Social Media Usage and Awareness of Cyber Security Issues among Youths

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ABSTRACT

This study aimed at identifying the level of awareness of social media use on safety issues among youths. The study was based on a survey using frequency (frequency), percentage, mean score, and interpretation. The sample involved 205 randomly selected youths from Tun Hussein Onn University Malaysia (UTHM). The data analysis of this study was conducted using Statistical Package for the Social Sciences (SPSS) version 21. The results showed that the level of awareness of social media use among youth was low. In addition, the correlation coefficient did not show significant social media usage with the level of awareness of social media among students but in contrast, it showed a low value.

Key words: Social Media, Awareness, Cyber Security, Youth

1. INTRODUCTION

According to [1], the information and communication technology has an increase in sharing rates, nowadays. The storage and processing of personal information has reached a level that never before had. People are aware that social media is an electronic application that allows people to connect and access information more easily through the internet. Today, there are 4.5 billion people or 60% of the world's population using the Internet of all kinds of social media applications in keeping with the age, variety of brands and design of existing applications [2].

Competitive social media applications such as Facebook, twitter and WhatsApp have captured the attention of the world. This has led to an increase in the user population of over 300 million to 1.1 billion users. It is a question of the true strength of the three (3) brands of social media applications that remain to provide the best service and interest for the diverse backgrounds of the community. According to [3], one of the main reasons this media application is gaining

popularity worldwide is because it is easy to communicate in many different ways whether via voice, email, picture message, or even sharing information links with just one click. But unknowingly, there is also danger in cyber security.

In today's internet-accessing social media, we are unaware of the dangers that can be encountered in cyber security issues. One of the accidental issues of the use of social media networks is violation of the security of personal information, which has been reported repeatedly in the media. According to [4], there are several forms of cyber-crime, first, cyberbullying in which someone who commits online bullying can embarrass or intimidate the victim and disturb the victim's thoughts and emotions. The second is phishing emails. Phishing is an act of sending an email to someone that looks like a legitimate email from an agency for the purpose of obtaining the recipient's personal information. According to [5] statistics, a total of 529 cases of cyberbullying were reported in Malaysia in 2016 and as of August 2017 only 431 cases of cyberbullying were reported.

Internet users need to focus on cyber security in their daily lives. According to [6], the government does not have the power to block all the social media from abusing the Internet. Thus, consumers need to increase their awareness to fight cybercrime. However, the question here is to what extent are the social media users aware of these cyber security issues? Therefore, this study was conducted to explore and answer the above issues and questions.

2. PROBLEM STATEMENT

The emergence of social media applications has given consumers, communities and organizations greater access to information, social networks and communication mediums. According to [5], the percentage of Internet use is 86.6% of which is used mostly at home (85.6%), via mobile devices in any location (84%) and at work (58.7%). The emergence of social media applications helps to further enhance the process of sharing information online. Generally, social media like Facebook, Twitter and Instagram are used as the mediums for communicating, socializing and as a source of information for

users [7]. However, the development of today's social media world has made the original function of social media evolve into new and more diverse functions.

The development of these social media sites also helps organizations develop their marketing strategies. [8] states that communication between customers and marketers today also helps to foster interaction with the brand being sold. The social media has also been a stepping stone for marketers to develop more superior and stronger brands to gain greater market space. [9] stated that teenage social users tend to share their personal information in the cyber world. Although they are able to control their privacy settings on social sites, the information they share is still accessible to a large network of friends in the cyber world. In addition, most teens who use these social sites are less aware of third-party access to their personal information in cyberspace.

In general, these privacy issues focus on personal information management as well as the willingness of users to share their surroundings and current situations with their network of contacts on the Internet or social media. This is stated in a study conducted by [9] who found that 51% of their informants refrained from using certain applications on smartphones and tablets due to their privacy concerns in the environment. The study also shows that 46% of teens turn off location tracking features on their smartphones because they are worried about the privacy of their information and do not want their gestures publicly known.

In addition, [10] found that privacy issues in the online business field pose the greatest risk to the development of the field. This is because at the moment consumer and consumer habits can be traced through the Internet with a text file called 'cookie'. Through these cookies, users seem to have left their traces on the Internet and they are used by advertisers on the Internet to find out about their habits and interests on something on the Internet. This method opens the marketplace for marketers to reach their customers, but this is also seen as a privacy breach for consumer.

3. USE OF SOCIAL MEDIA APPS

Social media is part of the technology that Web 2.0 has been developing as the demand for it has increased. [11] states that the most popular media that are used worldwide include blogs, social sites and Wikipedia. As the media was developing, new technologies have influenced procedures in various fields. Social media is a tool for collaboration, connecting the various electronic media between individuals and across geographies and social environments. Various definitions have been made available for the purpose of social media. [12] have provided general definitions of social media such as web 2.0 and user-generated content. Kaplein argues that social media is a group of internet-based applications built on the ideology and technology of web 2.0 that enables the creation and exchange of user-generated content.

Social media is a tool of communication and this is also supported by [12] who described social media applications as a medium based on social interaction, and was developed to

facilitate access to shared information. As stated by [13], users have easy access to other users' personal information through social networking applications such as Twitter, Facebook and Foursquare. This information-sharing activity by youths is actually motivated by their hobbies and interests in better relationships. Some of the most commonly shared information is related to school, employer, and personal information. Some youth or young users ignore the importance of safety and privacy when sharing sensitive personal information with the public [14]. For example, sharing personal information is often done through user profiles with friends through social media applications. It can be explained that social media is a must for everyone to give virtual exposure, work, make space and connect through life-time through online discussions, opinions and evolution by incorporating changes or exposing original content. The use of web-based social media technology is a communication medium. Despite the various definitions, there are basically three underlying elements (content, communications and Web 2.0) that support social media capabilities. Social media depends entirely on technology and Web 2.0 technology enables people to use a variety of platforms to share and discuss.

4. METHODOLOGY

This study is a quantitative study using survey design to assess the extent to which social media types are selected and the level of awareness of social media use among youths at Universiti Tun Hussein Onn Malaysia (UTHM). In order to collect population data based on the selected sample, the survey method using the questionnaire is the most appropriate choice. The purpose of the survey is also to describe the characteristics of a population so that the study can be carried out.

The sample included in this study was 205 youths at UTHM. Both genders were involved in this study. Respondents within the age range of 18 - 24 years were asked to fill out an online questionnaire that was distributed by researchers and users.

5. FINDINGS AND DISCUSSIONS

This study involved 205 youths at Tun Hussein Onn University Malaysia (UTHM). The number of respondents was divided by gender as shown in Table 1.

Table 1: Gender

No.	Details	N	%
1	Female	93	44.9
2	Male	112	54.1

The table above shows the demographic details of respondents where there were 93 with 44.9% male respondents and 112 with 54.1% female respondents. The respondents were youths studying at UTHM.

Table 2: Age of Youth

No.	Details	N	%
1	18 – 24 years old	166	80.2
2	25 – 34 years old	39	18.8

Most of the youths who responded to the questionnaire forms were those who had mobile phones and used technological gadgets. Most selected students were within18 -34 age group a total of 205 respondents answered the questionnaire online. The majority of the respondents (166) in the survey were within the 18-24 age group with 80.2% and the lowest were within the 25-34 age group of 39 people.

Table 3: Ethnicity

No.	Details	N	%
1	Malay	161	77.8
2	Chinese	14	6.8
3	Indian	21	10.1
4	Others	9	4.3

According to Table 3 above, the highest ethnic was Malay with the total of 161 with 77.8%. Furthermore, the Chinese ethnicity was 14 with 6.8% and the Indian ethnicity was 21 with 10.1%. The lowest ethnicity group was 'others' with 9 (4.3%) of them with.

In this study, the findings were explored based on the use of social media and gender. Furthermore, this study also measured the level of awareness of social media on cyber security issues among youths. Descriptive statistical analysis was used that included frequency, percentage and mean score in decomposing the overall construct of the questionnaire. The interpretation of mean scores and mean level values for the findings can be referred based on Table 4 and Table 5 below.

Table 4: Min Score Interpretation Scale

No.	Details	N	%
1	Malay	161	77.8
2	Chinese	14	6.8
3	Indian	21	10.1
4	Others	9	4.3

Table 5: Min Score Interpretation Scale

No.	Details	N	%
1	Malay	161	77.8
2	Chinese	14	6.8
3	Indian	21	10.1
4	Others	9	4.3

Frequency tables were created to investigate the use of social media usage among youths. In addition, the researcher also showed the scale of interpretation of the mean score and the interpretation of the mean level to assess the scale of the mean score. Researchers used the correlation test to study the issues of social media usage among youths at UTHM. Table 6 shows the details of social media usage among youths

Table 6: Analysis of Social Media Use in Youth

1. Has a social media account			
No.	Details	N	%
1	Yes	205	100
2	No	0	0
2. The amount of time you spend on social sites a day			
No.	Details	N	%
1	1 – 2 hours	30	14.6
2	2 – 4 hours	48	23.4
3	5 – 8 hours	92	44.9
4	8 – 12 hours	26	12.7
5	12 – 16 jam hours	2	0.9
6	> 16 hours	7	3.41
3. Your preferred type of social media application			
No.	Details	N	%
1	Facebook	148	15.2
2	Instagram	179	18.3
3	YouTube	171	17.5
4	Twitter	114	11.7
5	WhatsApp	179	18.3
6	Google+	75	7.7
7	Tik Tok	33	3.4
8	LinkedIn	19	1.9
9	Pinterest	19	1.9
10	Skype	12	1.2
11	Others	28	2.9
4. The purpose of surfing the internet / social media			
No.	Details	N	%
1	Online games	85	17.2
2	Find information	173	35.1
3	Eliminate boredom	178	36.1
4	Looking for new contacts	57	11.6

The table above shows a summary of social media usage among youths. Based on question 1, all respondents had 100% social media type. Question 2 showed that the average time spent on social sites was 5-8 hours with 44.9%, followed by 2-4 hours with 23.4% and 8-12 hours with 14.6%. This proves that today's youths optimistically integrate social media applications into their daily lives. Next, question 3 was about the types of social media applications that the respondents chose. The most popular social media application was Instagram (18 %).

A total of 36% of respondents found that their purpose of surfing the internet/social media was to eliminate boredom, followed by 35.1% seeking information and 17.2% playing online games. Most users, especially youths, liked to share personal information on social media during the day without any negative thoughts. Threats to the security of personal information through Internet networks are an important issue as it allows users to be at high risk without their knowledge. This is supported by [17] where agree that personal

information is easily accessible via social media because there is no limit and control over what to share with others. It is imperative that we address any possibility of getting in touch with each other through online applications. This not only affects the concept of surveillance through the Internet network to the individual or the user, but also to the economic, political and social life of a country [18]. Table 7 shows the analysis of awareness levels of social media use among youths.

Table 7: Social Media Awareness Level Analysis

No.	Details	Mean	Std. Deviation
1	I make sure the updated information on my social media accounts is accurate	2.40	1.38
2	I display information about myself appropriately on social media	2.69	1.20
3	I correctly display website/email information on social media	2.68	1.3
4	I accurately display gender information on social media	2.14	1.39
5	I display profile pictures on social media exactly	2.52	1.25
6	I accurately display my residence information on social media	3.36	1.35
7	I accurately display my phone number information on social media	3.33	1.40
8	I accurately display my birthday information on social media	2.63	1.35
9	I want to have a fake social media account to fool my friends	3.88	1.41
10	I use profane language during social media use	3.47	1.45
11	I am a person who is sensitive to the accuracy of social media contact information	2.36	1.37
12	I can distinguish between what information is shared or true	2.57	1.01
13	I've made security settings for my account on social media	2.04	1.29
14	I'm aware of who I am on social media	2.18	1.33
15	I'm aware of who I share information with on social media	2.29	1.30
16	I always identify information shared on social media as true or false	2.30	1.34
17	I have always been skeptical of information sharing on social media	2.41	1.16
18	I only share information with really trusted friends	2.11	1.34
Overall Score		**4.74**	**1.53**

The overall level of awareness of youth social media is low. Based on the table above, the data indicates their level of awareness following both sexes is mean with 4.74 (sd = 1.53). This shows that is little exposure to the issue of awareness of social media among youths at UTHM. This proves that they still do not understand the dangers of each activity or activity that has gone through social media for example, item 13 (mean = 2.04, sd = 1.269) which states "I have made security settings for my account on social media".

In line with this, youths need to be on the lookout for any behavior that is prominent on social media because unscrupulous hackers are always waiting to harm a person's social media system. However, there are also questions that indicate high mean (mean = 3.88, sd = 1.41) such as item 9 that says, "I want to have a fake social media account to cheat my friends". This item shows that they have an irresponsible attitude when it comes to social media.

Table 8: Social Media Usage Relationships and Social Media Awareness Levels

Variable	Social Media Awareness Level			Social Media Usage		
	R	Sig.	Interpretation	R	Sig.	Interpretation
Social Media Awareness Level	1	-	-	-0.13	.853	low
Social Media Usage	-0.13	.853	low	1	-	-

Table 8 shows that there is a significant negative relationship between social media usage and social media awareness levels. This indicates that these factors or constructs are weakly related to each other. The correlation showed a weak relationship between social media use selection and social media use awareness level (r = −0.13 and sig = 0.000 (p> 0.01).

6. CONCLUSION

In conclusion, the level of social media use among youths is low. They are less aware that they are constantly being watched by irresponsible individuals and at risk of their safety. The use of social media by teenagers especially students is under control because most of their mobile phones are not controlled by parents and there is no high awareness of cyber security. Plus, the number of discussion of current issues also need to be increased so that students are aware of the importance of cyber security towards the country and the surrounding community [19].

In addition, lack of supervision through social media also enables other users to quickly find out their current and family status. They are unaware of the information being shared in social media applications providing information to certain parties for bad activities such as house breaking, abduction and others. Therefore, youths should be wise to choose the type of social media that suits them and positively benefit from this media.

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