Research Title: The Digital Glass House - Social Networking and Privacy
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2nd Communication Research Conference: Facing The Future
London School of Public Relations (LSPR), Jakarta
8 April 2011

Abstract:

Since the explosion of the Internet age, nearly 2 billion people are connected to the World Wide Web, creating seemingly limitless opportunities for communication and collaboration including social networking. Communication is virtually instantaneous and vast amounts of information are available at the touch of a key. In such an open digital environment, we take it for granted that almost any information can be sourced online by anyone with Internet access. The rapid growth of the social networking sites (SNS) such as Facebook, which reaches 500 million users recently, has coincided with an increasing concern over personal privacy.

This study examines how Facebook users' perceptions of privacy, frequency of use, and the disclosure of their personal information with other users. This study was guided by two research questions: What are the Facebook users' perceptions of privacy and what is the personal information they disclose to other users? Does the Facebook users' frequency of use affect their disclosure of personal information? 149 respondents from the researcher's own Facebook profile filled up a Web-based questionnaire in August 2010. The data was analyzed using descriptive and inferential statistics. The research hypothesized that higher levels of privacy perception will result in less disclosure of personal information and the more active a user is on Facebook, the greater will be the user's likelihood of maintaining a private profile. The results of chi-square tests and correlation analysis found significant positive relationships between privacy perception and the disclosure of personal information, and no significant relationships between frequency of use and disclosure of personal information. Recommendations for future researchers were also included.

Adrian's Bio

Adrian Budiman is a Senior Lecturer in Communications and Media Program at Universiti Utara Malaysia. Adrian received his Ph.D. from the School of Media Arts and Studies at Ohio University. He received a BA in Management Economics from Gadjah Mada University (Indonesia) in 1992 and an MA in International Studies from Ohio University in 2003. His interests include impacts of new communication technologies, Internet communities and digital media. Adrian is also recognized on the international and national level as a practical media scholar. His international experiences includes appointed as a consultant for AIBD/UNESCO to the Voice of Vietnam in 2010, instructor for Media Monitoring at the Academy of Educational Development (AED), at Ohio in 2008, and as field coordinator for the Indonesian Broadcast Journalists project at Ohio in 2007. Adrian is regularly interviewed by the New Straits Times for issues regarding new media issues in Malaysia.

Arnie's Bio

Arnie Shakinar Abidin is a PhD student at the School of Communication, Universiti Sains Malaysia (USM). Arnie obtained a MSc (Managerial Communication) from Awang Had Salleh Graduate School of Arts and Sciences, College of Arts & Sciences, Universiti Utara Malaysia in 2010 and a BEd in Teaching English to Speakers of Other Languages (Hons.) from The University of Southampton, United Kingdom, in 2000. She received a Professional Award in Marketing UK Education from the British Council in 2005. She worked in the education industry for several years. Her past employers include the Ministry of Education, Malaysia, British Council and Taylor's University. She was also interviewed by The Star a couple of times. Her interests include online social networking, online privacy and analogue life versus digital life.

1.0 Background

The Internet has become a part of many people's daily life, from communicating with friends and family, paying bills and banking online, to working and conducting research. We live in a world where communication is virtually instantaneous and vast amounts of information are available at the touch of a key by our fingertips. In such an open digital environment, we take it for granted that almost any information can be sourced online including by numerous and anonymous users.

The increased use of the Internet, together with rapid advances in technology, has changed the way in which information about users is gathered, stored and exchanged. Accordingly, concerns about the privacy of Internet users have arisen.

1.1 Privacy

Individual privacy is an important dimension of human life. Definitions of privacy vary according to context, culture and environment. In an 1890 paper (cited in Rezgui, Bougettaya, and Eltoweissy, 2003), Samuel Warren and Louis Brandeis defined privacy as "the right to be let alone" (p. 41). In a seminal paper published in 1967, Alan Westin defined privacy as "the desire of people to choose freely under what circumstances and to what extent they will expose themselves, their attitude and behaviour to others" (Rezgui et al., 2003, p. 41). More recently, Ferdinand Schoeman defined privacy as the "right to determine what (personal) information is communicated to others" or "the control an individual has over information about himself or herself" (Rezgui et al., 2003, p. 41).

Generally, privacy is viewed as a social and cultural concept. Privacy has also become a digital problem with the ubiquity of computers and the emergence of the Internet. This problem is commonly referred to as Internet or online privacy. In general,

the phrase Internet privacy refers to the right of Internet users to conceal their personal information and have some degree of control over the use of personal information disclosed to others (Rezgui et al., 2003).

1.2 Social Networking

Social networking is a concept that has been around much longer than the Internet or even mass communication. Weaver and Morrison (2008) define social network as a network consisting of three or more entities communicating and sharing information. This could take the form of a research coalition, a Girl Scout troop, a university, or any number of other socially constructed relationships.

Since the explosion of the Internet age, nearly 2 billion people are connected to the World Wide Web (Miniwatts Marketing Group, 2010), creating seemingly limitless opportunities for communication and collaboration. In the context of today's electronic media, social networking has come to mean individuals using the Internet and Web applications to communicate in previously impossible ways (Weaver and Morrison, 2008). Social networks evolved to give users virtual hangouts where they could be themselves, share what they are doing or working on, or just express their views.

A social networking site (SNS) typically allows users to post their profiles and create personal networks for exchanging information with other users. As Nosko, Wood, and Molema (2010) mentioned, one of the primary goals of the SNS is to encourage disclosure of personal information with others online. Some examples of the SNS are Facebook, Friendster, MySpace and Twitter.

1.3 Facebook

Facebook (www.facebook.com) is a SNS that allows users to create personal profiles and establish connections with other users including their family, friends and colleagues. In addition to basic information such as name, profile picture and gender, which are always open to everyone, Facebook profiles also include optional information such as birthday, education, telephone numbers, address, email and photos. Users can also upload other media such as videos and interact with other users by commenting on their profile (or 'wall'), status updates, photos or videos.

Founded in February 2004, Facebook was initially restricted to Harvard students (Weaver and Morrison, 2008). In recent years, Facebook has opened its site to a wider audience in order to serve the growing demand for online social networking.

The rapid growth of SNS such as Facebook, which reaches 500 million users recently (Facebook, 2010) has coincided with an increasing concern over personal privacy. Press articles on privacy and SNS including Facebook have been published in The New York Times, The Guardian, The Daily Telegraph, The Independent, and BBC News, just to name a few.

Facebook members or users including students and adolescents provide personal information on their profiles that can be viewed by a large number of people. Rosenblum (2007) emphasised that the most immediate danger of posting online is the apparent one of leaving a permanent digital record of comprising photos and remarks that can later be searched and accessed by third parties trying to evaluate the character of an applicant for a job, school admission, or other competitive position for which applicants must be screened and eliminated. Companies now routinely use search engines to do their

background checks on prospective employees, and also often review SNS. As one officer observed, "You really do get a lot of information you can't ask for in the job interview, but you go on the Web and it's all right there" (Rosenblum, 2007, p. 46).

According to a recent survey by Microsoft, 75 percent of recruiters and human resource professionals in the United States of America (US or USA) reported that their companies require them to do online research about candidates, and many use a range of sites when scrutinising applicants – including search engines, social networking sites, photo and video sharing sites, personal Web sites and blogs, Twitter and online gaming sites. Seventy percent of US recruiters reported that they have rejected candidates because of information found online, like photos and discussion board conversations and membership in controversial groups (Rosen, 2010).

Recruiters are not the only ones checking up on students' profiles. Two swimmers at Louisiana State University lost athletic scholarships in May 2005 for making disparaging comments about their coach on Facebook. A student at Boston's Fisher College was reportedly expelled for defaming a college police officer on Facebook in October 2005 (Fleming, 2008).

Recently, a security consultant, Ron Bowes, published details of 100 million Facebook users, which he collected by using a piece of code to scan profiles for data not hidden by users' privacy settings. The list contained the URL (web page address) of every searchable Facebook user's profile, and their unique ID (username). Bowes mentioned that the data was published to highlight privacy issues (Emery, 2010).

According to McKeon (2010), the default privacy settings for a Facebook user's personal information has become more and more permissive. Facebook has changed how

the personal information is classified several times, which can be confusing to some users. Initially, Facebook restricted the visibility of a user's personal information to just their friends and 'network' (college or school) as seen in Figures 1.0 and 1.1 (see Appendices, pages 36 and 37). Soon, the visibility is open to all Facebook users (Figure 1.2, page 38) and the entire Internet (Figures 1.3 – 1.5, pages 39 – 41), with the general trend being towards encouraging users to share more about themselves with more people. Users have to change the default settings in order to keep their personal information private.

1.4 Literature Review

It is assumed that people's privacy perceptions and concerns reflect their privacy practices. However, previous studies on SNS reported that privacy perceptions and concerns do not parallel privacy practices (Viseu, Clement, and Aspinall, 2004; Hsu, 2006; Dwyer, Hiltz, and Passerini, 2007; Debatin, Lovejoy, Horn, and Hughes, 2009). Most scholars assume that people's privacy concerns represent how they will behave when they encounter privacy risks. As a result, scholars usually ask about respondents' privacy concerns without double-checking respondents' actual practices (Hsu, 2006). Previous studies have also found a discrepancy between users reporting understanding and caution in regards to privacy of their personal information and actually implementing the necessary steps to safeguard their personal information (Awad and Krishnan, 2006; Dwyer et al., 2007; Livingstone, 2008; Tufekci, 2008; Debatin et al., 2009). The majority of Facebook users claimed to know about ways to control visibility and searchability of their profiles, but some users were unaware of those tools and options (Acquisti and Gross, 2006). Jones and Soltren (2005) observed that users were generally familiar with

the privacy features Facebook offers, but some opted not to use the features instead. Rosenblum (2007) explained that users do not exercise in the virtual world even the routine common sense they would exercise in the real world. Most users do not exercise the same common sense because they believe they are interacting in a protected environment.

Having a private profile is associated with a higher level of online activity (Lewis, Kauffman, and Christakis, 2008). Respondents who do take action to protect their online privacy spend a higher number of hours per week online on average and have also been using the Internet for a greater number of years. It follows that the more online experience the respondents have, the more they will know about possible privacy threats, and the more they will know about how to take actions to protect themselves (Paine, Reips, Stieger, Joinson, and Buchanan, 2007). On the contrary, Jones and Soltren (2005) reported that the most active users disclose the most.

Chen and Rea (2004) stressed the need for more research on online privacy as online privacy issues are in their infancy. As technology advances and more users come online, studies concerning users' view of online privacy are essential. As Hsu (2006) put it, in the current computer age, privacy has become very "informationally enriched". Future research needs to recognise the difference between privacy concerns and privacy practices. Lewis et al. (2008) observed that given the widespread adoption of SNS, the increasing public scrutiny of online behaviour, and the policy implications surrounding online privacy more generally, it is surprising that few empirical data have been collected on the privacy practices of today's SNS users. While Facebook's privacy flaws are well documented and have made it into the news media, relatively little research is available

on how exactly these problems play out in the social world of Facebook users and how much the users know and care about these issues (Debatin et al., 2009). Nosko et al. (2010) expressed that relatively little is known about how people use SNS. Based on the surge in online communication, researchers have begun to explore self-disclosure online. Recent studies have begun to examine the use of online technology and the associated attitudes and behaviours that surround online communication. However, research in this area is still sparse.

Since many of the previous studies on SNS were conducted in the Western world, there is a need for studies in other parts of the world, such as in Asia, where a large number of Internet users reside, and particularly in Malaysia, where there is a huge number of user growth. According to the Internet World Statistics updated on 30 June 2010 by Miniwatts Marketing Group (2010), there are 825 million Internet users in Asia alone. Asia makes up 42% of the Internet users worldwide, which is the highest. Malaysia has 16.9 million Internet users with a staggering 356.8% user growth since 2000. Gonzalez (2010) stated that Malaysia has 7.9 million Facebook users. The largest ever global research project into people's online activities and behaviour, *Digital Life*, conducted by research firm TNS, reported that the heaviest users of SNS are in Malaysia, spending an average of nine hours per week on SNS (BBC News, 2010, October 10; TNS, 2010). Fisher-Hubner (1998) pointed out that people in most Asian countries have little sense of privacy. In addition, Hsu (2006) mentioned that scholars in some cross-cultural research claimed that people in Asian countries do not care about individual privacy. In the Western society, it is social custom that one does not ask others for personal information as a mark of respect (Nosko et al., 2010). The situation might be

different for the people in Asian countries including Malaysia. Malaysian Facebook users must be aware that if prospective employers or university admission officers want in-depth access to a candidate's personal activity, they can access their profiles, and readily get an uncensored, unflattering, and in many cases, largely unrepresentative portrait of the candidate if they did not use Facebook's privacy settings accordingly. Any Internet users can also access their personal information if they did not exercise cautions of the privacy settings, which could lead them to fall prey to identity thefts. Facing the challenge that privacy perceptions do not parallel privacy practices, this study seeks to find out Malaysian Facebook users' perceptions of privacy and their practices on Facebook.

1.5 Research Questions

This study aims to investigate Facebook users' perceptions of privacy, frequency of use, and the disclosure of their personal information with other users. The research questions are:

1) What are the Facebook users' perceptions of privacy and what is the personal information they disclose to other users?
2) Does the Facebook users' frequency of use affect their disclosure of personal information?

1.6 Significance of the Study

The findings of this study will contribute to the knowledge of privacy perceptions and privacy practices on SNS. This study is also aimed to bridge the gap that exists in the existing literature of privacy and SNS particularly within the Malaysian context. This

study will be beneficial for future researchers because it provides local insights into the factors related to the disclosure of personal information on Facebook. The study will also help to educate Facebook users on the sensitivity of the disclosure of their personal information online and its possible frightening consequences in the future.

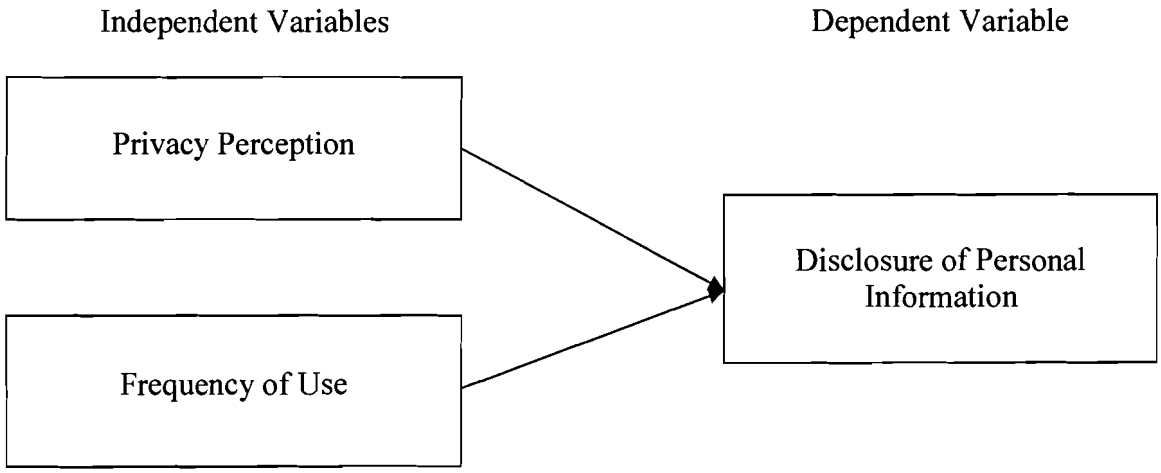
1.7 Scope of the Study

This study aims to examine Facebook users' perceptions of privacy, frequency of use, and the disclosure of their personal information with other users based on a personal profile in Malaysia. A personal profile is chosen because most of the previous studies opted for tertiary (college and university) students as the sample. Also, since most of the previous studies were based in the Western world, there may be differences in the research findings.

1.8 Proposed Theoretical Framework

Figure 2.0 shows the proposed theoretical framework, which represents the variables, namely the independent variables – privacy perception and frequency of use, and disclosure of personal information as the dependent variable.

Figure 2.0 Proposed Theoretical Framework



1.9 Hypotheses

There are two hypotheses developed based on the research questions and the theoretical framework. These are:

H1: Higher levels of privacy perception will result in less disclosure of personal information.

H2: The more active a user is on Facebook, the greater will be the user's likelihood of maintaining a private profile.

2.0 Methodology

A quantitative study was conducted to investigate Facebook users' perceptions of privacy, frequency of use and the disclosure of their personal information with other users.

2.1 Research Design

2.1.1 Sampling

The population of this study is the Facebook friends of the researcher's Facebook account. The total population is 400. The sample size of 100 was selected based on the sample size proposed by Peck, Olsen, and Devore (2008) who stated that for a population of 400, the researcher is recommended to recruit 100 respondents.

The sampling procedures were on a voluntary response or first come, first served basis, in which the first 100 completed responses were selected for data analysis. The researcher received 149 responses, which were used for data analysis.

A personal profile was chosen for the study because most of the previous studies opted for tertiary (college and university) students as the sample. A more diverse sample

was preferred for the study rather than a homogeneous group such as tertiary students. A convenience sampling was selected due to the nature of the study. Convenience sampling is built upon selections which suit the convenience of the researcher and which are 'first to hand'. The most easily accessible population are chosen as sample. The researcher has limited time and resources at her disposal and thus, it is quite reasonable that she should choose the most convenient. An element of convenience is likely to enter into sampling procedures of most research (Denscombe, 2003). As Stake (1995) pointed out, the researcher's time and access for fieldwork are almost always limited. If we can, we need to pick cases which are easy to get to and hospitable to our inquiry.

2.1.2 Instrumentation

The study was conducted using the primary data collection through a Web-based questionnaire created using Google Documents (or Google Docs). The questionnaire was designed as a Web page and located on a host site, namely Google Docs.

The questionnaire was developed based on adapted questions from Viseu et al. (2004), Jones and Soltren (2005), Acquisti and Gross (2006), Dwyer et al. (2007), Goettke and Christiana (2007) and Debatin et al. (2009). There were twenty items in the questionnaire, which consisted of four items on demographic factors, ten items on privacy perception, three items on frequency of use and finally, three items on disclosure of personal information. Table 3.0 (see Appendices, page 42) presents the measurement items of the study.

The first part of the questionnaire contained four demographic items. The respondents were required to state their gender, age, occupation, and education level. The second part consisted of ten items on one of the independent variables, privacy

perception. These items were measured using the Likert scale from strongly disagree (1) to strongly agree (5). The respondents were asked to indicate their level of agreement by choosing a value that corresponded to what they think or feel in answering the questions. The third part showed three items on another independent variable, frequency of use. Respondents were asked to choose one answer from the answers given for one item and filled up the answers in the blanks for two other items. The final part consisted of three items on the dependent variable, disclosure of personal information. Respondents were asked to choose one answer from the answers given for one item. One item was measured using the Likert scale from strongly disagree (1) to strongly agree (5). Respondents were required to tick all the answers that apply to them for the final item, as well as filled up the answers in the blank.

2.1.3 Data Collection Procedures

The data collection began on 30 August until 6 September 2010. The link to the Web-based questionnaire was posted on the researcher's Facebook wall and distributed to the respondents using Facebook's private message function. The respondents filled up the Web-based questionnaire voluntarily and submitted it online. The researcher received 149 completed questionnaires. The respondents' answers were automatically fed into a Google Docs' spreadsheet.

2.1.4 Data Analysis

The data collected on a Google Docs' spreadsheet was copied into SPSS for data analysis. The data was summarised using the appropriate descriptive and inferential

statistics, and was analysed based on the hypotheses developed in 1.9. The results of data analysis are presented in the next section.

3.0 Findings

The researcher received 149 completed questionnaires, which were used for data analysis. The link to the Web-based questionnaire was posted on the researcher's Facebook wall and distributed to the respondents using Facebook's private message function. The respondents filled up the Web-based questionnaire voluntarily and submitted it online. The respondents' answers were automatically fed into a Google Docs' spreadsheet.

3.1 Demographic Factors

Chart and Table 3.0 (see Appendices, page 42) show that female respondents formed 66% of the sample, while the remaining 34% were male respondents.

Chart and Table 3.1 (Appendices, page 43) illustrate that the respondents' age ranged from 16 to 65 years old. The highest percentage of respondents was those aged 31 – 35 years (54%). The second highest percentage was those from 26 – 30 years old (15%). The age groups with the lowest percentage were 16 – 20, 46 – 50 and 56 – 60 years, with 1% each. The other age groups were 21 – 25 years (8%), 36 – 40 years (11%), 41 – 45 years (4%), 51 – 55 years (3%) and 61 – 65 years (2%). The average age was 34.

Chart and Table 3.2 (Appendices, page 44) demonstrate that public sector employees represented the highest percentage of the sample (48%), while those who worked in the private sector came second (21%). The remaining groups were students (15%), business or services (11%) and homemaker, retiree or unemployed (5%).

Chart and Table 3.3 (Appendices, page 45) display that respondents with undergraduate degrees composed the highest percentage in terms of education level (51%). The second highest percentage was postgraduate and professional qualification (28%). The other groups for education level were diploma (13%), pre-university (3%) and secondary or high school (5%).

3.2 Descriptive Analysis

Descriptive analysis which includes the mode, mean and standard deviation for the independent and dependent variables are presented in Table 3.4 (Appendices, page 46). The lowest mode score was 1 (frequency of use) and the highest was 5 (privacy perception). The mean is ranged from 2.68 (frequency of use) to the highest mean score of 3.60 (privacy perception). The standard deviation varied from the lowest score of 1.08 (privacy perception) to the highest score of 1.14 (disclosure of personal information).

3.3 Findings

The results of inferential statistical tests are presented in this section.

3.3.1 Chi-square

Statistical tests of significance provide an estimate of the probability that any association found between two or more variables is the product of sheer chance rather than a genuine connection between such variables – connections that will be found on other occasions. These tests provide a benchmark for researchers, indicating whether to proceed on the assumption that the apparent connection is real or whether to treat the data as unreliable evidence on the point (Denscombe, 2003).

Probably the most flexible and certainly the most commonly used statistical test of significance is the chi-square test. The chi-square test works with nominal data, as well as ordinal, internal and ratio data, which explains its popularity. The chi-square allows researchers to compare an observed set of data against an expected set of values to see how well the observed data fit what was expected. The difference between what was 'observed' and what was 'expected' is the key to the chi-square test. The chi-square test uses the extent of difference (in the cells of contingency tables) between what was observed and what might have been expected in order to calculate whether researchers can have confidence that the observed relationship was actually due to something other than pure chance – whether it was real or a fluke (Denscombe, 2003).

A significant chi-square tells the researchers that the observed distribution differs significantly from the expected distribution (Allen et al., 2009).

3.3.2 Correlation Coefficient

A correlation describes a statistical relationship between two variables based on each observation (e.g. person or case). Correlations range from -1.0 to +1.0 (both of these values indicate perfectly correlated variables). If the two variables are not correlated (or the researcher does not have the data to be able to observe the correlation), the correlation value will be zero. The values in between, which are commonly observed, indicate some less than perfect ability to predict the value of one variable based on the value of the other. The more accurate the prediction, the larger the correlation (i.e. closer to either 1 or -1) and the smaller the correlation (i.e. closer to zero), the less accuracy in the prediction. A positive correlation indicates that as one value increases, the value for the other variable also increases. A negative correlation indicates that as one value for a variable

increases, the value of the other variable decreases (Allen et al., 2009). While correlation could range between -1.0 and +1.0, the researcher needs to know if any correlation found between two variables is significant or not (i.e. if it has occurred solely by chance or if there is a high probability of its actual existence). In addition, a significance of p value of less than 0.05 (or < 0.05) is the generally accepted conventional level in social sciences research. This indicates that 95 times out of 100, the researcher can be sure that there is a true or significant correlation between the two variables, and there is only a 5% chance that the relationship does not truly exist (Sekaran, 2003).

In reality, correlations are unlikely to be perfect. Researchers generally regard any correlation coefficient between 0.3 and 0.7 (plus or minus) as demonstrating some reasonable correlation between two variables. The scale model suggested by Davis (1971) used to describe the relationship between the independent variables and the dependent variables are as shown below:

a) 0.7 and above – very strong relationship
b) 0.50 to 0.69 – strong relationship
c) 0.30 to 0.49 – moderate relationship
d) 0.10 to 0.29 – weak relationship
e) 0.01 to 0.09 – very weak relationship

Table 3.5 (Appendices, page 47) shows the relationship between privacy perception (questions 1–10) and disclosure of personal information (question 14). The results indicated that there were significant relationships for four items – questions 1, 2, 3 and 9 ($p < 0.05$) and the correlations were from weak (0.229) to moderate (0.374).

Table 3.6 (Appendices, page 48) displays the relationship between privacy perception (questions 1–10) and disclosure of personal information (question 15). The results revealed that there were significant relationships for nine items ($p < 0.05$) with the exception of question 6 (or Q6). The correlation ranged from very weak (0.032) to strong (0.541).

Table 3.7 (Appendices, page 49) illustrates the relationship between privacy perception (questions 1–10) and disclosure of personal information (question 16). The results registered that there were significant relationships for six items ($p < 0.05$). The correlation ranged from strong (0.567) to very strong (0.728).

H1: Higher levels of privacy perception will result in less disclosure of personal information.

Out of 30 items displayed in Tables 3.5, 3.6 and 3.7 (Appendices, pages 47–49), 19 items recorded significant positive relationships between the first independent variable, privacy perception and the dependent variable, disclosure of personal information. It could be concluded that generally, higher levels of privacy perception resulted in more disclosure of personal information. In other words, higher levels of privacy perception did not result in less disclosure of personal information. Hence, hypothesis 1 is not supported.

Table 3.8 (Appendices, page 50) shows the relationship between frequency of use (questions 11–13) and disclosure of personal information (question 14). The results registered no significant relationships for all three items ($p > 0.05$).

Table 3.9 (Appendices, page 50) illustrates the relationship between frequency of use (questions 11–13) and disclosure of personal information (question 15). The results

indicated that there was a significant relationship for one item – question 11 ($p < 0.05$). The correlation was moderate (0.303).

Table 3.10 (Appendices, page 51) displays the relationship between frequency of use (questions 11–13) and disclosure of personal information (question 16). The results revealed that there was a significant relationship for one item – question 13 ($p < 0.05$). The correlation was strong (0.574).

H2: The more active a user is on Facebook, the greater will be the user's likelihood of maintaining a private profile.

Out of 9 items illustrated in Tables 3.8, 3.9 and 3.10 (Appendices, pages 50–51), only 2 items recorded significant relationships between the second independent variable, frequency of use and the dependent variable, disclosure of personal information. Hence, hypothesis 2 is also not supported.

3.3.3 Summary of Findings

Table 3.11 exhibits the summary of data analysis.

Table 3.11 Summary of Data Analysis

	Hypothesis	Result
H1	Higher levels of privacy perception will result in less disclosure of personal information.	Not supported
H2	The more active a user is on Facebook, the greater will be the user's likelihood of maintaining a private profile.	Not supported

4.0 Discussion and Conclusions

This study examined the Facebook users' perceptions of privacy, frequency of use, and the disclosure of their personal information with other users. The research questions which guided the study were:

1) What are the Facebook users' perceptions of privacy and what is the personal information they disclose to other users?
2) Does the Facebook users' frequency of use affect their disclosure of personal information?

The findings are discussed in the following section.

Research question 1: What are the Facebook users' perceptions of privacy and what is the personal information they disclose to other users?

Charts 4.0 – 4.9 and Tables 4.0 – 4.9 (see Appendices, pages 52–61) provided information concerning the respondents' privacy perceptions. 57% of the respondents reported 'strongly agree' and 25.5% recorded 'agree' when asked whether they valued their privacy on Facebook whereas 3.4% of the respondents strongly disagreed (Chart and Table 4.0, page 52). 64% were very concerned and 18% were concerned with the disclosure of personal information that they provided on their Facebook profile. Only 1% of the respondents were not concerned at all (Chart and Table 4.1, page 53). 45% claimed they were very familiar and 32% said they were familiar with Facebook's privacy settings that let them control who may view their personal information. 2% were not familiar with the privacy settings at all (Chart and Table 4.2, page 54). 50% chose 'strongly agree' and 28% opted for 'agree' when enquired whether they can prevent other Facebook users from viewing their photos. Only 1% strongly disagreed (Chart and Table

4.3, page 55). A small percentage of 6% strongly agreed that Facebook has done enough to secure their personal information. As many as 51% were not sure if Facebook has done enough to secure their personal information (Chart and Table 4.6, page 58). On the contrary, 58% thought that they have done enough to secure their personal information on Facebook. 8% stated 'disagreed' and 3% reported 'strongly disagreed' for the statement (Chart and Table 4.7, page 59). 77% claimed that they have accepted a friend request with their privacy in mind. Only 1% strongly disagreed with the statement (Chart and Table 4.8, page 60). However, 44% admitted that they have accepted a friend request from someone they have never met in person. 32% strongly disagreed with the statement (Chart and Table 4.9, page 61).

Overall, the data in Charts and Tables 4.0 – 4.9 (Appendices, pages 52–61) recorded reasonably high percentages of 'strongly agree' and 'agree' from the respondents. These proved that the respondents did have fairly high levels of privacy perception. However, only 26% of the respondents admitted that they have read Facebook's Privacy Policy in full (Chart and Table 4.4, page 56) and 22% claimed that they have read Facebook's Terms of Service in full (Chart and Table 4.5, page 57).

Chart 4.14 and Table 4.14 (page 66) charted how many respondents used Facebook's privacy settings to control who may view their personal information. 49.7% strongly agreed and 29.7% agreed with the statement. 2.7% strongly disagreed.

Chart 4.15 and Table 4.15 (pages 67–68) revealed items of the personal information which the respondents disclosed to other Facebook users. 60% of the respondents disclosed their current location, hometown (58%), year of birth (50%), relationship status (66%), education information (52%), work information (38%), email

address (50%), mobile number (9%), home address (3%) and other (13%). Items specified in 'Other' were political views, likes and interests, and website.

19 of the 30 items displayed in Tables 3.5, 3.6 and 3.7 (pages 47–49) revealed significant positive relationships between the first independent variable, privacy perception and the dependent variable, disclosure of personal information. It could be concluded that in general higher levels of privacy perception did not result in less disclosure of personal information. This finding was consistent with previous studies conducted by Viseu et al. (2004) and Hsu (2006). Previous studies reported a gap between privacy perceptions and actions towards privacy. In other words, Internet users' privacy concerns did not reflect their privacy practices such as the case with respondents in this study.

Research question 2: Does the Facebook users' frequency of use affect their disclosure of personal information?

Charts and Tables 4.10 – 4.12 (Appendices, pages 62–64) supplied information on the respondents' frequency of use. Chart and Table 4.10 (page 62) illustrated that 34.2% of the respondents have been using Facebook for 2 years, 3 years (21.5%) and more than 3 years (22.1%). Chart and Table 4.11 (page 63) showed that 17.4% logged on once on Facebook daily, 2 times (25.5%), 3 times (18.8%), 4 times (12.1%) and 5 times (17.4%). Chart and Table 4.12 (page 64) displayed that 50.3% spent between 1 – 30 minutes on Facebook each time they log on to the site, 31 – 60 minutes (22.1%), 61 minutes – 2 hours (13.4%), 3 – 4 hours (10.1%) and 5 hours and above (4%).

83% of the respondents have a private profile and 17% have a public profile (Chart and Table 4.13, page 65).

Only 2 of the 9 items illustrated in Tables 3.8, 3.9 and 3.10 (pages 50–51) recorded significant relationships between the second independent variable, frequency of use and the dependent variable, disclosure of personal information. This finding was parallel with the study conducted by Jones and Soltren (2005). The scholars reported that the majority of respondents who were active users tend to be more open or disclose personal information the most.

5.1 Limitations of the Study

This study had some limitations. The limitations were:

a) *Time and financial constraints.* For a small-scale research like this study, there tend to be tight constraints on time and money. The researchers did not have the luxury of trying different approaches for the study if one approach did not work.

b) *Convenience sample.* Due to limited time and access for fieldwork, the researchers decided to focus on Facebook friends from one the researcher's own Facebook account as a sample. This could limit its generalisability to a larger population.

c) *Instrument.* The study was measured using a self-reported Web-based questionnaire only.

5.2 Recommendations for Future Research

The researchers would like to make the following suggestions for future research:

a) *More studies on Facebook and privacy.* According to Jones and Soltren (2005), no previous academic work specific to Facebook was found on the Lexis database, Google's database for scholarly papers, the Social Science Research

Network, and Internet search engines. Previous studies stressed the need for more research on SNS and privacy as research in this field is still sparse (Lewis et al., 2008; Debatin et al., 2009). There is also a need for more studies in this field in Asia as many of the previous studies were conducted in the Western world. As Chen and Rea (2004) put it, as technology advances and more users come online, studies concerning users' view of online privacy are essential. The researcher would also like to suggest more larger-scaled studies on Facebook and privacy such as *Digital Life*, the largest ever global research project into people's online activities and behaviour around the globe. The *Digital Life* researchers interviewed almost 50,000 consumers across 46 countries (TNS, 2010). A larger-scaled research would allow access to more accurate and complete picture of the selected field. Findings from larger-scaled studies would likely to provide more impact on policy changes. For instance, if hundreds of millions of Facebook users were to demand that Facebook makes privacy as the default setting on the site, Facebook Inc. would likely to be more willing to listen.

b) *Variables*. Future researchers might want to expand studies on SNS and privacy by adding new variables which were not mentioned in previous studies.

c) *Theories*. Future researchers might want to consider using other theories which were not used in previous studies to support their findings.

d) *Instrument*. The researchers would like to suggest future researchers to use other instruments such as interviews or data mining and interviews for depth of information. The researchers are likely to gain valuable insights based on the

depth of information. Direct contact at the point of interview means that data can be checked for accuracy and relevance as the researchers collect the data.

e) *Sample*. Many of the previous studies opted for tertiary (college and university) students as the sample. Therefore, the researchers would like to recommend more heterogeneous or diverse samples so better generalisabilities to larger populations can be made.

5.4 Conclusions

The results of the study were consistent with a few previous studies conducted in the Western world, such as by Viseu et al. (2004) and Hsu (2006), which reported a gap between privacy perceptions and actions towards privacy. The findings were also parallel with the study conducted by Jones and Soltren (2005) who reported that the majority of respondents who were active users tend to be more open or disclose personal information the most.

In conclusion, this study has contributed to the understanding of privacy perceptions and privacy practices on Facebook particularly in Malaysia. It is hoped that the study has bridged the gap existed in the existing literature of privacy and SNS within the Malaysian context. The researchers had also received feedback from a few Facebook users (i.e. the respondents) that this study had helped to educate them on privacy. Hopefully, this study will also help to educate other Facebook users out there on the importance of privacy and to be aware of the possible consequences of the disclosure of their personal information.

It goes without saying that there is a need for the respondents as well as other Facebook users to take more proactive actions to protect their personal information and

privacy on Facebook. The users need to be cautious with the information they provide on Facebook and restrict access to their profiles. The consequences of excessive disclosure of personal information and false senses of security are just beginning to emerge. As information retrieval and analysis tools become more powerful, the users need to develop common sense about accepted practices on Facebook (Jones and Soltren, 2005).

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APPENDICES

Figure 1.0 Facebook's default privacy settings: The milestone (2005)
Source: McKeon, M. (2010).

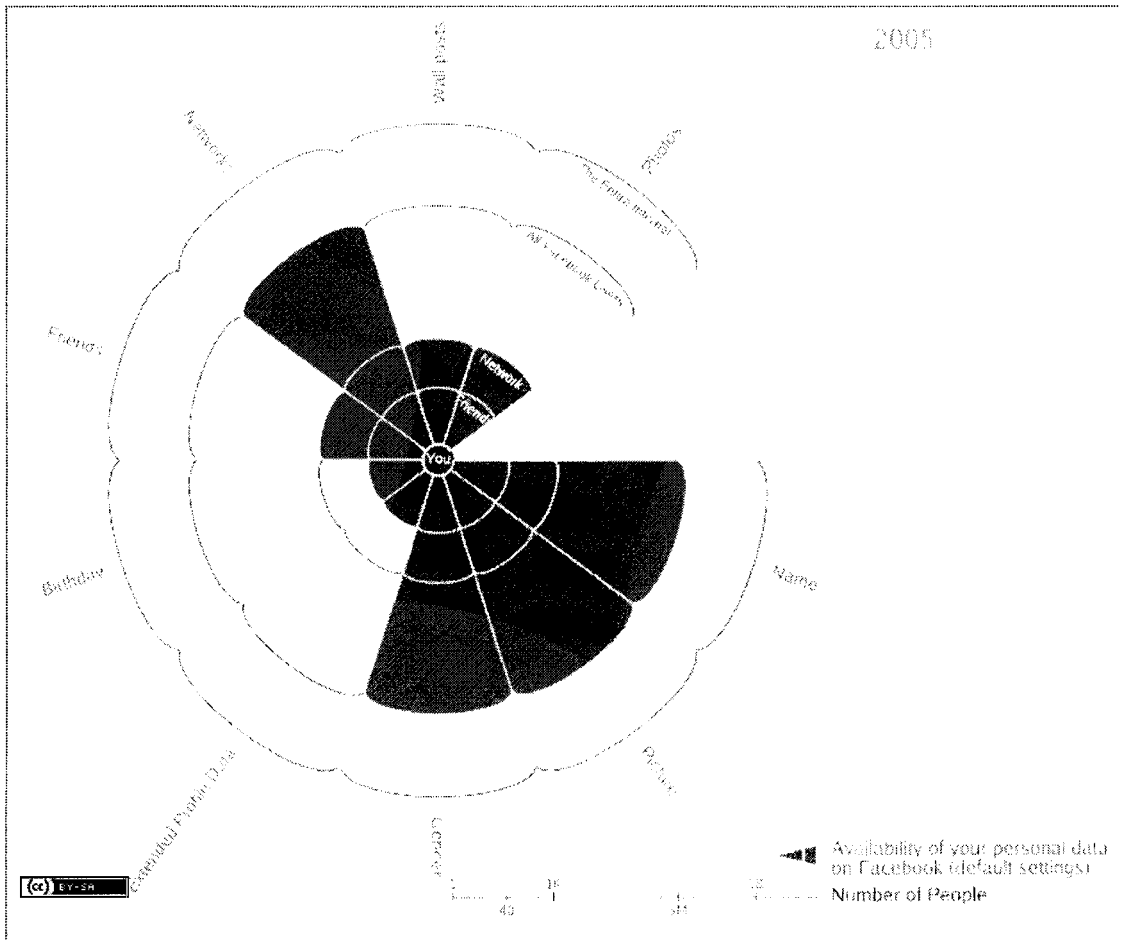


Figure 1.1 Facebook's default privacy settings: The milestone (2006)
Source: McKeon, M. (2010).

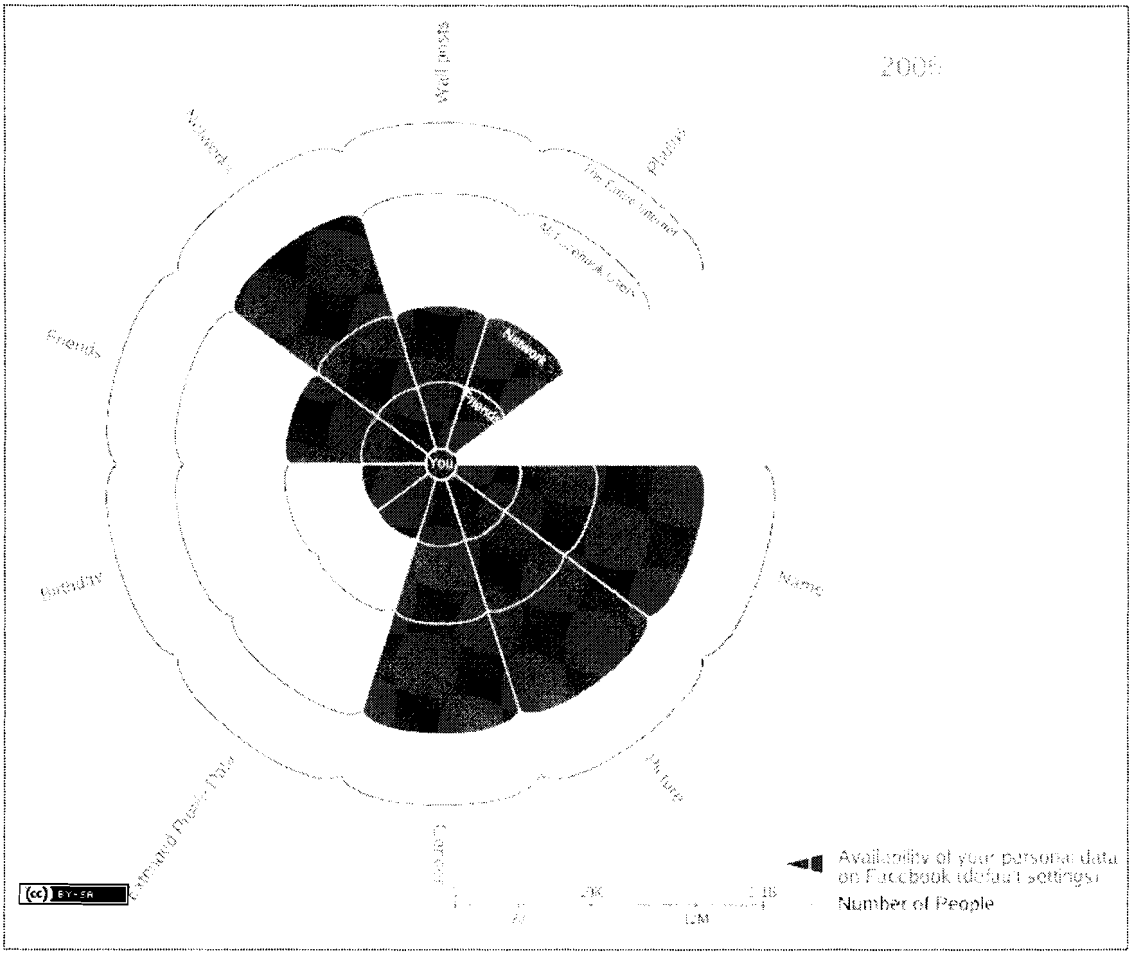


Figure 1.2 Facebook's default privacy settings: The milestone (2007)
Source: McKeon, M. (2010).

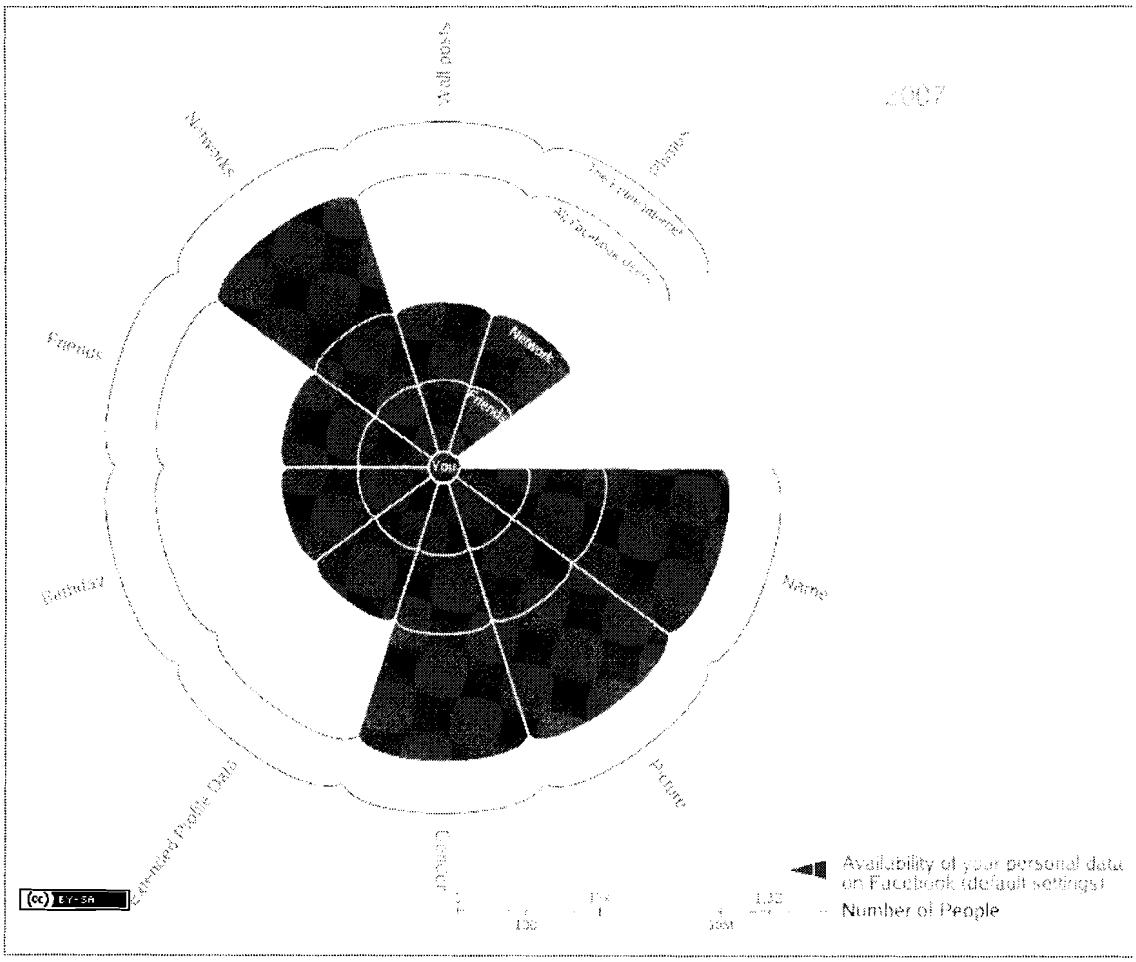


Figure 1.3 Facebook's default privacy settings: The milestone (November 2009)
Source: McKeon, M. (2010).

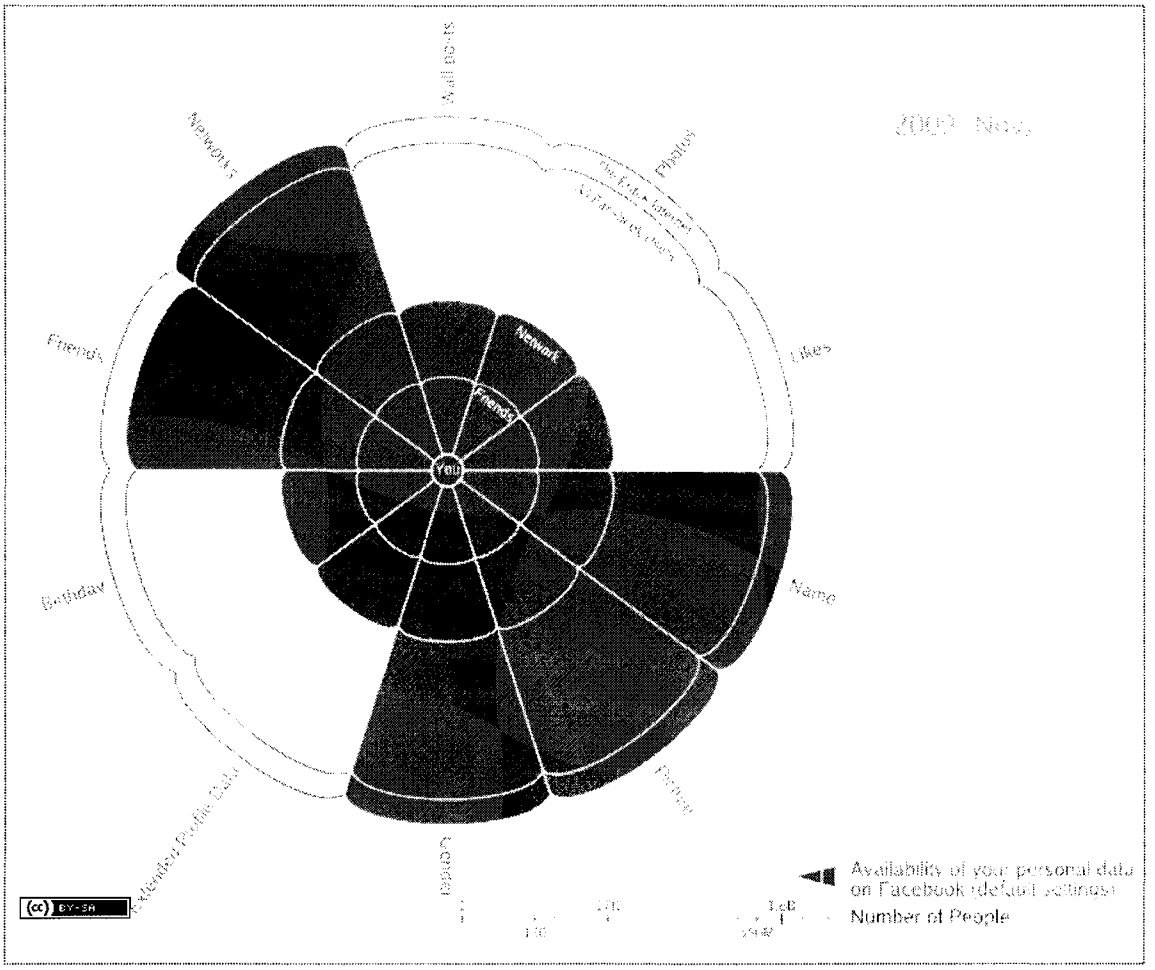


Figure 1.4 Facebook's default privacy settings: The milestone (December 2009)
Source: McKeon, M. (2010).

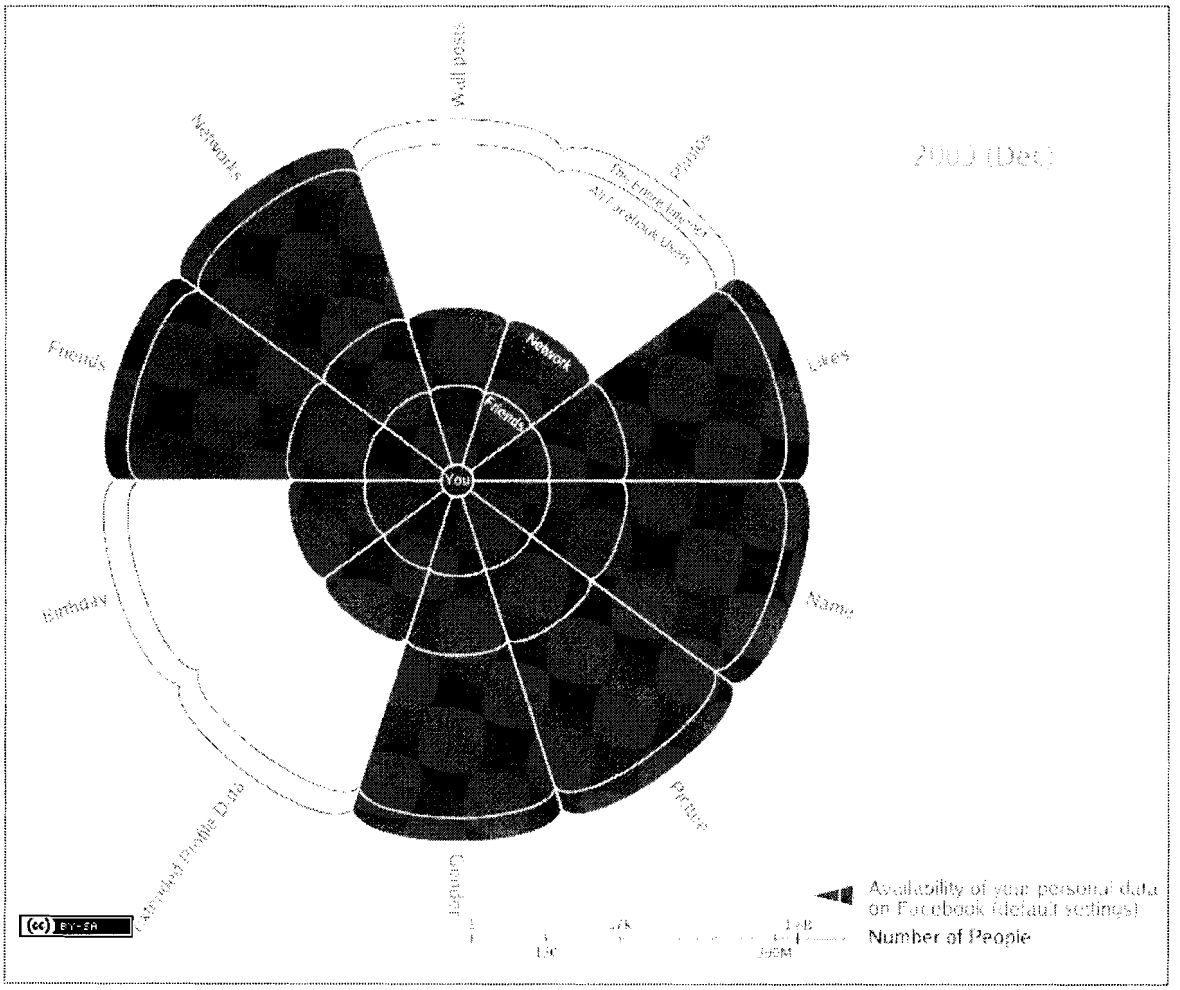


Figure 1.5 Facebook's default privacy settings: The milestone (April 2010)
Source: McKeon, M. (2010).

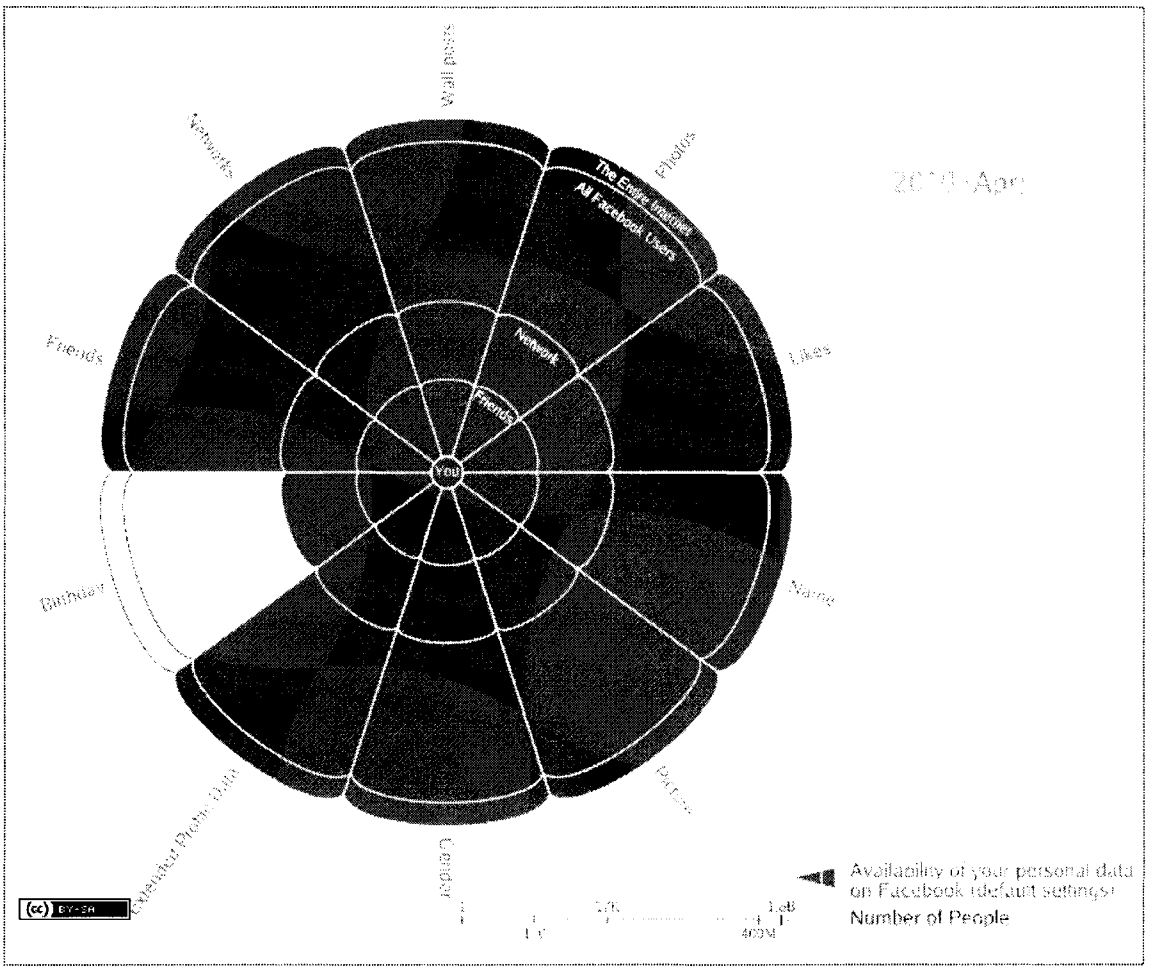


Table 3.0 Measurement Items

Variables	Items	Scales	Sources
Privacy Perception	10	Five-point Likert scale	Viseu et al. (2004), Jones and Soltren (2005), Acquisti and Gross (2006), Dwyer et al. (2007), Goettke and Christiana (2007), and Debatin et al. (2009).
Frequency of Use	3	Five-point Likert scale, and fill in the blanks.	Jones and Soltren (2005), and Dwyer et al. (2007).
Disclosure of Personal Information	3	Five-point Likert scale, tick answers that apply, and fill in the blank.	Jones and Soltren (2005), and Dwyer et al. (2007).

Chart 3.0 Gender

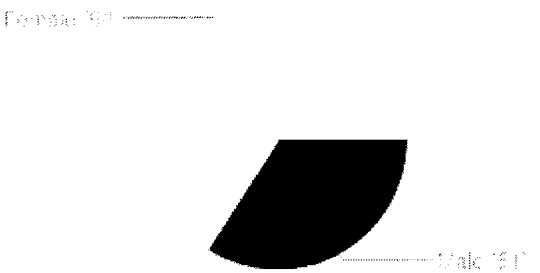


Table 3.0 Gender

Gender	Frequency	Percentage (%)
Male	51	34.2
Female	98	65.8
Total	149	100.0

Chart 3.1 Age Groups

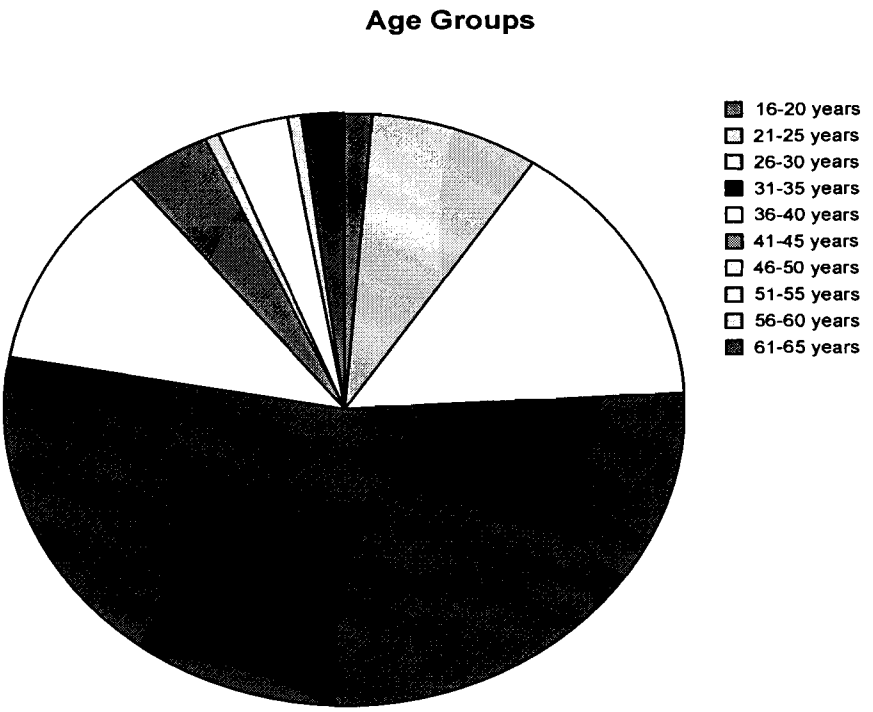


Table 3.1 Age Groups

Age Groups	Frequency	Percentage (%)
16-20 years	2	1.3
21-25 years	12	8.1
26-30 years	22	14.8
31-35 years	80	53.7
36-40 years	17	11.4
41-45 years	6	4.0
46-50 years	1	0.7
51-55 years	5	3.4
56-60 years	1	0.7
61-65 years	3	2.0
Total	149	100.0

Chart 3.2 Occupation

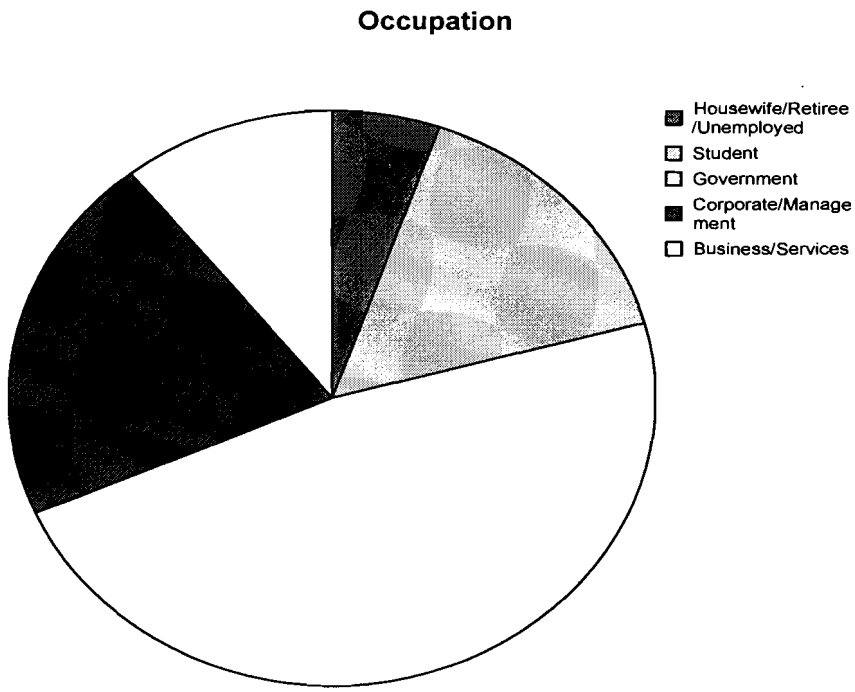


Table 3.2 Occupation

Occupation	Frequency	Percentage (%)
Housewife/Retiree/Unemployed	8	5.4
Student	23	15.4
Government	71	47.7
Corporate/Management	31	20.8
Business/Services	16	10.7
Total	149	100.00

Chart 3.3 Education Level

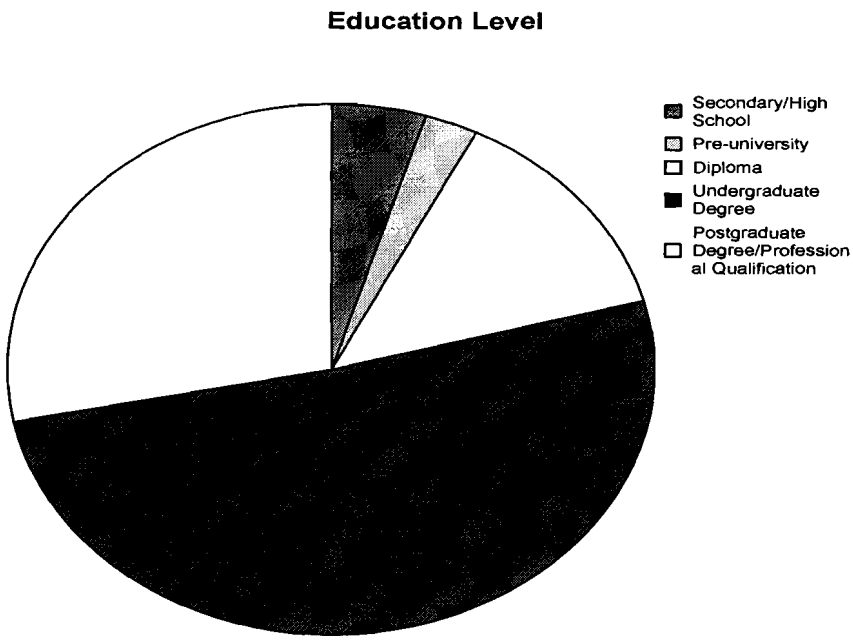


Table 3.3 Education Level

Education Level	Frequency	Percentage (%)
Secondary/High School	7	4.7
Pre-university	4	2.7
Diploma	20	13.4
Undergraduate Degree	76	51.0
Postgraduate Degree/ Professional Qualification	42	28.2
Total	149	100.0

Table 3.4 Descriptive Statistics of the Dependent and Independent Variables

Variables	Mode	Mean	Standard Deviation
Privacy Perception	5	3.60	1.08
Frequency of Use	1	2.68	1.25
Disclosure of Personal Information	2	3.32	1.14

Table 3.5 Chi-square Tests and Correlations between Privacy Perception (Questions 1-10) and Disclosure of Personal Information (Question 14)

Item	Variables	P-value	Result	Correlation Coefficient	
Q1	I value my privacy on Facebook. *Q14	0.0450	Reject H null	0.255	Weak
Q2	I am concerned of the disclosure of personal information that I provide on my Facebook profile. *Q14	0.003	Reject H null	0.326	Moderate
Q3	I am familiar with Facebook's privacy settings that let me control who may view my profile. *Q14	0.099	Reject H null	0.229	Weak
Q4	I can prevent other Facebook users from viewing my photos. *Q14	0.428	Fail to reject	-	-
Q5	I have read Facebook's Privacy Policy in full. *Q14	0.121	Fail to reject	-	-
Q6	I have read Facebook's Terms of Service in full. *Q14	0.258	Fail to reject	-	-
Q7	Facebook has done enough to secure my personal information. *Q14	0.803	Fail to reject	-	-
Q8	I have done enough to secure my personal information on Facebook. *Q14	0.139	Fail to reject	-	-
Q9	I accept a friend request with my privacy in mind. *Q14	0.000	Reject H null	0.374	Moderate
Q10	I have accepted a friend request from someone I have never met in person. *Q14	0.140	Fail to reject	-	-

*Q14: Is your profile private (can be viewed by friends only) or public (open to everyone)?

p value is significant at < 0.05

H null: There is no relationship between two variables

Table 3.6 Chi-square Tests and Correlations between Privacy Perception (Questions 1-10) and Disclosure of Personal Information (Question 15)

Item	Variables	P-value	Result	Correlation Coefficient	
Q1	I value my privacy on Facebook. *Q15	0.000	Reject H null	0.433	Moderate
Q2	I am concerned of the disclosure of personal information that I provide on my Facebook profile. *Q15	0.000	Reject H null	0.459	Moderate
Q3	I am familiar with Facebook's privacy settings that let me control who may view my profile. *Q15	0.000	Reject H null	0.435	Moderate
Q4	I can prevent other Facebook users from viewing my photos. *Q15	0.000	Reject H null	0.311	Moderate
Q5	I have read Facebook's Privacy Policy in full. *Q15	0.016	Reject H null	0.163	Weak
Q6	I have read Facebook's Terms of Service in full. *Q15	0.225	Fail to reject	-	-
Q7	Facebook has done enough to secure my personal information. *Q15	0.024	Reject H null	0.221	Weak
Q8	I have done enough to secure my personal information on Facebook. *Q15	0.000	Reject H null	0.541	Strong
Q9	I accept a friend request with my privacy in mind. *Q15	0.000	Reject H null	0.481	Moderate
Q10	I have accepted a friend request from someone I have never met in person. *Q15	0.054	Reject H null	0.032	Very weak

*Q15: I use Facebook's privacy settings to control who may view my personal information.

p value is significant at < 0.05

H null: There is no relationship between two variables.

Table 3.7 Chi-square Tests and Correlations between Privacy Perception (Questions 1-10) and Disclosure of Personal Information (Question 16)

Item	Variables	P-value	Result	Correlation Coefficient	
Q1	I value my privacy on Facebook. *Q16	0.018	Reject H null	0.613	Strong
Q2	I am concerned of the disclosure of personal information that I provide on my Facebook profile. *Q16	0.000	Reject H null	0.728	Very strong
Q3	I am familiar with Facebook's privacy settings that let me control who may view my profile. *Q16	0.089	Reject H null	0.567	Strong
Q4	I can prevent other Facebook users from viewing my photos. *Q16	0.000	Reject H null	0.703	Very strong
Q5	I have read Facebook's Privacy Policy in full. *Q16	0.167	Fail to reject	-	-
Q6	I have read Facebook's Terms of Service in full. *Q16	0.858	Fail to reject	-	-
Q7	Facebook has done enough to secure my personal information. *Q16	0.188	Fail to reject	-	-
Q8	I have done enough to secure my personal information on Facebook. *Q16	0.043	Reject H null	0.590	Strong
Q9	I accept a friend request with my privacy in mind. *Q16	0.000	Reject H null	0.693	Strong
Q10	I have accepted a friend request from someone I have never met in person. *Q16	0.266	Fail to reject	-	-

*Q16: Which of these personal information did you include in your profile which can be viewed by others (i.e. other than yourself)? Please choose all that apply. Please fill up 'Other' if you did include any other personal information (e.g. Bio, likes and interests, website, etc.).

p value is significant at < 0.05

H null: There is no relationship between two variables.

Table 3.8 Chi-square Tests and Correlations between Frequency of Use (Questions 11-13) and Disclosure of Personal Information (Question 14)

Item	Variables	P-value	Result	Correlation Coefficient	
Q11	How long have you been using Facebook? *Q14	0.206	Fail to reject	-	-
Q12	On average, how many times do you log on to Facebook per day? *Q14	0.874	Fail to reject	-	-
Q13	On average, how much time do you spend on Facebook each time you log on to the site? *Q14	0.203	Fail to reject	-	-

*Q14: Is your profile private (can be viewed by friends only) or public (open to everyone)?

p value is significant at < 0.05

H null: There is no relationship between two variables

Table 3.9 Chi-square Tests and Correlations between Frequency of Use (Questions 11-13) and Disclosure of Personal Information (Question 15)

Item	Variables	P-value	Result	Correlation Coefficient	
Q11	How long have you been using Facebook? *Q15	0.001	Reject H null	0.303	Moderate
Q12	On average, how many times do you log on to Facebook per day? *Q15	0.433	Fail to reject	-	-
Q13	On average, how much time do you spend on Facebook each time you log on to the site? *Q15	0.461	Fail to reject	-	-

*Q15: I use Facebook's privacy settings to control who may view my personal information.

p value is significant at < 0.05

H null: There is no relationship between two variables.

Table 3.10 Chi-square Tests and Correlations between Frequency of Use (Questions 11-13) and Disclosure of Personal Information (Question 16)

Item	Variables	P-value	Result	Correlation Coefficient	
Q11	How long have you been using Facebook? *Q16	0.638	Fail to reject	-	-
Q12	On average, how many times do you log on to Facebook per day? *Q16	0.256	Fail to reject	-	-
Q13	On average, how much time do you spend on Facebook each time you log on to the site? *Q16	0.073	Reject H null	0.574	Strong

*Q16: Which of these personal information did you include in your profile which can be viewed by others (i.e. other than yourself)? Please choose all that apply. Please fill up 'Other' if you did include any other personal information (e.g. Bio, likes and interests, website, etc.).

p value is significant at < 0.05

H null: There is no relationship between two variables.

Chart 4.0 Frequency of answers for question 1: I value my privacy on Facebook (Privacy Perception)

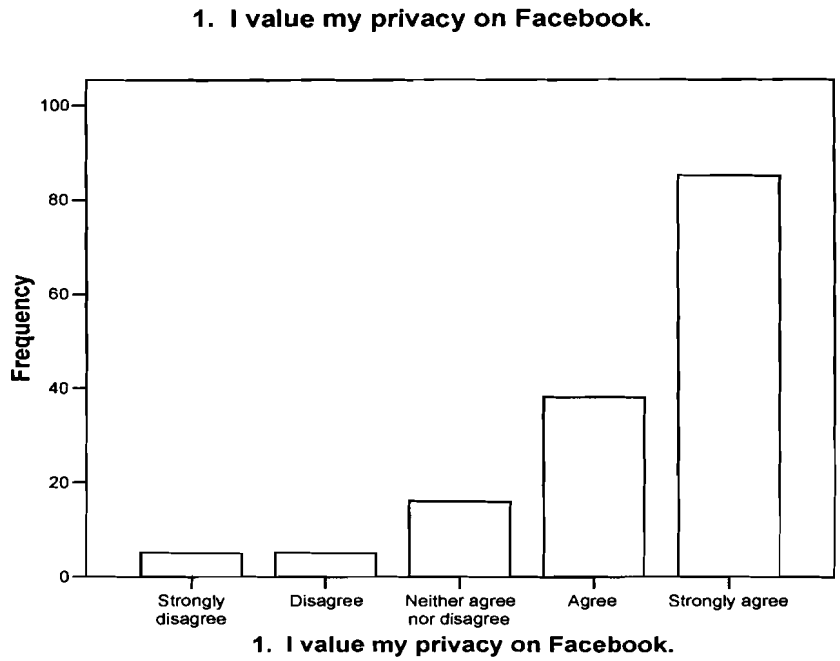


Table 4.0 Frequency and percentage of answers for question 1: I value my privacy on Facebook (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	3.4	3.4	3.4
	Disagree	5	3.4	3.4	6.7
	Neither agree nor disagree	16	10.7	10.7	17.4
	Agree	38	25.5	25.5	43.0
	Strongly agree	85	57.0	57.0	100.0
	Total	149	100.0	100.0	

Chart 4.1 Frequency of answers for question 2: I am concerned of the disclosure of personal information that I provide on my Facebook profile (Privacy Perception)

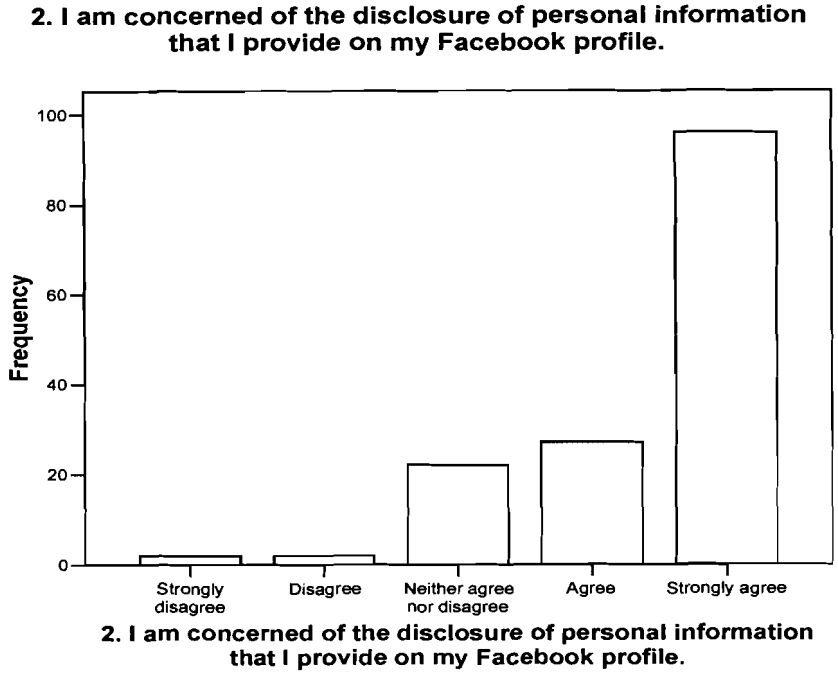


Table 4.1 Frequency and percentage of answers for question 2: I am concerned of the disclosure of personal information that I provide on my Facebook profile (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	1.3	1.3	1.3
	Disagree	2	1.3	1.3	2.7
	Neither agree nor disagree	22	14.8	14.8	17.4
	Agree	27	18.1	18.1	35.6
	Strongly agree	96	64.4	64.4	100.0
	Total	149	100.0	100.0	

Chart 4.2 Frequency of answers for question 3: I am familiar with Facebook's privacy settings that let me control who may view my profile (Privacy Perception)

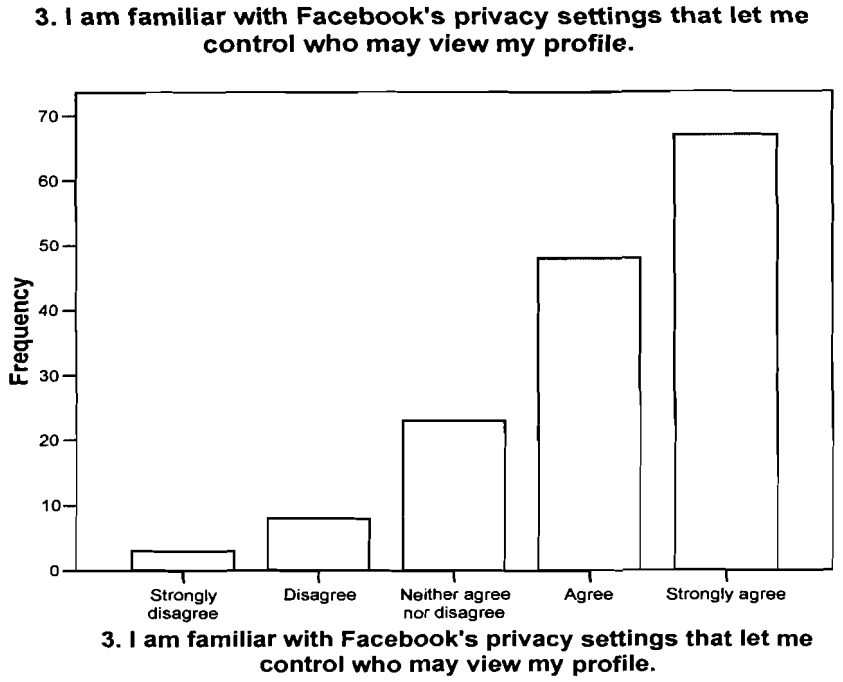


Table 4.2 Frequency and percentage of answers for question 3: I am familiar with Facebook's privacy settings that let me control who may view my profile (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	2.0	2.0	2.0
	Disagree	8	5.4	5.4	7.4
	Neither agree nor disagree	23	15.4	15.4	22.8
	Agree	48	32.2	32.2	55.0
	Strongly agree	67	45.0	45.0	100.0
	Total	149	100.0	100.0	

Chart 4.3 Frequency of answers for question 4: I can prevent other Facebook users from viewing my photos (Privacy Perception)

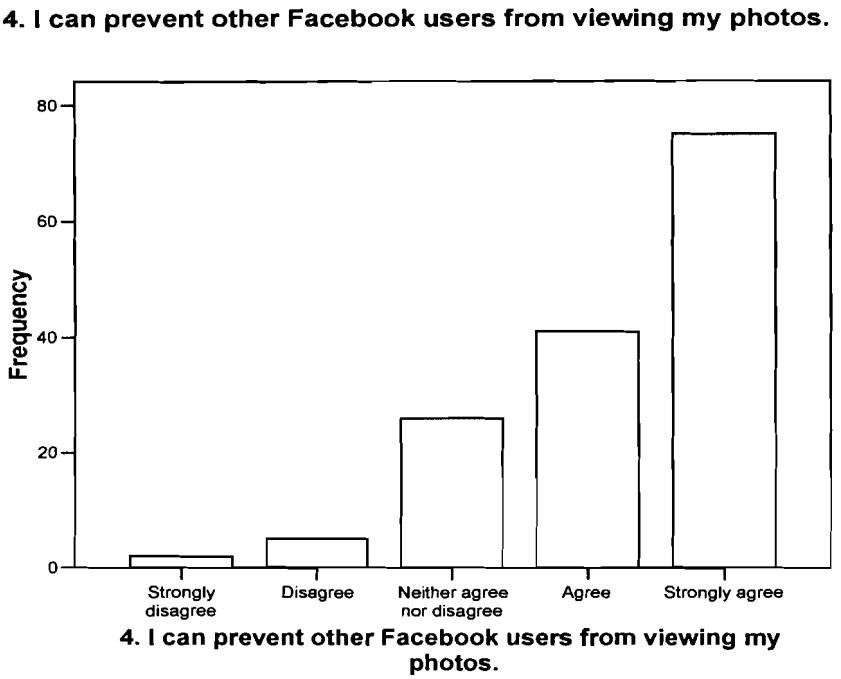


Table 4.3 Frequency and percentage of answers for question 4: I can prevent other Facebook users from viewing my photos (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	1.3	1.3	1.3
	Disagree	5	3.4	3.4	4.7
	Neither agree nor disagree	26	17.4	17.4	22.1
	Agree	41	27.5	27.5	49.7
	Strongly agree	75	50.3	50.3	100.0
	Total	149	100.0	100.0	

Chart 4.4 Frequency of answers for question 5: I have read Facebook's Privacy Policy in full (Privacy Perception)

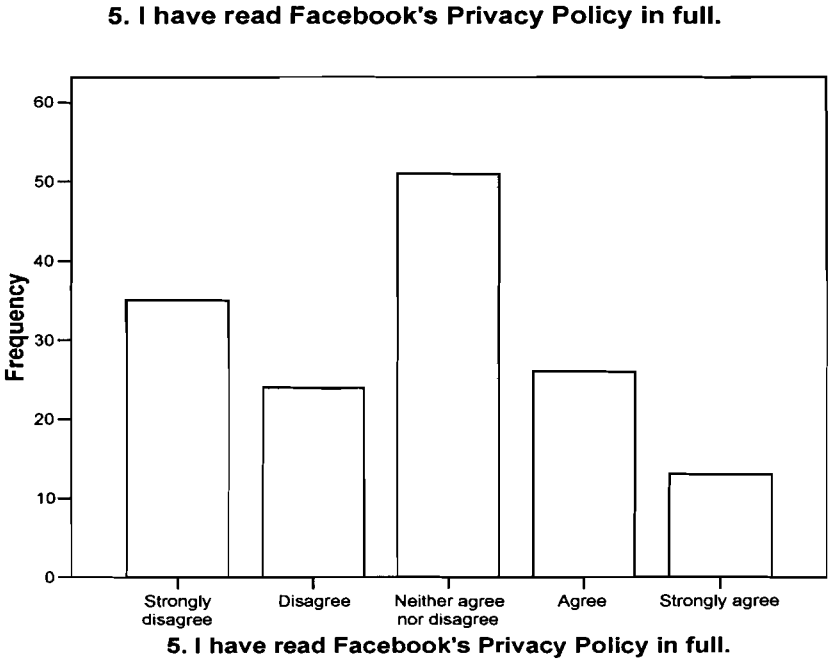


Table 4.4 Frequency and percentage of answers for question 5: I have read Facebook's Privacy Policy in full (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	35	23.5	23.5	23.5
	Disagree	24	16.1	16.1	39.6
	Neither agree nor disagree	51	34.2	34.2	73.8
	Agree	26	17.4	17.4	91.3
	Strongly agree	13	8.7	8.7	100.0
	Total	149	100.0	100.0	

Chart 4.5 Frequency of answers for question 6: I have read Facebook's Terms of Service in full (Privacy Perception)

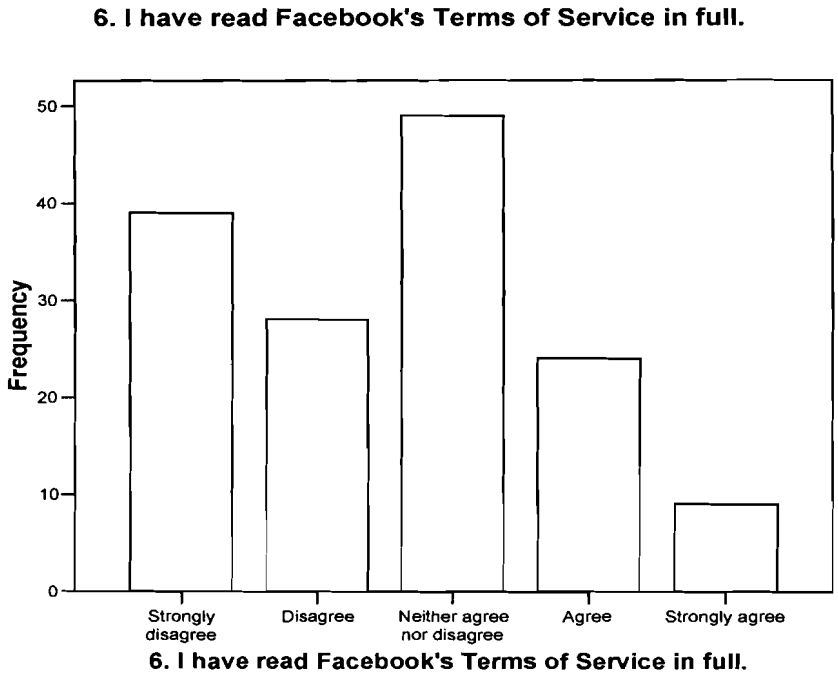


Table 4.5 Frequency and percentage of answers for question 6: I have read Facebook's Terms of Service in full (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	39	26.2	26.2	26.2
	Disagree	28	18.8	18.8	45.0
	Neither agree nor disagree	49	32.9	32.9	77.9
	Agree	24	16.1	16.1	94.0
	Strongly agree	9	6.0	6.0	100.0
	Total	149	100.0	100.0	

Chart 4.6 Frequency of answers for question 7: Facebook has done enough to secure my personal information (Privacy Perception)

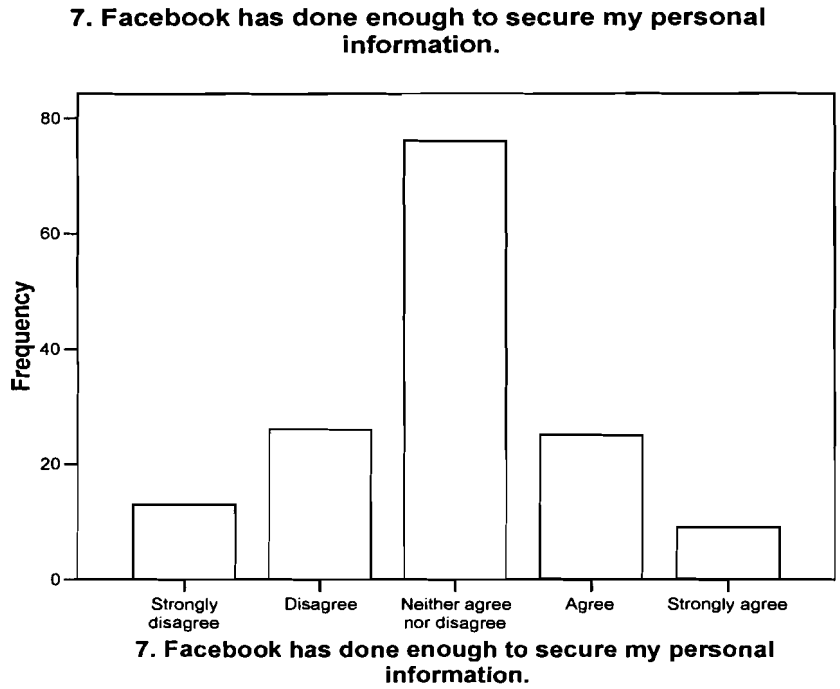


Table 4.6 Frequency and percentage of answers for question 7: Facebook has done enough to secure my personal information (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	13	8.7	8.7	8.7
	Disagree	26	17.4	17.4	26.2
	Neither agree nor disagree	76	51.0	51.0	77.2
	Agree	25	16.8	16.8	94.0
	Strongly agree	9	6.0	6.0	100.0
	Total	149	100.0	100.0	

Chart 4.7 Frequency of answers for question 8: I have done enough to secure my personal information on Facebook (Privacy Perception)

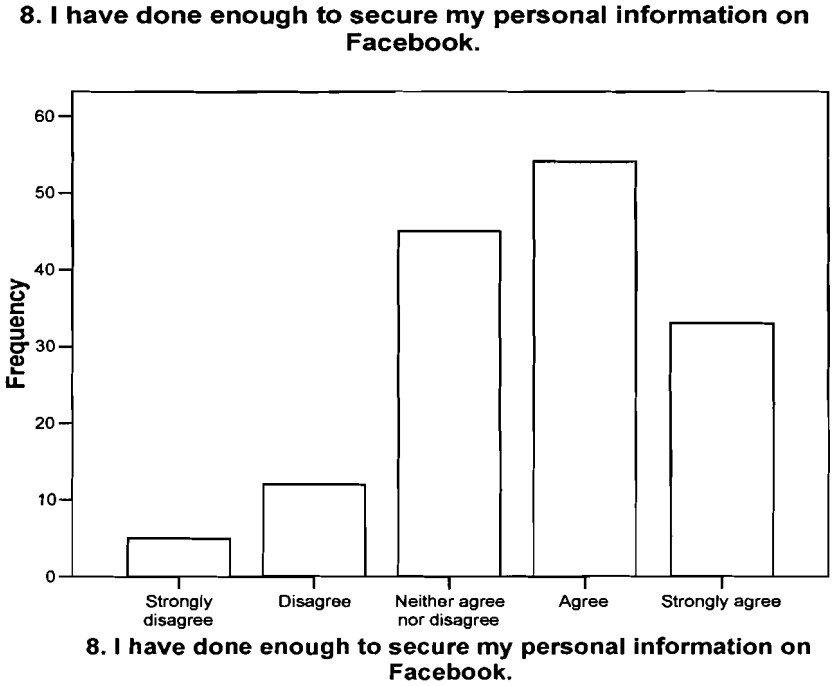


Table 4.7 Frequency and percentage of answers for question 8: I have done enough to secure my personal information on Facebook (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	5	3.4	3.4	3.4
	Disagree	12	8.1	8.1	11.4
	Neither agree nor disagree	45	30.2	30.2	41.6
	Agree	54	36.2	36.2	77.9
	Strongly agree	33	22.1	22.1	100.0
	Total	149	100.0	100.0	

Chart 4.8 Frequency of answers for question 9: I accept a friend request with my privacy in mind (Privacy Perception)

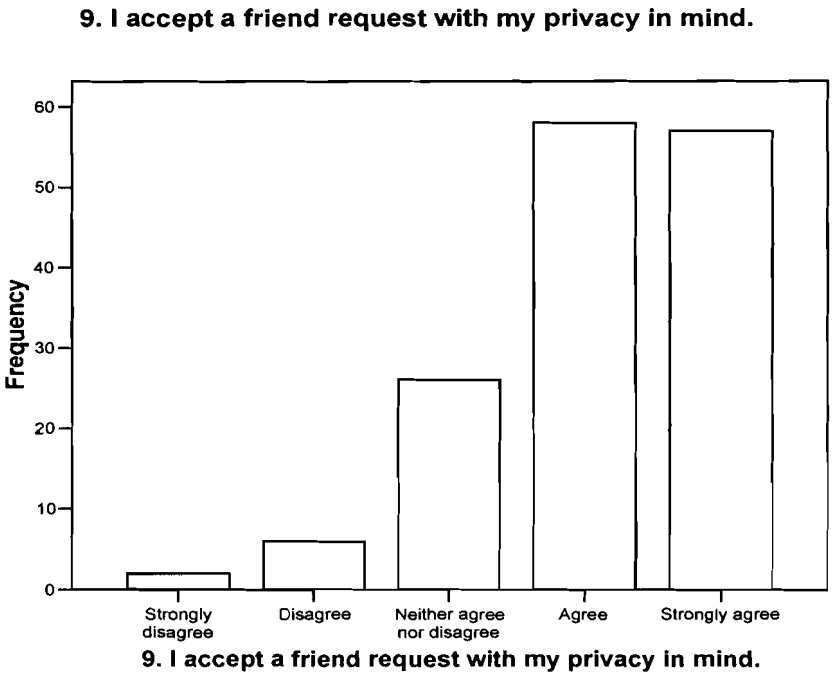


Table 4.8 Frequency and percentage of answers for question 9: I accept a friend request with my privacy in mind (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	1.3	1.3	1.3
	Disagree	6	4.0	4.0	5.4
	Neither agree nor disagree	26	17.4	17.4	22.8
	Agree	58	38.9	38.9	61.7
	Strongly agree	57	38.3	38.3	100.0
	Total	149	100.0	100.0	

Chart 4.9 Frequency of answers for question 10: I have accepted a friend request from someone I have never met in person (Privacy Perception)

Table 4.9 Frequency and percentage of answers for question 10: I have accepted a friend request from someone I have never met in person (Privacy Perception)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	48	32.2	32.2	32.2
	Disagree	13	8.7	8.7	40.9
	Neither agree nor disagree	22	14.8	14.8	55.7
	Agree	35	23.5	23.5	79.2
	Strongly agree	31	20.8	20.8	100.0
	Total	149	100.0	100.0	

Chart 4.10 Frequency of answers for question 11: How long have you been using Facebook? (Frequency of Use)

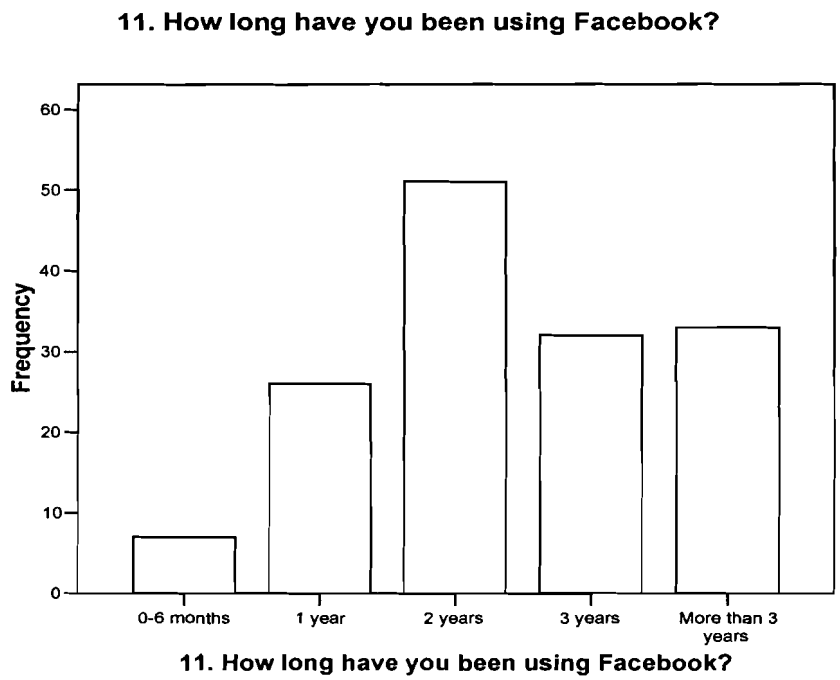


Table 4.10 Frequency and percentage of answers for question 11: How long have you been using Facebook? (Frequency of Use)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	0-6 months	7	4.7	4.7	4.7
	1 year	26	17.4	17.4	22.1
	2 years	51	34.2	34.2	56.4
	3 years	32	21.5	21.5	77.9
	More than 3 years	33	22.1	22.1	100.0
	Total	149	100.0	100.0	

Chart 4.11 Frequency of answers for question 12: On average, how many times do you log on to Facebook per day? (Frequency of Use)

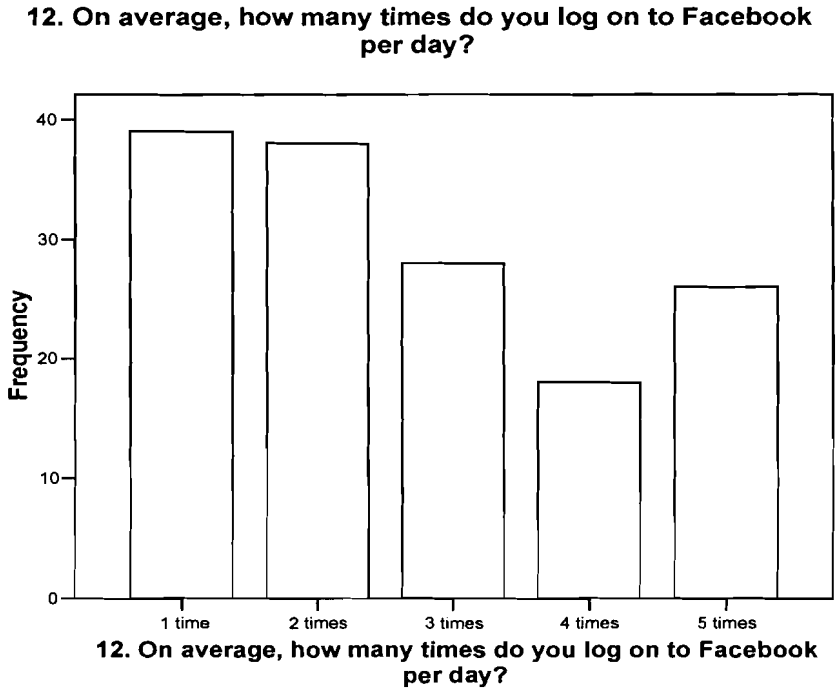


Table 4.11 Frequency and percentage of answers for question 12: On average, how many times do you log on to Facebook per day? (Frequency of Use)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	1 time	39	26.2	26.2	26.2
	2 times	38	25.5	25.5	51.7
	3 times	28	18.8	18.8	70.5
	4 times	18	12.1	12.1	82.6
	5 times	26	17.4	17.4	100.0
	Total	149	100.0	100.0	

Chart 4.12 Frequency of answers for question 13: On average, how much time do you spend on Facebook each time you log on to the site? (Frequency of Use)

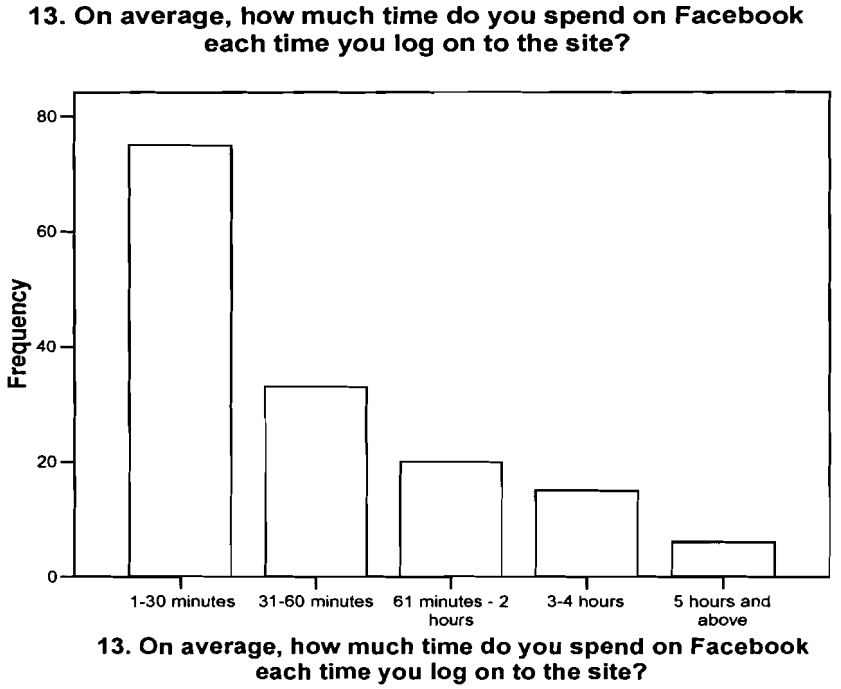
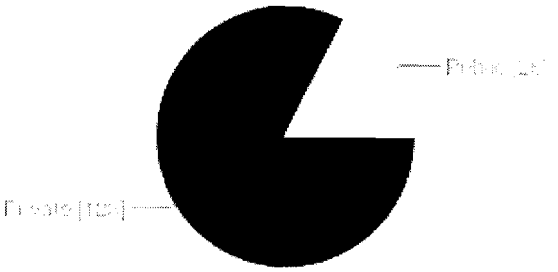


Table 4.12 Frequency and percentage of answers for question 13: On average, how much time do you spend on Facebook each time you log on to the site? (Frequency of Use)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	1-30 minutes	75	50.3	50.3	50.3
	31-60 minutes	33	22.1	22.1	72.5
	61 minutes - 2 hours	20	13.4	13.4	85.9
	3-4 hours	15	10.1	10.1	96.0
	5 hours and above	6	4.0	4.0	100.0
	Total	149	100.0	100.0	

Chart 4.13 Frequency of answers for question 14: Is your profile private (can be viewed by friends only) or public (open to everyone)? (Disclosure of Personal Information)



Private (83%) Public (17%)

Table 4.13 Frequency and percentage of answers for question 14: Is your profile private (can be viewed by friends only) or public (open to everyone)? (Disclosure of Personal Information)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Public	26	17.4	17.4	17.4
	Private	123	82.6	82.6	100.0
	Total	149	100.0	100.0	

Chart 4.14 Frequency of answers for question 15: I use Facebook's privacy settings to control who may view my personal information (Disclosure of Personal Information)

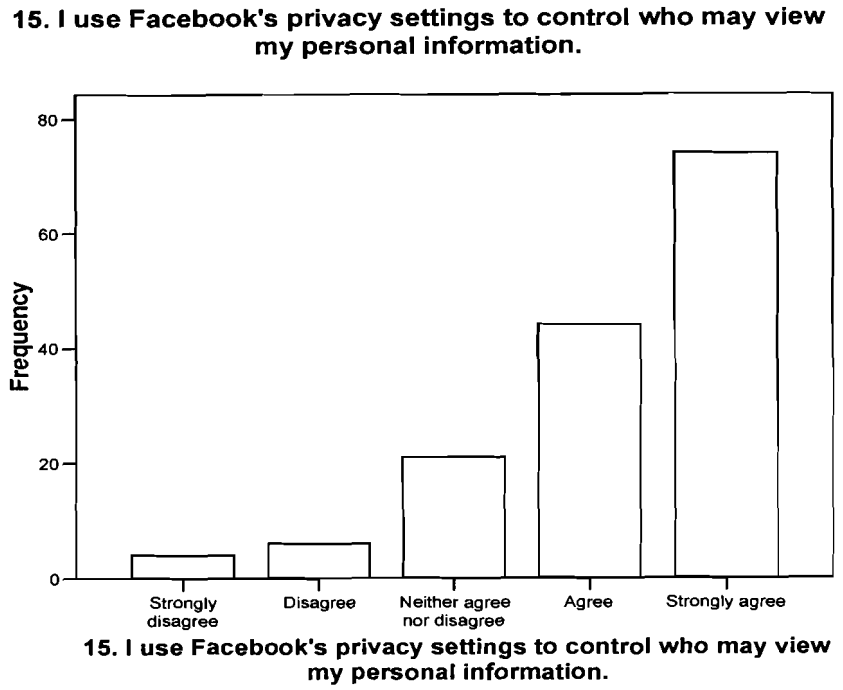


Table 4.14 Frequency and percentage of answers for question 15: I use Facebook's privacy settings to control who may view my personal information (Disclosure of Personal Information)

		Frequency	Percent (%)	Valid Percent	Cumulative Percent
Valid	Strongly disagree	4	2.7	2.7	2.7
	Disagree	6	4.0	4.0	6.7
	Neither agree nor disagree	21	14.1	14.1	20.8
	Agree	44	29.5	29.5	50.3
	Strongly agree	74	49.7	49.7	100.0
	Total	149	100.0	100.0	

Chart 4.15 Frequency of answers for question 16: Which of these personal information did you include in your profile which can be viewed by others (i.e. other than yourself)? Please choose all that apply. Please fill up 'Other' if you did include any other personal information (e.g. Bio, likes and interests, website, etc.).
(Disclosure of Personal Information)

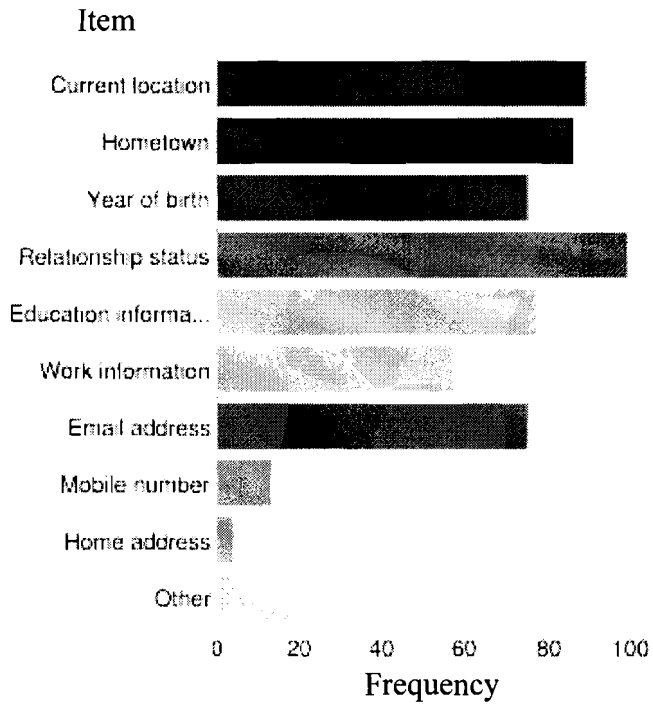


Table 4.15 Frequency and percentage of answers for question 16: Which of these personal information did you include in your profile which can be viewed by others (i.e. other than yourself)? Please choose all that apply. Please fill up 'Other' if you did include any other personal information (e.g. Bio, likes and interests, website, etc.). (Disclosure of Personal Information)

Item	Frequency	Percent (%)*
Current location	89	60
Hometown	86	58
Year of birth	75	50
Relationship status	99	66
Education information	77	52
Work information	57	38
Email address	75	50
Mobile number	13	9
Home address	4	3
Other	19	13
Total	149	399

* Respondents may select more than one checkbox, so percentages may add up to more than 100%.