size was identified through G*Power analysis. The research involved 482 respondents in Malaysia, selected through multi stage sampling which started with a cluster sampling, simple random sampling and purposive sampling technique. A cross sectional survey and structured questionnaire were used for data collection. A quantitative survey was designed using self-administrated questionnaire. All variables were measured through scales previously used by other researchers. EFA were used to explore the data and provides the researcher with information about how many factors are needed to best represent the data. Structural Equation Modeling (SEM) under AMOS software was used in the analysis. Finally, this study contributes knowledge on SNS factors.*

KEYWORDS: *Social Networking Sites (SNS), Confirmatory Factor Analysis (CFA), multi stage sampling*

1.0 INTRODUCTION

According to Murray and Waller (2007), Social Networking Sites (SNS) as virtual society which let people to connect and communicate with each other on a particular subject or to just hang out together online. Social networking sites (SNS) generally provide users a profile and enabling them to upload and share photos, music and various types of messages they would like to share with other people. In addition, SNS provide social and emotional support, information resources and ties to other people. SNS users who spend more time on social networking sites are better at showing empathy to their online friends and learn how to socialize. SNS are where Malaysians spend the largest share of their time online. In Malaysia, social networking such as Facebook has 12 948 320 users which consist of 49.50 percent of population. The statistic also shows that the biggest group of users is currently 18 – 24, followed by the users in the age of 25 – 34. In term of sex, there are 54 percent male users and 46 percent female users. These questionnaire are designed which original idea was to explore how SNS can give impact to the unity as there is no study of unity made in cyberspace. Figure 1.0 below shows the SNS usage in Malaysia. As the number of SNS users are increasing, researchers have designed the SNS factors questionnaire as the main contribution of the knowledge.

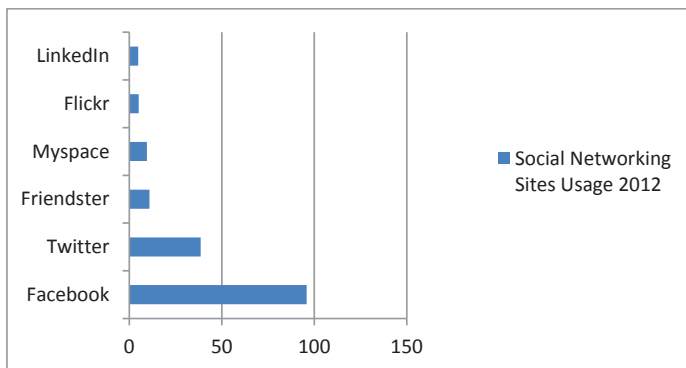


Figure 1: SNS usage

(Source: Malaysian Institute for Research in Youth Development, 2012.)

1.1 Literature Review

The supremacy of social networking sites essentially depends on its mainly purpose. When social media engagement contributes to positive changes, there is an inevitable forward movement with regard to the development of peaceful relations as well as the construction of a healthy, harmonious, and prosperous society. It is also a tool created

for information delivery, and fundamentally the nature of the message and method of conveyance either aid or hamper social development (Moala, 2011).

According to Taske and Plude (2011), through social networking sites, users can choose which messages make it to the inbox, block advertisements and save work-related e-mails for other formal e-mail accounts. In addition, users will be able to send and receive messages in real time through whatever medium or device is most convenient for them. Facebook and Twitter can serve a very distinct purpose – to keep people connected on a personal level. People meet digitally to discuss politics, rally for a common cause and gossip about neighbors. They also help users announce their availability to other people and, potentially, services. The advantages to using Facebook can be various and many such as maintaining contact with friends, developing a network with other people around one, reunite with old classmates or friends, meet people with similar interests, networks for groups and organizations, sharing recent news about a person's life or getting the latest news, and so forth (Nazan *et al.*, 2011).

There has been a growth in support groups and social networks that encourage people to build relationships and share problems and best practice (Leach, 2011). In addition, Cheong (2011) stated that social media bring numerous benefits associated with increased access and interaction where clergy and congregation can connect in new ways. He also belief that social networks allow the exchange of textual, visual and video information among participants, now known not just as 'users' but also as hybrid producers and consumers or 'pro-sumers'. Users also can connect and share their faith and lives with others through photos, audio messages, blogs, prayers, music, causes and so much more.

Furthermore, social networking sites can also function as a form of social and prayer support as they provide an avenue for connections via hyperlinks, hits and comments from other SNS users, including comment from family, friends, and even strangers. Moreover, Green (2011), belief that Facebook encourages identity shaping to an extent that others do not. This is facilitated by the depth of the platform, which includes user-defined extended information about themselves beyond the requisite hometown, education, employment, interests and activities.

The Malaysian Prime Minister and government also have realized the important of social networking sites in order to get close with

the community and encouraged harmony. Burson-Marsteller study finds almost two – thirds of world leaders are on social networking sites. This study illustrates how Twitter is closing communication gap between society and world leader (Lufkens, 2012). Listening to people problems, giving good advices, visiting the community, involving in charity programs, engaging and supporting civil society activities, promoting public awareness on national unity that shown through social media are among the elements that can make people feel touch, safe and unite among them. Blossom (2009) stated that, people like contact with influential people who they would like to get to know better as a part of the experience of being there at a Web page.

This new communication technology also will empower the people and will act as a catalyst for civil society. Therefore, the government has also taken initiative to use social media as an agent of national unity. As described by Cheong (2011), social media made government potentially available 24/7 ministry. It raises government visibility to public, prospects and media. It also helps for government to stay in touch with stakeholders with more frequency (Martin, 2010). Studies done by Rainie, Purchell, Siesfeld & Patel (2011) shown that if people believe their local government shares information well, they also feel good about their town and its civic institutions. From article that researcher took from *The Star Newspaper*, The Prime Minister of Malaysia says “ there aren’t a lot of things that can unite young people these days. They all just seem to have their own thing going on now – they like different kinds of music, they support different football clubs and they are even divided over their choice of smartphones. But if there’s one thing that all of them would have in common – one thing that unites them – it would be social media.” (Lan Yee, 2010).

In addition, prosperity and well-being of this country in the future depends on mutual understanding and cooperation between ethnic groups in Malaysia. The Prime Minister has established his own social media such as Facebook and Twitter in order to get closed to all ethnics and encouraged solidarity.

Lastly, the impact of social networking sites on society was proven during the 2013 Malaysia General Election, where social networking sites played a major role during the election. That also resulted in more social networks and blogs being created. As mentioned by Kushairi (1997), the new media today is the only accepted network that allows people to globally keep in touch with each other and obtain virtually any information they need. Finally, to ensure unity, stability and prosperity in ongoing, deliberate measures need to be taken to

cope with daily problems and living environment of the multi-racial society in Malaysia. Social media is expected to play a major role in helping realize that dream. Going forward, only time will tell how social networking will be in the future. One thing for certain, social networking will remain as people always want to “connect” with other people.

Based on an extensive literature review and empirical studies, Reza Pishghadam *et al.*, (2011) and A.Rauf Ridzuan *et al.*, (2015) have developed a few factors in measuring social solidarity. The factors affecting social network sites use in order to gain solidarity are:

Interaction: This factor refers to an occasion when two or more people or things communicate with or react to each other. Through interaction by multiethnic in SNS, they can discover their similar attitude, opinions and values (Edelmann, 1993). The social networking sites today is the only accepted network that allows people to globally keep in touch with each other (Kushairi, 1997). As stated by Cheong (2011), SNS can increase access and interaction where clergy and congregation can connect in new ways. Solidarity society contains a high degree of social interaction within communities (Kearns and Forrest, 2000).

Involvement: refers to the act or process of taking part in something. At the involvement stage, a sense of mutuality of being connected develops in SNS. During this stage, people experiment and try to learn more about the other person (Devito, 2009). As stated by Devito (2009), during this stage a sense of mutuality of being connected develops. SNS can be seen when people link up with friends and family, either by adding them as a friend, following them or tagging them in photos.

Quality: This factor refers to the level of enjoyment, comfort, and health in someone’s life. The quality in SNS that makes a relationship interpersonal is interdependency; that is the actions of one person have an impact on the other (Devito, 2009). Contact quality and frequency of contact with friends enhance group attitude (Tropp and Pettigew, 2005). According to Sabbagh (2003), people who characterized by a good or highly positive climate friends, respectively, to situations of strong solidarity. Hargie *et al.*, (2003) suggested, the more similar the values and common interest of friends in SNS are, the more likely they are to become friends. SNS can be used as a form of social and prayer support as they provide an avenue for connections (Cheong, 2011).

Intimacy: Finally, intimacy refers to things that are said or done only by people who have a close relationship with each other. It is a feeling that

you can be honest and open when talking about yourself, that you can express thoughts and feelings you wouldn't reveal in other relationships (Devito, 2009). Exchange of essentials resources in SNS such as love, respect, unselfish attitude will contribute to strong solidarity (Sabbagh, 2003). As stated by Wellman and Gulia, (1999) and Eyadat and Eyadat (2010), SNS can provide social and emotional support, information resources and ties to other people. Through this stage, communication becomes more personalized and easier (Gudykunst and Nishida, 1984).

2.0 METHODOLOGY

For this study, researchers have created the SNS questionnaire based from an intensive literature review. This research used quantitative study approach. The design of this study offers an enhanced understanding on the relationships that exist among variables involved in this study. The study adopted a cross-sectional survey research. This approach enabled researcher to gather data at the same point of time from a large sample of people relatively quickly and inexpensively. The larger sample could mitigate the problem of change differences. Data were gathered using self-administrated questionnaire as this method exhibits objectivity, and it is independent of researcher's bias and value. For this research the sampling design is used the probability sampling. In probability sampling design, the selection of participants is determined at random. At the first stage, multistage cluster sampling was used in this study to cover the West Malaysia (i) East Coast (Kelantan, Pahang Terengganu) (ii) West Coast (Perlis, Kedah, Penang, Perak, Selangor, Negeri Sembilan, Melaka, Johor) and (iii) East Malaysia (Sabah and Sarawak). It is a sampling strategy (e.g., gathering participants for a study) used when conducting studies involving a very large population. At the second stage, the researcher used purposive sampling which relies on the judgment of the researcher when it comes to selecting the units. For this study, researchers have chosen respondents who have friends with other ethnics in their SNS and must be active users.

2.2 Questionnaire Design

Table 1: Measurement Scales

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Researchers in this study used measurement scale for their survey. Measurement scale is a measurement with four response categories ranging from “strongly disagree” to “strongly agree”, which require the respondents to indicate the degree of agreement or disagreement with each of a series of statements related to the stimulus objects. Example of agreement scale 1 (Strongly Disagree), 2 (Disagree), 3 (Agree), 4 (Strongly Agree). The example can be seen in table 1.0.

2.3 Scale Reliabilities in Pilot Study

The Cronbach’s alpha was used to measure the reliability of a measure is an indication of the stability and consistency with which the instrument measure the concept and helps to assess the “goodness” of a measure. Cronbach’s alpha is the most common form of internal consistency reliability coefficient based on the correlation between variables. Cronbach’s alpha coefficient ranges in value from 0.00 to 1.00. If the correlation is high, there is evidence that the questions are measuring the same underlying construct, therefore indicating a reliable scale. Table 2.0 below shows the reliability analysis for SNS for the study.

Table 2: Reliability Analysis for SNS Factors

Variables	No. of items	No. of Items Discarded	Cronbach’s Alpha
Social Networking Sites Factors	39	13	0.76

2.4 Explanatory Factor Analysis (EFA)

EFA explores the data and provides the researcher with information about how many factors are needed to best represent the data. For this study, five criteria were taken into account when extracting factors: item loadings (those loadings less than 0.30 and loaded on multiple factors were eliminated during the EFA process), eigenvalues and variance percentage (solutions accounting for 60% of the total variance – in some cases less). Table 3.0 below shows the factor loadings of SNS factors.

Table 3: Factor loadings associated with the SNS factors scale following principle component analysis

SNS Factors Measure Kaiser-Meyer-Olkin measure of sampling adequacy=0.95 Bartlett test of sphericity =6345.38, p=0.000	Factor 1 Involvement	Factor 2 Interaction	Factor 3 Intimacy	Factor 4 Quality
B16: I interact with all my multiethnic friends in SNS.		.71		
B17: I interact with all my multiethnic friends to enhance my relationship with them.		.74		
B18: I interact with all my multiethnic friends to maintain my relationship with them.		.68		
B19: I interact with all my multiethnic friends as to find the similarity in attitude		.67		
B20: I interact with all my multiethnic friends to find the similarity in opinion		.72		
B21: The way I interact is based on my personality		.66		
B22: The way I interact is based on my group identity		.55		
B23: I Involve with variety activities through SNS	.74			
B24: My Friends in SNS willing to attend to events invited through SNS	.61			
B25: I play games in SNS with my multiethnic friends	.59			
B26: I chat with my multiethnic friends through SNS	.55			
B27: I involve outdoor activity during free time with my multiethnic friends through SNS	.68			
B28: I get Involve with social activity through SNS	.78			
B29: I get involve with cultural activity through SNS	.78			
B30: I get Involve with political activity through SNS	.73			
B31: I learn many things from my multiethnic friends				
B32: I feel comfortable with my multiethnic friends				
B33: I accept my multiethnic friends differences				
B34: My multiethnic friends in SNS have good attitude				
B36: My multiethnic friends give encourage whenever I need				.48
B37: My multiethnic friends give motivation whenever I need				
B38: My attitude becomes better when mixing with multiethnic friends through SNS				.59
B39: My personality becomes better when mixing with multiethnic friends through SNS				.57
B40: The spirit of teamwork increase when mixing with multiethnic friends through SNS				.70
B41: Strong mutual loyalty increase				.56
B42: The feeling of trust in relationship increase when mixing with multiethnic friends through SNS				.46
B44: My multiethnic friends in SNS have high tolerance				
B45: I am getting close by similarity				
B46: The good education background from my multiethnic friends are easy to get closed				
B47: I have close relationship with multiethnic friends in SNS			.73	
B48: SNS creates harmony in my environment			.66	
B49: I know my multiethnic friends family and vice versa				
B50: Social agent (family, friends, religion) help me in making close with my multiethnic friends				
B51: Selfless make me easy to get close with everyone				
B52: Openness can unite everyone in my SNS			.66	
B53: Trust can strengthen multiethnic relationships				
B54: My multiethnic friends can become close friends			.60	
B35: My multiethnic friends have good background			.72	
B43: The feeling of harmony exist when mixing with multiethnic friends through SNS			.67	
Eigenvalues	10.66	2.13	1.56	.98
Percentage of Variance Explained	39.46	7.90	5.76	3.61

3.0 FINDINGS

From the analysis, EFA of 39 SNS factors items identified 4 factors). 11 items (B31, B32, B33, B34, B37, B45, B46, B49, B50 B51 and B53) were deleted because of too low factor (below .4) and cross loadings. Interpretation of the 4 factors solution, which explained 56.7% of the variance, was accomplished by relating clusters of items for each construct to the theoretical concepts of SNS factors. Theoretically, two quality items (B35 and B43) loaded on the intimacy item. Majority of items loaded on their corresponding constructs. The balance of items after run the EFA was 28 which to be used for the survey.

Based from table 4.0 below, the mean score achieved for all respondents on this dimension is 2.67. The highest mean for SNS factors is quality (M=2.77). It shows that quality in SNS is the main factor people use social networking sites. According to social capital theory, social networks and quality sociability on SNS will help to develop solidarity. Researches also have demonstrated that both contacts quality with multi ethnic members enhance intergroup attitudes (Tropp and Pettigrew, 2005).

Table 4: Descriptive Statistics of the SNS Factors

Constructs	N	Mean	Std. Deviation
Quality on SNS	482	2.77	.56
Intimacy on SNS	482	2.76	.67
Interaction on SNS	482	2.68	.63
Involvement on SNS	482	2.44	.65
Overall		2.66	.63

4.0 CONCLUSION

The study also contributes to the study of knowledge by presenting the Social Networking Sites (SNS) Factors. The questionnaires were collected from multiethnic SNS users. The questionnaires from each item in SNS Factors have been tested through Explanatory Factor Analysis (EFA) which to explore the data and provides the researchers with information about how many factors are needed to best represent the data. The analysis also resulted in the deletion of insignificant factors, to create a new research model of SNS factors.

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