

SOCIAL MEDIA RISKS AMONG WOMEN IN MALAYSIA: A STRUCTURAL EQUATION MODELLING APPROACH

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ABSTRACT

The rapid growth of social media in Malaysia affects all age groups, including women and girls. This group is at risk as they are more exposed to various harms and vulnerabilities caused by social media usage. Thus, it is crucial to identify and assess factors that may jeopardize this group in using social media. This article discusses a study conducted to identify types and nature of risks facing women by the exposure to social media, and develop a social media risk model for them. Specifically, the study aims to examine the perceived risks by Malaysian women in using social media which focuses on seven important dimensions namely ideology, love affair, sexual harassment, drugs, economy, religion and family relationship. The study employed a survey that uses a set of online questionnaire distributed to women who are actively using social media, particularly social networking sites. This study involves a sample of 1,307 respondents in an exploratory study, in which a 7-factor 40-item instrument to measure risks comprising of the seven hypothesised dimensions were being developed. Results confirm factor structures of the risk model and suggest a more parsimonious instrument for each; a 5-factor 17-item scale for social media risk. Goodness-of-fit indices for the model are presented. The key result shows that the five dimensions namely ideology, love affair, sexual harassment, drugs and economy are significant to the risk model of women in Malaysia, while they perceived social media as not giving risks in terms of their religious belief and family relationship. This study has contributed to the body of knowledge on risk, social media and women.

Key words: Social media, risk, women, Malaysia, Structural Equation Model

INTRODUCTION

Risk is not a new term in scientific research. Studies on risks emerged in the 17th and 18th centuries, but established in the 20th century where risk became a theoretical focus designed to bolster a scientific, mathematically-based approach toward uncertainty (Zachmann, 2014). Risk became the main approach to addressing the problems of uncertainty (Luhmann, 1991, in Zachman, 2014). Uncertainty, however, is a fundamental anthropological experience, where people in all societies have had to deal with ambiguity in one way or another (Zachmann, 2014). Risk is the potential of gaining or losing something of value (Wikipedia, 2018). Values (such as physical health, social status, emotional well-being, or financial wealth) can be gained or lost when taking risk resulting from a given action or inaction, foreseen or unforeseen (planned or unplanned).

In the context of social media, risk can be analyzed by examining the pattern of usage of social media, i.e. the purpose, frequency, perception, dependency towards the tools plus other related factors, and the risks caused by the usage. In relations to this article, social media risk analysis is therefore refers to a technique to identify and assess factors that may jeopardize individuals or group of individuals in using social media. Although there is some contention around a formal definition, social media can be loosely classified as a collection of software tools which enables individuals to share information, collaborate, create and grow communities (Berners-Lee, Hendler & Lassila, 2006). Kietzmann, Hermkens, McCarthy and Silvestre (2011) classified social media into seven blocks, namely identity, conversations, sharing, presence, relationships, reputation and groups. They proposed these blocks for firms as well as individuals to manage risks and opportunities in social media offerings.

This article discusses a research conducted to investigate the risks of social media to women in Malaysia. This group is chosen as they are 'at risk' and vulnerable to the many risks and threats of social media available on the Internet and other platforms. By examining the nature of risks facing users of social media especially women and girls, this research will provide dimensions in understanding the issues of social media usage in Malaysia. Furthermore, by understanding the ways the group perceived their risks and more importantly identifying strategies to overcome the risks, we can come up with a social media model that is designed in such a way that it can contribute to the value-based knowledge society which should be achieved by the year 2020. The objective of the research is to determine the perceived risks of social media among Malaysian women. The specific objectives of the research are to identify types and nature of risks facing women and girls by the exposure to social media, and to develop a social media model for a group at risk. Thus, the hypothesized model will integrate seven important dimensions namely Religion, Ideology, Love Affair, Family Relationship, Sexual Harassment, Drugs, and Economy.

Half of the world's population is female, but according to the United Nations, women still earn no more than one-tenth of the world's income (Communication World, 2010). Current scenario in Malaysia indicates that despite obtaining higher education qualification, women do not fully participate in the workforce. The National Economic Advisory Council (NEAC) of Malaysia reported that the labour market participation rate for Malaysian women is lower than in other countries, despite a higher level of education (NEAC, 2010). National Women Policy also gives emphasis on the women empowerment particularly in the

workforce, decision making and leadership (RMK-10). The 2011 budget also seen RM30 million was allocated by the Malaysian government to increase women's participation in entrepreneurship (Bernama, 2010). However, only 53.6% of women were contributing to the workforce and the government has targeted to increase the number to 55% by end of 2015 (TalentCorp, 2015). The question whether these figures can be achieved is yet to be answered by looking at how women survived in their lives. They faced many constraints to improve their lives, either the working or non-working women. Thus it is timely for policymakers to reflect on the impact of this situation to the economic and social growth of a nation. In fact, 2018 is announced as Women Empowerment Year by the Prime Minister of Malaysia during 2018 Budget presentation (Prime Minister's Office, 2018).

Even though there is a relatively large body of literature on issues pertaining to women and ICT in Malaysia, but studies on women and social media are rather limited. Women are associated with 'a group at risk' due to the fact that they are more exposed to online risks and threats as compared to men, thus this group was chosen for this study. Previous findings also provide support that access of women to education, technology, healthcare, social support, and economy is inadequate and that is the reason why they "remain largely marginalized, poor and socially excluded" (Bishnoi et. al, 2012) and these have led to broadening the technological gender gap (Daher, 2012).

This research intended to investigate the perceived risks of social media by Malaysian women. The theoretical importance comes from the attempt to derive and validate a model of risks for women and girls using social media as a context of study in relation to risks theory. Therefore, based on the findings of this study, we will design and develop a social media model integrating social and cultural, economy, politics, legal and psychology dimensions for a group at risk, i.e. women and girls. Our findings can contribute greatly to a better understanding of the mechanism behind social media issue pertaining to women and girls. By understanding the ways the group identifies their risks, we can come up with a social media model that is designed in such a way that it can contribute to the value-based knowledge society which should be achieved by the year 2020.

LITERATURE REVIEW

Women and Girls Online

ICT have helped women in various aspects of life, including ICT literacy, business, sales and services (Fuzirah, Norizan & Zaini, 2011). The rapid growth of social media applications resulted significant increase in the usage among women and girls. Studies support the fact that social media is immensely popular among young people and adults (Lenhart, Madden, Smith, Purcell, Zickuhr, & Rainie, 2011). Interestingly, since the introduction of Web 2.0, women usage of social media keeps on increasing and outnumbering men globally (Hicks, 2010; Lenhart, 2009; McPherson, 2014) and women also lead by application usage, especially Facebook, Pinterest, Instagram (Duggan, 2015) and blogging (Jones, Johnson-Yale, Willermeier & Perez, 2009). This positive trend has also given rise to the issues of empowerment and risk of social media towards this group. When women are exposed to social media, they could utilise it into beneficial things, but at the same time, social media could also endangered them. Many women success stories proved that social media is beneficial if it were used wisely (Hall, 2015), but many cases reported women were the victims of social media fraud (e.g. Astro Awani, 5th Sept 2014).

Women and girls usage of social media has increased as compared to men and boys (Hicks, 2010; Lenhart, 2009; Maul, 2010) even though the gap has narrowed between 2010 and 2015 (Pew Research Centre, 27 August 2015). Pew Research Centre also found that female users outnumbered male in Facebook, Pinterest, Instagram and Tumblr, while male beat female in Twitter, reddit/Digg/Slashdot (Pew Research Centre, 27 August 2015). There is only a slight difference in the use of LinkedIn and Tumblr between both gender. Prior to that, a Google survey of 17 social networks in 2009 found that male users outnumber female in only one, Digg, a social news site (Hicks, 2010). The gender balance is equal in only two, LinkedIn and YouTube. Women make up 57 per cent of Facebook and Twitter, 64 per cent of MySpace, and 68 per cent of Bebo. When women and girls are exposed to social media, they could turn it into something beneficial or something that might give them risks. Many women success stories proved that social media is beneficial if it were used wisely, while many other incidents have shown that women and girls were being trapped by social media. One of the examples is the exploitation of Facebook to trap women and girls to be the drug mules (Kong, 2010).

Women are engaging with social media and social networks faster than any other demographic. In fact, several studies have shown that women and girls outnumbered men and boys in terms of social media usage (Hicks, 2010; Lenhart, 2009). Nguyen (2010) indicated that women are more social in social media utilization, while men like music. In other study, girls, particularly older girls, were found to be more likely to use social networking sites than boys (86% of girls age 15-17 have profile online, compared to 69% of boys age 15-17) (Lenhart, 2009). The study also revealed that women are much more likely to look online for any health information. It is such a common scenario today to see women, not only working women but also unemployed and housewives, browsing and surfing social networking sites, reading blogs or chatting with friends using mobile phones, tablets, or other sophisticated devices anywhere and anytime. Women and girls also utilize the social media for income generation and social benefits; do sales and marketing online, find jobs, reconnect with old friends and share their life experience via blog or Instagram.

There are various reasons why women and girls were so attached to social media. Quizon's (2010) perspective is such an interesting example in which she argues that this scenario happens due to the web's shift to more emotionally rich content has favoured girls and women who tend to cultivate social networks, develop emotional connections online, and create profile pages more than men and boys. She added that the anecdotal and storytelling quality of the Internet today also makes it a more girl-friendly domain as compared to the earliest version of the Internet which requires more programming skills. Jimenez (2011)

stressed that social media have leveled the playing field in business, enabling small and minority and women-owned businesses to compete with larger, more well-established businesses. What she meant by 'a level of playing field' is that all people have a fair chance, based on their ability and initiative, to realize their potential. And interestingly, as stated by Multimedia Publisher (2008), while men were more likely to transfer songs from their PC to a portable unit, women were more likely to transfer photos from their digital cameras to their PCs, underlining the importance of life sharing aspect of social media for women. This scenario provides evidence that women and girls seen social media in distinct way as men and boys did.

A study shows that women entrepreneurs value social media at three times the level of male small business owners (Guardian Life Insurance Company, 2010). Their adept use of social media provides women with a glimpse into their professional and personal lives (Quizon, 2010). Through social media, women can begin to imagine what the daily lives of their role models are like, and new coverage on the Web provides them with a longer view of particular career paths in. In her optimistic perspective, Quizon (2010) emphasised that by harnessing the social component of today's technology and cultivating role models through social media to women, we can start to imagine a world where the cyber pioneers are girls. Indeed, it is evidenced that social media has given and will continue to benefit many women and girls all around the world.

Social Media Risk

Technological empowerment such as ICT ownership model was found to have a positive effect and statistically significant to women empowerment (Badran, 2010). However, social media, as part of ICT, has also proven to be a source of risks to women. Beier and Wagner (2014) in their study on social media risk found that risks is the main factor preventing executives in small firms from social media activities. Among the risks of social media onto the group are invasion of privacy, cybertrooper, drug mules, online dating, cybercrime, blackmailing, pornography and unsecured link, which may lead to possible crimes like kidnapping, pedophiles, human trafficking and drug syndicate. Among the identified perceived risks are financial, product performances, social, psychological, and time convenience loss (Nenonen, 2006). According to Khan, Swar and Lee (2014), there are four types of risks distinguished among social media users: time risk, psychological risk, social risk, and privacy risk, while Gutiérrez-Santiuste, Gallego-Arrufat and Simone (2016) added technical risks as an important risk category related to social media communication. Aramo-Immonen, Jussila, Ilvonen and Helander (2016) found that privacy related risks were perceived more than in previous years. In addition, Buni and Chemaly (2014) stated that "across websites and social media platforms, everyday sexist comments exist along a spectrum that also includes illicit sexual surveillance, "creepshots," extortion, doxxing, stalking, malicious impersonation, threats, and rape videos and photographs". They added that the explosive use of the Internet to conduct human trafficking also has a place on this spectrum, given that three-quarters of trafficked people are girls and women. Social media were also found to affect body image of young women (Perloff, 2014).

Despite various applications of social media adopted by users, pattern shows that research on social media in Malaysia mainly emphasised on blogs (e.g. Muhamad Nazri & Suhaimee, 2008; Zanariah, Siti Rohana & Norun Najjah, 2008), YouTube (e.g. Aripin, et al., 2016; Lingam & Aripin, 2017), and social networking sites (e.g. Safurah, Khaizuran & Azmi, 2010). Other researches on media usage and impacts focused mainly on youths (Faradillah Iqmar Omar, Nor Azlili Hassan, Iza Sharina Sallehuddin & Nor Hafizah Abdullah, 2016; Latiffah, Samsudin & Fauziah, 2009; Safurah et al., 2010; Shiratuddin, Sani, Hassan, Ahmad, Khalid, & Ahmad, 2016). As far as we are concerned, only a limited number of studies were carried out in Malaysia to examine the social media risks among citizens, particularly women and girls. Safurah, Khaizuran and Azmi (2010) for instance, analyzed the risks involved when youths engaged in building relationships through social media. They argued that one of the risks involved in using social media is invasion of privacy. Their respondents practiced certain measures of protecting their privacy by limiting access to their personal information and personal pictures.

Thus, this may not particularly apply to women and girls and disregard risks as a major concern. Thus, it is important to highlight the risks of social media on women and girls. Given the issues and challenges faced by the country in managing and controlling the adoption of social media and its risks in view of women and girls, it is timely and significantly important to undertake this research in Malaysia.

By examining the nature of risks that are facing social media users especially women, this research will provide dimensions in understanding the issues of social media usage in Malaysia. Furthermore, by understanding the ways the group manages their risks and more importantly the effectiveness of strategies to overcome the risks, plus the empowerment opportunities and strategies, we can come up with a social media model that is designed in such a way that it can contribute to the value-based knowledge society which should be achieved by the year 2020. The model will integrate major important dimensions including technology, social and economics, plus other possible dimensions gained from the findings.

RESEARCH METHODOLOGY

A cross sectional study measures the prevalence of social media risks in a population at a point in time. The population of this study was Malaysian women who are active users of social media specifically Facebook. Participants of the survey were 1,307 women selected via purposive sampling and the main criteria for selection of respondents is women who actively use social media in daily lives and can be reached by the researchers via snowball technique. Questionnaires are used as a research instrument. The questionnaires which were distributed via online web survey consists of two main sections: Section A pertains to the demographic profile of the respondents (i.e. age, marital status, race, academic qualification and employment), while Section B consists of seven dimensions of perceived risks, namely Religion, Ideology, Love Affair, Family Relationship, Sexual Harassment, Drugs and Economy, which were self-developed by researchers based on knowledge, expertise, experience and past

research. All questionnaires had validity and reliability tested. Data were analysed descriptively to determine the mean and standard deviation of each item.

Structural Equation Modeling (SEM) through AMOS-18 and SPSS-19 software packages were used for data analysis. Fit indices include the Chi-Square statistics divided by the degree of freedom (χ^2/df); Root Mean Square Error of Approximation (RMSEA), SRMR, Parsimony Normed Fit Index (PNFI), and Comparative Fit Index (CFI) as suggested by Hair, Black, Babin and Anderson (2010), Hu and Bentler (1999), Kline (2005), Mulaik, James, Van Alstine, Bennet, Lind and Stilwell (1989), and Tabachnik and Fidell (2007). The survey was developed with the help of prior research, literature review, and social media consumer research. The development of the instrument consists of a 7-point Likert-type scale (1=Strongly Disagree to 7=Strongly Agree) and the participants were asked to rate the 40 items relating to the seven risk dimensions, i.e. Religion, Ideology, Love Affair, Family Relationship, Sexual Harassment, Drugs, and Economy.

RESEARCH FINDINGS

Demographic Profile

Participants of the survey were 1,307 females; age ranged between 19 and 54 years old with mean age=24.75 (SD=4.77), as shown in Table 1. Majority of the respondents are single (82.6%), Malays (76.5%) and many of them have obtained at least a Bachelor degree or above (66.2%). In terms of employability, more than half of the respondents are students (52.6%), 27.5% are support staff, 10.2% are professional staff, 8.6% are unemployed, while 1.1% are housewives.

Table 1: Demographic Profile of Respondents (N=1,307)

Demography	Frequency	%
Age		
19 – 28	1,114	85.2
29 – 38	154	11.8
39 – 48	34	2.6
49 – 54	5	0.4
Marital status		
Single	1,080	82.6
Married	213	16.3
Others	14	1.1
Race		
Malay	1,000	76.5
Chinese	157	12
Indian	51	3.9
Sabah/Sarawak	93	7.1
Others	6	0.5
Academic Qualification		
Bachelor degree and above	865	66.2
Diploma and Certificate	156	12
Higher School Certificate and below	286	21.9
Employment		
Professional staff	133	10.2
Support staff	360	27.5
Housewife	14	1.1
Student	688	52.6
Unemployed	112	8.6

Perceived Risks of Social Media

Forty items are being tested under seven dimensions. These items were self-developed based on researchers' knowledge, expertise, experience and also past research. The respondents were asked "In terms of Religion / Ideology / Love Affair / Family Relationship / Sexual Harassment / Drugs / Economy, social media risked me to...".

i) Religion

Religion is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 2, statements related to "misunderstand my religion", "receive wrong information about religion" and "disrespect other religions" scored high means, while statements pertained to "get confused by the different views within the religion" and "be affected by different religious views" showed moderate means. The finding indicates that respondents tend towards agree that social media have given risks to their religious belief.

Table 2: Perceived Risk of Social Media toward Religion (N=1,307)

Item	Statement	Mean	S.D
AGA1	receive wrong information about religion	5.99	.928
AGA2	get confused by the different views within the religion	3.99	1.811
AGA3	be affected by different religious views	3.04	1.730
AGA4	disrespect other religions	5.30	1.287
AGA5	misunderstand my religion	6.05	.985

ii) **Ideology**

Ideology is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 3, statements related to “be unaware of my right to choose the political party that I like”, “build political ideology that jeopardize me” and “unconscious about my opponent's strategy” scored high means, while statements pertained to “sway by political parties in the country” and “change my political beliefs” showed moderate means. The finding indicates that respondents tend towards agree that social media have given risks to their ideology.

Table 3: Perceived Risk of Social Media toward Ideology (N=1,307)

Item	Statement	Mean	S.D
IDEA1	build political ideology that jeopardized me	4.89	1.398
IDEA2	sway by political parties in the country	3.34	1.488
IDEA3	unconscious about my opponent's strategy	4.24	1.506
IDEA4	change my political beliefs	3.29	1.522
IDEA5	be unaware of my right to choose the political party that I like	5.18	1.410

iii) **Love Affair**

Love Affair is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 4, all items under Love Affair showed low means. The finding indicates that respondents tend towards disagree that social media have given risks to them in term of love affair. In other words, they did not perceive any risk for their love affair when using social media.

Table 4: Perceived Risk of Social Media toward Love Affair (n=1,307)

Item	Statement	Mean	S.D
CIN1	search for a suitable partner	3.48	1.750
CIN2	stuck with foreigner's love	2.20	1.507
CIN3	spout dignity for the sake of love	2.01	1.443
CIN4	meet true love	3.02	1.676
CIN5	choose the right partner	3.01	1.668
CIN6	feel appreciated by my partner	3.40	1.825
CIN7	reunited with my old lover	3.37	1.865
CIN8	commit an affair	2.02	1.458

iv) **Family Relationship**

Family Relationship is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 5, statements related to “be unaware of my right to choose the political party that I like”, “build political ideology that jeopardize me” and “unconscious about my opponent's strategy” scored high means, while statements pertained to “sway by political parties in the country” and “change my political beliefs” showed moderate means. The finding indicates that respondents tend towards agree that social media have given risks to their ideology.

Table 5: Perceived Risk of Social Media toward Family Relationship (N=1,307)

Item	Statement	Mean	S.D
KEL1	alienate family	5.62	1.311
KEL2	involved in family disputes	2.43	1.572
KEL3	envied towards the achievement of other family members	2.46	1.599
KEL4	being apart from my family	5.46	1.503
KEL5	difficult to update family information	5.76	1.252
KEL6	sense of being watched by the family	4.78	1.772

v) **Sexual Harassment**

Sexual Harassment is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 6, all items under sexual harassment showed medium to low means. The finding indicates that respondents tend towards disagree that they have experience sexual harassment while using social media

Table 6: Perceived Risk of Social Media toward Sexual Harassment (N=1,307)

Item	Statement	Mean	S.D
SEK1	bothered by strangers	4.24	1.889
SEK2	feel uncomfortable with the porn language used by my friends	3.94	1.900
SEK3	exposed to the risk of being raped	3.47	1.838
SEK4	exposed to the risk of sexual harassment	3.34	1.828
SEK5	humiliated by social media friends.	3.63	1.854

vi) **Drugs**

Drugs is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 7, all items under drugs showed very low means. The finding indicates that respondents did not perceive social media as a threat for them in using or exposing to drugs or the drugs syndicate.

Table 7: Perceived Risk of Social Media toward Drugs (N=1,307)

Item	Statement	Mean	S.D
DAD1	exposed to drugs syndicate	2.37	1.695
DAD2	Involved with drugs smuggling (drugs mule)	2.27	1.645
DAD3	Taking drugs	2.11	1.527
DAD4	recognize the various types of drugs	3.21	2.065
DAD5	affect other friends to get involved with drugs	2.04	1.511

vii) **Economy**

Economy is operationalized and measured by the level of agreement on a seven-point Likert-type scale. Based on Table 8, all items under Economy showed medium means. The finding indicates that respondents tend towards disagree that social media have given risks to their economy.

Table 8: Perceived Risk of Social Media toward Economy (N=1,307)

Item	Statement	Mean	S.D
REKO1	spend money more than the actual needs.	4.03	1.911
REKO2	vulnerable to online fraud	4.12	1.939
REKO3	lose large amounts of money	3.24	1.849
REKO4	being a victim of identity fraud	3.60	2.002
REKO5	feel like being stalked	3.80	1.947
REKO6	lost personal life/privacy	4.14	1.947

Examining Goodness of Fit (GOF) Indices

In terms of overall fit, Table 9 reveals the following fit statistics: $\chi^2=402.5$, $df=85$, $\chi^2/df=4.7$, $RMSEA=0.05$, $SRMR=0.047$, and $CFI=0.981$. The relative fit indicators exceed 0.90 and the absolute fit indicators suggest that the residuals are small and tightly distributed. Consistent with this, the parsimony fit indicator, PNFI, exceeds 0.6, indicating that the model has adequate over-identifying restrictions for parsimony. Based on these statistics, it can be conclude that the hypothesised model provides an adequate fit to the data.

Table 9: Goodness-of-Fit Indices

Fit Indices	Cut-off Value	Actual Value
Chi-square (χ^2)		
Chi-square (p-value)		536.434
Degrees of freedom (df)		114
Absolute Fit Indices		
Relative Chi-square, χ^2/df (CMIN/DF)	5:1	4.706:1
Root Mean Square Error of Approximation (RMSEA)	< 0.08	0.053
Standardized Root Mean Square Residual (SRMR)	< 0.08	0.064

Incremental Fit Indices (IFI)		
Comparative Fit Index (CFI)	CFI > 0.90	0.978
Parsimony Fit Indices (PFI)		
Parsimony Normed Fit Index (PNFI)	PNFI > 0.60	0.815

Evaluating Construct Validity

Construct validity was evaluated to ensure that set of measurement items represents the theoretical latent construct these variables were designed to measure. Construct validity consisting of convergent and discriminant validity.

Convergent and Discriminant Validity

Convergent validity is examined through factor loadings, Critical Ratio (CR) and Average Variance Extracted (AVE). As shown in Figure 1, all the factor loadings exceed 0.7 as suggested by Hair et al. (2010). Only two items (IDEA3 and SEK1) show factor loading less than 0.7, but the researchers decided to retain them for model fit test.

Table 10: Factor Loadings for Dimensions of Risk Model

Dimension	Item	Factor Loadings
IDEOLOGY	IDEA1	.80
	IDEA3	.66
	IDEA5	.77
LOVE AFFAIR	CIN1	.79
	CIN4	.93
	CIN5	.95
	CIN6	.77
SEXUAL HARASSMENT	SEK1	.64
	SEK3	.97
	SEK4	.96
DRUGS	DAD1	.95
	DAD2	.99
	DAD3	.94
ECONOMY	REKO2	.83
	REKO3	.88
	REKO4	.93
	REKO5	.83

Discriminant validity tested the degree to which the constructs differ from each other (Afari, 2013). The discriminant validity was assessed by applying two analytical procedures, (i) the square root of average variance extracted (AVE) for each construct is larger than the inter-construct correlation (Barclay, Higgins & Thompson, 1995; Fornell & Larcker, 1981; Hair et al., 2010), and (ii) the loading of an item within a construct is greater than its loading in any other construct in the model (Gefen, Straub & Boudreau, 2000). The correlation pattern indicated that every item had a stronger correlation with its construct, confirming the measurements reliability. The average variance extracted (AVE) values for the five constructs were above .50, ranged from 0.507 to 0.936. For the composite reliability (CR) to be adequate, a value of 0.70 or higher was recommended (Nunnally & Bernstein, 1994). The final criterion to satisfy convergent validity was the measure of the AVE. AVE is a measure that indicates the amount of variance in the item that is explained by the construct. The results of the statistical analysis in Table 11 show that all of the AVE values were above the suggested value of 0.5. Likewise, construct reliability (CR) values ranged from 0.803 to 0.967 exceeded the 0.7 thresholds. Taken together, the evidence supports the convergent validity of this study measurement model (Hair et al., 2010). The results of discriminant validity are also shown in Table 11.

Table 11: Reliability, AVE and Discriminant Validity of Risk Model

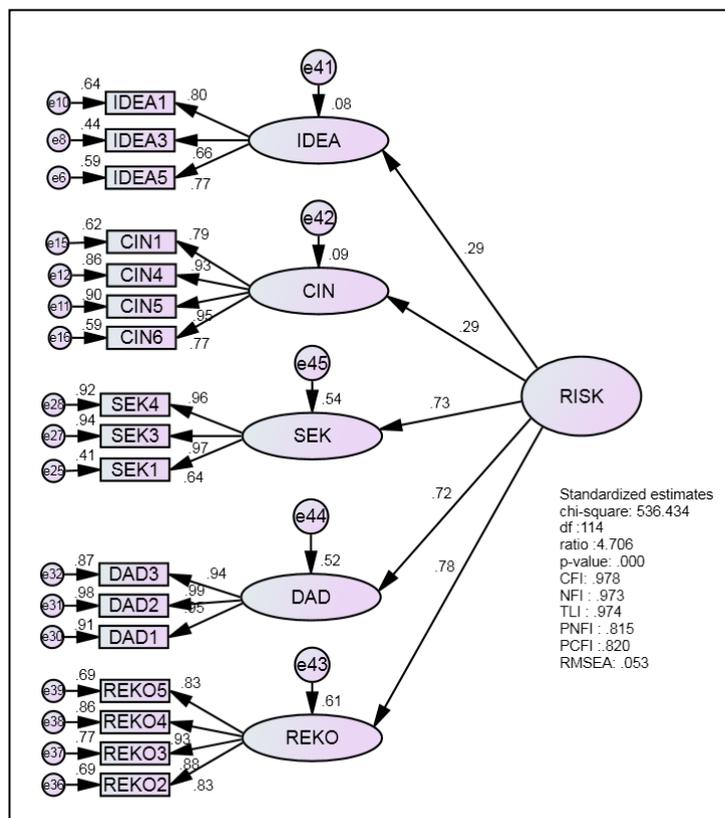
	CR (>.70)	AVE (>.50)	DAD	IDEA	CIN	SEK	REKO
DAD (Drugs)	0.972	0.920	0.959				
IDEA (Ideology)	0.789	0.556	0.140	0.746			
CIN (Love Affair)	0.920	0.743	0.215	0.338	0.862		
SEK (Sexual Harassment)	0.900	0.757	0.545	0.183	0.164	0.870	
REKO (Economy)	0.925	0.754	0.558	0.261	0.237	0.573	0.868

Note: the bold elements in the main diagonal are the square roots of average variance extracted

Nomological Validity

Based on item-factor loadings, all items for Religion and Family Affairs were dropped due to loadings less than 0.5 (Hair, Ringle, & Sarstedt, 2011; Barclay et al. 1995). In addition, two items from Ideology, four items from Love Affair, two items from Sexual Harassment, two items from Drugs and two items from Economy were dropped due to the less than 0.5 loadings. Results indicated that the overall measurement model of risk achieved a good-fitting model. The re-specification model of social media risk finalised a 17-item measurement model from the five constructs, specifically Ideology, Love Affair, Sexual Harassment, Drugs and Economy.

Figure 1: Social Media Risk Model



DISCUSSIONS AND CONCLUSION

Many longitudinal studies provide evidence that women outnumbered men in social media usage (Hicks, 2010; Lenhart, 2009; Maul, 2010; Pew Internet Research, 2015). Thus, with the heavy usage, there are also various social media risks await women. The results of this study proved that Malaysian women do perceive social media as having some risks to them. This is obvious in terms of Ideology, Love Affair, Sexual Harassment, Drugs and Economy, which are paralleled to the previous literatures (Buni & Chemaly, 2014; Perloff, 2014; Safurah, Khaizuran and Azmi, 2010). The findings also in line with Nenonen (2006) especially the risk of social media in terms of social and psychological, and Khan et al (2014) for psychological, social and privacy risks. Interestingly, women in this study did not perceive social media to give threat to their Religion and Family Relationship even though they admit that there are certain conditions where social media do give risk them. This is in contrast to Preston (2015) who claimed that social media provide stress to women in terms of family relationship.

The overall development of a country requires empowered, educated, and enlightened women (Ahmad, 2011). Hence, women must be given an equal chance of accessing and using social media. Women nowadays are much exposed to various tools to help them in their daily lives and to assist them in better understand the world, including women’s rights, tackling violence against women and public accountability towards gender equality. Thus social media can be tools to help them in achieving this target. However, with the advent of social media, comes together the risks which may hinder women’s achievement in life. This article presented a study on the involvement of a group at risk, particularly women in social media setting. Studies proved that women increasingly involved in social media to fulfill their various needs. This study concludes that Malaysian women perceived social media as having risks especially in the ideology, love affair, sexual harassment, drugs and economy, while they perceived social media as not giving risks in terms of their religious belief and family relationship.

Future research on this topic should put focus on the technical risk (Gutiérrez-Santiuste, Gallego-Arrufat & Simone, 2016) and privacy-related risk (Aramo-Immonen, Jussila, Ilvonen & Helander, 2016), since the usage of this new media has demanded many technical knowledge and skills by women and girls, and involve various privacy terms and rules. It will also be impactful

for future research to conduct qualitative methods to get in-depth perspectives and insights of social media risks among this group at risk.

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REFERENCES

- Afari, E. (2013). The effects of psychosocial learning environment on students' attitudes towards Mathematics. In M.S. Khine (Eds). *Application of structural equation modelling in educational research and practice*. Rotterdam, The Netherlands: Sense Publishers. 76-91.
- Ahmad, J. (2011). Women's empowerment and gender equality to promote education: A review. *Economic Affairs*, 56(4), 347-352.
- Aramo-Immonen, H., Jussila, J.J., Ilvonen, I. & Helander, N. (2016). *Perceived risks in social media use: A longitudinal study among university students*. Proceedings of the Fourth International Conference on Technological Ecosystems for Enhancing Multiculturality – TEEM'16. doi: <http://dx.doi.org/10.1145/3012430.3012606>
- Aripin, N., Ismail, A., Ishak, M.S., Abdul Rahman, N.A., Abdul Rahman, M.N., Madon, M., & Mustafa, M.F., (2016), "Youtube" dan generasi muda Islam: Satu pendekatan kelompok fokus dalam kalangan pelajar universiti, *Jurnal Komunikasi Malaysian Journal of Communication*, 32(1), 165-188.
- Astro Awani. (5th Sept 2014). *Sindiket love scam: 1,750 mangsa ditipu, rugi RM68 juta*. Retrieved 20th August 2015 from <http://www.astroawani.com/berita-malaysia/sindiket-love-scam-1-750-mangsa-ditipu-rugi-rm68-juta-43271>
- Barclay, D., Thompson, R., & Higgins, C. (1995). The Partial Least Squares (PLS) approach to causal modeling: Personal computer adoption and use an illustration. *Technology Studies*, 2(2), 285-309.
- Beier, M. & Wagner, K. (2014). *Individual and corporate decisions to adopt social media: perception of risks and benefits in small firms*. Discussion Papers on Economics and Entrepreneurial Management. Retrieved 31 Dec 2017, from: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2384900
- Bernama. (2010). *Take advantage of budget 2011 provisions, women urged*. 15 Oct. Retrieved 2nd March 2011 from <http://web10.bernama.com/budget2011/news.php?id=535826>.
- Berners-Lee, T., Hendler, J. and Lassila, O. (2006). The semantic web. *Scientific American*, 284, p.34-43.
- Bishnoi, A., Mehta, S. K., Godara, A. K. & Sethi, N. (2012). Identification of crucial messages related to social empowerment of women. *Stud Home Com Sci*, 6(1), 39-43.
- Buni, C. & Chemaly, S. (2014). The unsafety net: How social media turned against women. *The Atlantic*. Retrieved on 14 March 2018 from www.aicegladiators.com/uploads/1/1/3/2/1132782/aice_global_gender_cyber.pdf
- Communication World. (2010). *Women and work: Brokering trust through social media*. p.30.
- Daher, M. (2012). *Women empowerment through technology and social media: MEPI Capstone Project*. Lebanese American University. Retrieved 21st May 2014 from http://mepitl.lau.edu.lb/images/MiraDaher_WomenEmpowermentThroughTechnologyAndSocialMedia.pdf.
- Duggan, M. (2015). *The demographics of social media users*. Pew Research Centre. Retrieved from <http://www.pewinternet.org/2015/08/19/the-demographics-of-social-media-users/>
- Faradillah Iqmar Omar, Nor Azlili Hassan, Iza Sharina Sallehuddin & Nor Hafizah Abdullah. (2016). Gen Y: A study on social media use and outcomes. *Journal of Management & Muamalah*, 6(1), 53-64.
- Fornell, C. and Larcker, D.F. (1981) Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18, 39-50. <https://doi.org/10.2307/3151312>.
- Fuzirah Hashima, Norizan Abdul Razak & Zaini Amir (2011). Empowering rural women entrepreneurs with ICT skills: An impact study of 1Nita project in Malaysia. *Procedia - Social and Behavioral Sciences*, 15, 3779-3783.
- Gefen, D., Straub, D. & Boudreau, M. (2000). Structural equation modelling techniques and regression: Guidelines for research practice. *Communications of the Association for Information Systems*, 7(7), August, 1-78.
- Guardian Life Insurance Company. (2010). *Guardian Life Index: Prioritizing the value of technology to America's small business owners*. Retrieved 29th March 2011 from http://www.smallbizdom.com/glifep/groups/camp_internet/@stellent_camp_website_smallbizdom/documents/report/value-of-technology-research.pdf.
- Gutiérrez-Santiuste, E., Gallego-Arrufat, M.-J. & Simone, A. (2016). Barriers in computer-mediated communication: Typology and evolution over time. *Journal of e-Learning and Knowledge Society*. 12, 1.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate data analysis*. (7 ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F., Ringle, C.M. & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2): 139-51.
- Hall, C. W. (2015). *Empowered women of social media*. Hot Pink Publishing.
- Hicks, R. (2010). *Are women better at understanding social media?* Retrieved 26th March 2011 from <http://www.futuregov.asia/articles/2010/dec/06/are-women-better-men-using-social-media/>
- Hu, L. T. & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal* 6: 1-55.
- Jimenez, L. (2011). Leveling the playing field. *Profiles in Diversity Journal*, January/February: 12.
- Jones, S., Johnson-Yale, C., Millermaier, S., & Perez, F.S. (2009). U.S. college students' internet use: Race, gender and digital divides. *Journal of Computer-Mediated Communication*, 14, 244-264.

- Khan, G.F., Swar, B. & Lee, S.K. 2014. Social Media Risks and Benefits A Public Sector Perspective. *Social Science Computer Review*, 32, 5 (2014), 606–627.
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P. & Silvestre, B.S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251.
- Kline, R. B. (2005). Principles and practice of structural equation modeling. New York: The Guilford Press.
- Kong, L. (2010). *Drug syndicate using Facebook to recruit young women as mules*. The Star. Thursday, 2 December. Retrieved 26th March 2011 from <http://thestar.com.my/news/story.asp?file=/2010/12/2/nation/20101202145442&sec=nation>.
- Latiffah Pawanteh, Samsudin A. Rahim & Fauziah Ahmad. (2009). Media consumption among young adults: A look at labels and norms in everyday life. *Jurnal Komunikasi (Malaysian Journal of Communication)*, 25, 21-31.
- Lenhart, A., Madden, M., Smith, A., Purcell, K., Zickuhr, K., & Rainie, L. (2011). *Teens, kindness and cruelty on social network sites: How American teens navigate the new world of "digital citizenship."* Retrieved from Pew Research Center's Internet & American Life: http://pewinternet.org/~media/Files/Reports/2011/PIP_Teens_Kindness_Cruelty_SNS_Report_Nov_2011_FINAL_110711.pdf.
- Maul, K. (2010). Study finds women's social media use up. PRWeek.
- McPherson, S. (2014), Empowering women and girls, one hashtag at a time, Forbes, 27 May, Retrieved 20th August 2015 from <http://www.forbes.com/sites/susanmcperson/2014/05/27/empowering-women-and-girls-one-hashtag-at-a-time>.
- Muhamad Nazri Mohamed Noor & Suhaimee Saahar @ Saabar. (2008). *Blogsphere: Ruang kontra hegemoni? Analisis terhadap blog politik Malaysia terpilih dalam PRU 2008*. Paper presented at the Seminar Politik Malaysia.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of Goodness-of-Fit Indices for Structural Equation Models. *Psychological Bulletin*, 105(3), 430-445.
- Multimedia Publisher. (May 2008). *Women ahead of men in online TV, DVR, games, social media*. 19(5), p.5-7.
- National Economic Advisory Council (NEAC). (2010). *Concluding part: Strategic policy measures*. Retrieved 2nd March 2011 from <http://www.neac.gov.my/sites/default/files/NEM%20Concluding%20Part.pdf>.
- Nenonen, S. (2006). *Consumer's perceived risk in e-shopping*. Retrieved on 12th January 2018 from <https://www.preencionintegral.com/canal-orp/papers/orp-2006/consumers-perceived-risks-shopping>.
- Nguyen, J. (2010). *The state of social networks*. comScore Inc. Retrieved 19th December 2010 from http://www.comscore.com/layout/set/popup/request/Presentations/2010/The_State_of_Social_Networks_in_Asia_Pacific_with_a_Focus_on_Malaysia_PDF_Request.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric theory*. 3rd ed. New York: McGraw-Hill.
- Perloff, R.M. (2014). *Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research*. *Sex Roles*, 71(11-12), 363-377. <https://doi.org/10.1007/s11199-014-0384-6>.
- Pew Research Centre (2015). *Social media gender gap narrows*. Retrieved on 12 Feb 2018 from http://www.pewresearch.org/fact-tank/2015/08/28/men-catch-up-with-women-on-overall-social-media-use/ft_15-08-20_socmedgender_narrows/
- Preston, C. (2015). *Social media stress: It's real, but you can avoid it*. Retrieved on 24th May 2016 from <http://fortune.com/2015/01/28/social-media-stress-its-real-but-you-can-avoid-it/>
- Prime Minister's Office. *Touchpoint 2018 budget*. Retrieved on 14th January 2018 from <https://www.pmo.gov.my/bajet2018/TouchpointsBudget2018.pdf>
- Quizon, N. (2010). Social change: Women, networks and technology. *Interactions*, January- February: 36-39. DOI: 10.1145/1649475.1649484.
- Safurah Abd Jalil, Khairuzan Abd Jalil, & Azmi Abdul Latiff. (2010). *Social media and our youths today: Exploring the impact of social media on Malaysian youths*. Paper presented at the International Conference on Communication and Media, Melaka.
- Shiratuiddin, N., Sani, M., Hassan, S., Ahmad, M., Khalid, K., & Ahmad, N. (2016). Penyertaan politik generasi y dan sosial media di Malaysia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 32(1), 125-143.
- Tabachnick, B. & Fidell, L. 2007. *Using multivariate statistics*. 5th ed. Boston: Pearson Education, Inc.
- TalentCorp Malaysia. (2015). *Advancing women in the workplace*. Retrieved 20th August 2015 from <http://www.talentcorp.com.my/facts-and-figures/advancing-women-in-workplace>.
- Wikipedia, (2018), Retrieved on 13 Feb 2018, <https://en.wikipedia.org/wiki/Risk>.
- Zanariah Jano, Siti Rohana Omar, & Norun Najjah Ahmat. (2008). *Political discourse in Malaysian blogs*. Paper presented at the Seminar Politik Malaysia.
- Zachmann, K. (2014). Risk in historical perspective: Concepts, contexts, and conjunctions, in C. Klüppelberg et al. (eds.), *Risk – A multidisciplinary introduction*, Switzerland: Springer International Publishing, DOI 10.1007/978-3-319-04486-6_1.

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