Internet Safety and Malaysian Students: A Study of Female Undergraduates and Their Net Pals

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ABSTRACT

Malaysian female undergraduates are perceived as able to rationally evaluate and estimate risks towards Net pals. Friendship is secured online while deception and fraud are revealed offline. Based on what they have been informed, the female undergraduates may know their Net pals' likes and dislikes but the invisible cyber veil does not allow them to penetrate the illusion and accurately evaluate a person's character and personality. This study examined how Malaysian female undergraduates use the Internet, perceive risks in meeting Net pals and the safety awareness surrounding cyber friendship. Responses of 118 female undergraduates (43% from UiTM, 30% from UM, 27% from MMU) to a survey indicated that Net pals were befriended through chat rooms and websites. More than half of the female undergraduates would have a face-to-face meeting with their Net pals without the knowledge of relevant parties and have done at least one potentially unsafe behaviour. If the extent and level of Internet safety awareness is known, the problem of Internet deception that might lead to potential social problems such as rape and sexual abuse can be effectively addressed.

Introduction

Today's world belongs to generation Y, i.e. those aged between seven to twenty eight. This group of people is the largest consumer group and they enjoy the modern gadgets that make life convenient and interesting. At the forefront of these gadgets is the computer and with it, the Internet and connectivity. This has created a generation of "wired" youths. Wired

youths use the Web mainly as a two-way communication tool for instant messaging and exchanging e-mails. Most of them enter chat rooms and after a few sessions, subsequently befriend total strangers – these people befriended through the Internet are known as Net pals.

With the Internet, speed and convenience is the name of the game, whereby young adults get to befriend a stranger within a short time frame. Friendship is secured online while deception and fraud are revealed offline.

The Internet is used for interpersonal communication (Krant, Mukhopadhyay, Szcypula, Kiesler & Scherlis, 2000), suggesting a large amount of social behaviour worth investigating. Computer-mediated communication (CMC) is low in socio-emotional content (Rice & Love, 1987). Visual anonymity and text-only communication have also been used to predict that CMC would discourage awareness of others (Kiesler, Siegal & McGuire, 1984) and encourage anti-normative, aggressive, uninhibited behaviour termed 'flaming' through a corresponding reduction in self-focus (Kiesler et al., 1984).

McKenna and Bargh (2000) claimed that: "It is not surprising then that deindividuation and the negative results that often accompany it ... readily occur on the Internet" (p. 60). McKenna and Bargh further argued that deindividuation on the Internet will also lead to greater self-disclosure as "under the protective cloak of anonymity, users can express the way they truly feel and think" (p. 62). A female's evaluation of an ambiguous situation as potentially dangerous can have important consequences. Females would perceive their risk of being attacked by both a stranger and an intimate friend to be dissimilar (Taylor, Neter, and Wayment, 1995; Taylor, Wood, and Lichtman, 1983). Undergraduate females are perceived as able to rationally evaluate and estimate risks towards Net pals. However, contrary to expectations there have been numerous cases and instances reported in the local dailies where these girls have been taken advantage of. Malaysian female undergraduates represent a segment of young adults that need to be taught on general assessment of risk and victimisation.

Statistics taken from the Royal Malaysia Police website indicate there has been a steady increase in violent crime against women. The situation certainly warrants due attention. Whether our undergraduate females are adding to the statistics have yet to studied. At present, no research has been carried out on safety awareness amongst Malaysian female undergraduates towards Net pals. Thus it is strongly felt that this research is timely in order to increase safety measures amongst these

users. This research aims to analyse the frequency of Internet usage among female undergraduates which states the use of the Internet among female undergraduates and to identify the safety issues towards Net pals

Purposive sampling was used in the study as the primary purpose of the study is to gauge the extent of safety awareness of Malaysian female undergraduates with respect to net pals. Malaysian female undergraduates from three universities were selected for this study: The three universities are: Universiti Technologi MARA (UiTM Main Campus), University of Malaya (UM), and Multimedia University (MMU) (Melaka campus). UiTM was selected for its homogenous student population (bumiputra), and it being a public university. UM was selected for its heterogeneous student population, and it being a public university. MMU is a private university, which has a heterogeneous student population. The sample size for UiTM was 50, UM was 35, and UUM was 33.

Methodology

This study involves a non-experimental design and is targeted towards Malaysian female undergraduates between the ages of 20 to 24 who are either pursuing a diploma or degree program in public or private universities. In Malaysia (as of March 2006), there are 28 private higher education institutions out of which 11 were full-fledged universities, 12 university-colleges, and 5 branch campuses of foreign universities. In addition, there are 18 public universities.

A survey using a self-administered questionnaire was randomly distributed to the Malaysian female undergraduates in campus. A face-to-face interview was conducted through a five-page questionnaire. There were a total of 20 questions: 4 were demographic profile questions, 4 were questions on Internet usage (frequency and various types of usage), and 12 questions were focused on safety awareness towards Net pals. The language used was typical of the lingo used by the campus undergraduates.

To make meaningful interpretations of the construct safety awareness towards net pals we have to move from the theoretical domain surrounding the construct to an empirical level that operationalises the construct. This was done by selecting specific sets of observable tasks believed to be indicators of safety awareness towards net pals such as age and gender of net pals, specific use of the Internet, face-to-face meeting, Internet safety and threats, and informing relevant parties.

Self-disclosure behaviours include (i) posting a picture of oneself on the Internet for other people to see, (ii) giving personal information such as address, full name, or phone number to someone met on the Internet and (iii) sending a picture of oneself to someone met on the Internet.

Safety awareness include (i) doing things to make sure one is safe at face-to-face meeting such as going with someone else, talking about it with someone, informing *relevant parties, and meeting in a public place, (ii) being aware of threats such as computer hackers, strangers accessing personal details on the websites, harassment in the chat rooms, verbal abuse, intimidation, implied sexual or physical threats in the e-mail or chat rooms and others which respondents can include in the openended question and finally (iii) informing relevant parties should one feel unsafe or being threatened while using the Internet. (*Such relevant parties include parents/caregivers, teachers, friends, and the police.)

The above mentioned are important dimensions of Internet safety awareness towards Net pals. The open-ended responses to specific items helped reduce under-representation of the structured content on safety awareness.

Data Analysis

Certain items were analyzed by making comparisons across the three universities, and some within individual universities. Due to a small number of missing responses there is a slight variation in the number who answered each item. For some items, response options were not mutually exclusive and therefore non-responses cannot be distinguished from negative responses. For example, not checking any response from a range of options for a certain item may mean that none were applicable or that the person chose not to answer that item. For some items, it was only possible to give one answer thus the response categories are mutually exclusive.

Demography of the Malaysian Female Undergraduates

The female undergraduates range in age from 20 years old to 24 years old. Figure 1 shows the percentage distribution of the age groups of the female undergraduates while Figure 2 shows the percentage distribution of the female undergraduates by accommodation.

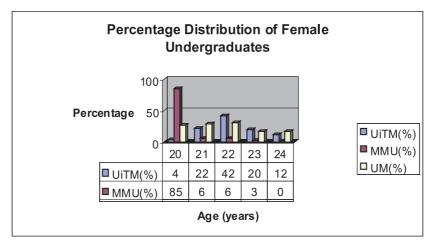


Figure 1

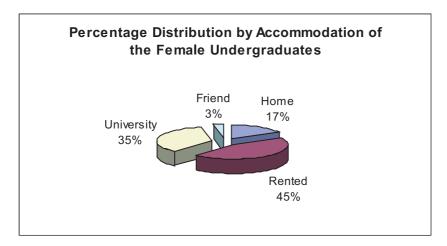


Figure 2

Table 1: Frequency in Accessing the Internet among the Female Undergraduates

	UiTM (%)	MMU (%)	UM (%)	Total (%)
Everyday	30	85	46	50
2 or 3 times a week	4	23	12	22
Once a week	26	12	31	24
Once a fortnight	2	0	11	4
Total	100	100	100	100

Table 2: Duration of Time Spent by the Female Undergraduates on the Internet in a Week

	UiTM (%)	MMU (%)	UM (%)	Total (%)
0-5 hours	78	31	54	57
6-10 hours	16	21	26	20
11 - 15 hours	2	18	9	9
16 - 20 hours	2	3	9	4
Above 20 hours	2	27	3	10
Total	100	100	100	100

Table 3: Internet Access Points of the Female Undergraduates

	UiTM (%)	MMU (%)	UM (%)
Home	5 (16%)	1 (53%)	4 (31%)
School/Faculty	2 (52%)	4 (10%)	3 (39%)
Cybercafe	1 (74%)	5 (7%)	5 (19%)
Someone else's home	3 (29%)	3 (14%)	1 (57%)
University library	4 (27%)	2 (20%)	2 (53%)

Note: Multiple responses. Numbers denote rank.

Reasons for Using the Internet

Table 4 shows the various reasons of the female undergraduates for using the Internet.

Table 4: Reasons of the Female Undergraduates for Using the Internet

	UiTM (%)	MMU (%)	UM (%)
Chat room	3 (37%)	4 (41%)	7 (22%)
E-mail	3 (37%)	7 (32%)	5 (31%)
Playing games	6 (24%)	3 (43%)	3 (32%)
Instant messages	8 (20%)	1 (52%)	6 (28%)
Surfing personal interest	2 (39%)	5 (40%)	8 (21%)
Making friends	5 (27%)	7 (32%)	1 (41%)
Downloads	4 (31%)	6 (43%)	2 (35%)
Bored, want something to do	7 (23%)	2 (45%)	4 (32%)
Academic or other related work	1 (41%)	8 (27%)	4 (32%)

Note: Multiple responses. Numbers denote rank.

Frequency of Usage of the Internet

Table 1 shows the frequency in accessing the Internet by the female undergraduates. 50% of the female undergraduates use the Internet daily. Most of the female undergraduates who use the Internet daily were from MMU. When comparing the Internet usage of twice or trice a week, UiTM female undergraduates register the highest usage (42%) compared to the other female undergraduates, followed by UM female undergraduates (12%). Table 2 shows the duration of time spent on the Internet in a week while Table 3 shows the ranked access points of the Internet of the female undergraduates.

Non Face-to-Face Communication

89% of the female undergraduates have at least communicated with their Net pals either through e-mail, snail mail or the telephone, which is a non-anonymous communication. 52% of the parents or caregivers of the female undergraduates were aware of the face-to-face meeting of their daughters meeting with their Net pals. Table 5 shows the percentage distribution of the various non face-to-face communication by the female undergraduates from the three universities.

Table 5: Percentage Distribution of non Face-to-Face Communication of the Female Undergraduates

	UiTM (%)	MMU (%)	UM (%)	Total (%)
e-mail	41	31	28	100
Snail mail	20	38	42	100
Telephone/hand phone	36	32	32	100

Table 6 shows the percentage distribution of the various precautionary measures taken by the 81% of the female undergraduates have personally met their Net pals.

Information of Net Pal

70% of the female undergraduates from the three universities first met their Net pals in chat rooms while 30% of them first met their Net pals in

Table 6: Precautionary Measures Taken at Face-to-Face Meeting

	UiTM (%)	MMU (%)	UM (%)
Went with someone	45	37	18
Informed someone	33	41	26
Informed parents	15	31	54
Met in a public place	49	30	22

websites that they frequent. Approximately half of the female undergraduates from UiTM (56%), and MMU (52%) befriended Net pals that are between one to five years older. Half of the UM undergraduates (52%) befriended Net pals that are of the same age. A very small percentage of the UiTM (7%), and MMU (4%) female undergraduates and none from UM, befriended Net pals that are above ten years older.

Potentially Unsafe Behaviour

Potentially unsafe behaviour would be posting a picture of oneself on the Internet for other people to see, giving personal information such as address, phone number, or full name, and sending a picture of oneself to Net pal. 41% of the female undergraduates would not do any of the above. Table 7 shows the percentage distribution of the 59% of the female undergraduates that would perform the previously mentioned behaviours

Table 7: Potentially Unsafe Behaviour

	UiTM (%)	MMU (%)	UM (%)	Total (%)
Posted a picture	26	49	25	45
Given personal information	n 39	17	44	15
Sent picture to Net pal	26	32	42	16

Note: Multiple responses

Safety Awareness

Most (91%) of the female undergraduates from the three universities have some awareness of Internet Safety. Most of the UiTM female undergraduates have heard of Internet Safety Awareness from the

website, followed by the media (newspaper, television, radio), friends, parents and teachers.

Most of the MMU female undergraduates heard of Internet Safety Awareness from their parents or caregivers. This is followed by their teachers, media, website and friends. The UM female undergraduates seem to hear of Internet Safety Awareness almost equally from parents, teachers, friend, media and website.

59% of the female undergraduates from the three universities have felt unsafe or threatened while using the Internet while 41% reported otherwise.

Perceived Unsafe Behaviours

Most of the female undergraduates perceived some unsafe behaviours when using the Internet. 67% of the female undergraduates from the three universities feared computer hackers, 52% feared strangers accessing their personal details, 31% feared implied sexual threats, 19% feared harassment, 14% feared verbal abuse or intimidation, and 7% feared implied physical threats. The top four behaviours that the UiTM female undergraduates perceive as unsafe are computer hackers, implied sexual threats, strangers assessing their personal information and harassment. These perceived unsafe behaviours are ranked almost equal.

A high percentage of the MMU female undergraduates (63%) perceive implied physical threats as the main unsafe behaviour. This perception is followed closely by, verbal abuse or intimidation, harassment, and strangers accessing their personal information.

UM female undergraduates register less percentage for each of the perceived unsafe behaviours compared to the other female undergraduates of the other two universities. The top three unsafe behaviours as perceived by the UM female undergraduates are implied sexual and physical threats, computer hackers, and strangers assessing their personal details.

Informing Relevant Parties of Any Internet Threats.

About 4% of the UiTM female undergraduates, would not inform anyone if something happened that made them feel unsafe or threatened while they was using the Internet. A slightly higher percentage (9%) of both

MMU and UM female undergraduates would do similarly. 76% of the female undergraduates would tell their friends, 41% would inform their parents or caregivers, and 9% would tell either their teacher or the police.

Implications of the Findings

Several important implications can be drawn from the findings of this study. In general, the age distribution was a cause for concern because a large percentage (90%) of the female undergraduates are at the susceptible age of 22 years (refer to Figure 1) where they can be easily taken advantage of.

On the whole, only 17% of the female undergraduates reside at home with their families. The rest of the students reside in the university hostels or dormitories, rented quarters or with friends. As such, these undergraduates are basically independent. Being far from home and lonely, these undergraduates surf the Internet quite often and access chat rooms to make new friends online. These electronic platforms often lack adult supervision. This is evident from the long hours spent surfing the Internet in a week. When comparing the Internet usage of twice or trice a week, UiTM female undergraduates register the highest usage, followed by MMU female undergraduates. UiTM female undergraduates also rank the highest in using the Internet for 0 to 5 hours in a week (refer to Table 2). As most of the UiTM female undergraduates do not live with their families, most of them access the Internet at cybercafés. The majority of the MMU and UM undergraduates access the Internet in their own home or someone else's home.

The MMU female undergraduates mainly use the Internet for instant messages. These undergraduates are bored and do not know what else to do to fill up their time. They also use the Internet for playing games and for chatting. The MMU female undergraduates ranked academic work the lowest in their reason for using the Internet. The top four reasons that the UM female undergraduates use the Internet are for making friends, followed by downloads, playing games and academic work.

The majority of the female undergraduates have at least communicated with their Net pals either through e-mail, snail mail or the hand phone, which is a non-anonymous communication.

70% of MMU, 50% of UiTM, and 29% of UM female undergraduates have met their Net pals. Out of the total number of female undergraduates that have personally met their Net pals, 19% felt that they did not need

to take any precautionary measures. Around half of the UiTM female undergraduates either went with someone (chaperoned) or they met in a public place. Very few of the UiTM undergraduates informed their parents.

70% of the female undergraduates first met their Net pals in chat rooms with 30% meeting theirs in the websites that they frequently visit. The type of chat rooms and websites visited are important as there are more unsavoury characters lurking in certain chat rooms and websites who might prey on young females.

A minimum of 76% of the female undergraduates have male Net pals. This could be because the female undergraduates are at an age of trying to find a suitable life partner. Approximately half of the female undergraduates from UiTM and MMU befriended Net pals that are between 1 to 5 years older. Half of the UM undergraduates befriended Net pals that are of the same age. A very small percentage of the UiTM and MMU undergraduates befriended Net pals that are above ten years older.

Half of the female undergraduates did not inform their parents or caregivers of their first meeting with their Net pals. They might feel that they are relatively safe and thus do not need to take any precautionary steps. 59% of the female undergraduates have at least performed one potentially unsafe behaviour. Potentially unsafe behaviour would be posting a picture of oneself on the Internet for other people to see, revealing personal information such as address, telephone number or their full name, and sending a picture of oneself to Net pals.

Almost all of the female undergraduates from the three universities have some awareness of Internet Safety. Most of the undergraduates heard of Internet Safety Awareness from the website, the media (newspaper, television, radio), friends, parents and teachers. This implies that everyone has a role to play in letting the young females be aware of safety issues when befriending strangers.

While on the Internet, some of the undergraduates felt unsafe due to implied sexual threats, verbal abuse and harassment. In such cases these young females should be warned and cautioned on what appropriate steps they should take if they felt uncomfortable when dealing with a particular stranger.

From the responses given, it was noted that some of the female undergraduates would not inform anyone if something happened that made them feel unsafe or threatened while they was using the Internet. This gives due cause for alarm as keeping quiet about the incident might

encourage the situation to worsen. Parents or caregivers, teachers, friends and the police all have an important role to play in educating the young female undergraduates on Internet Safety. Parents tend not to talk about Internet safety with their young adults in a timely and comprehensive way, leaving a vacuum in which the media may become a powerful educator, providing "frequent and compelling portraits of sex as fun and risk-free". Interestingly, one of the strongest predictors of risk for meeting Net pals for young adults was the perception that their peers were doing the same.

Young adults may begin to believe the worldview portrayed, and may begin to adopt the media's social norms as their own. Some, especially those who have fewer alternative sources of Internet safety awareness such as parents or friends, may use the media as a kind of super-peer that encourages them on.

Suggestions for Future Research

In this study, the respondents were female undergraduates from three universities in Malaysia. Thus, the findings could not be accurately generalized to the bigger population of Malaysian female undergraduates. It is recommended that similar studies be carried out with female undergraduates in other local universities as well as private institutions of higher learning so as to obtain a better representation of the situation. Future research may incorporate measuring the impact of meeting Net pals for the first time.

Conclusion

The findings presented in this study provide some good insights into the female undergraduates' perception of Internet safety awareness. Female undergraduates must always be aware of their environment — Net pals may constitute a threat. Safety issues towards Net pals should be given some priority and all relevant parties have an important role to play.

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