# Categories of Friends on Social Networking Sites: An Exploratory Study 

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#### Abstract

The widespread use of social networking sites has transformed the ways people make, communicate with and manage their friends. This study seeks to find out students' perception of the types of friends they have on their social networking sites (SNS), such as Facebook and Twitter, in comparison to offline friends, and the quality of these friendships. A questionnaire survey was administered to 104 graduate students in the Division of Information Studies at the Nanyang Technological University, Singapore. It was found that the main categories of friends on SNS are school friends, work-related friends, friends sharing same interest/activity and family. The study also found differences by age, gender and nationality. Female respondents were more likely to list school friends, workrelated friends and family friends than male respondents, who were more likely to list friends with the same interest/activity. Local Singaporeans were more likely to list friends sharing same interest/activity, whereas international students from India and China were more likely to list family friends, close friends, mutual friends and school friends. Females, younger people and international students tended to have a bigger variety of friends. Generally, respondents rated their offline friends higher in quality compared to their online friends. The results also show that friendships of longer duration are viewed as higher quality, for both online and offline friends. A follow-up study will examine the kinds of information exchanged between different types of friends.


Keywords: categories of friends, social networking sites (SNS), quality of friendship, online versus offline friends.

## 1. INTRODUCTION

Friendship is an interpersonal relationship that is central to people's social lives. Throughout a person's entire life, making and maintaining friendships take up a substantial amount of time and attention. There are numerous definitions of friends and friendship. Hays (1988) defined friendship as a voluntary interdependence between two persons over time, which is intended to facilitate social-emotional goals of the participants, and may involve varying types and degrees of companionship, intimacy, affection, and mutual assistance. Wright (1984) characterized it as a relationship involving voluntary or unconstrained interaction in which the participants respond to one another personally. Spencer and Pahl (2006) noted that friends tend to be people who have something in common, such as the same sense of humor, similar interests, belong
to the same organization, come from same place, have a similar background, lead a similar lifestyle, or work in the same industry. These definitions were based on the assumption that friendship typically starts and develops through face-to-face interaction.

However, times have changed. With Social Networking Sites (SNS) such as Facebook and Twitter, people are interacting with "friends" online daily. SNS typically allow members to create a personal profile, communicate with other members, and initiate, develop and maintain friendships with people out of the boundaries of their homes, communities and countries (Ellison, Steinfield \& Lampe, 2007). As a result a new form of relationship has emerged, called online friendship.

In the past, people have struck up friendships through mail correspondence and telephone conversations. What is different with SNS is the sheer scale of the activity. According to statistics from Facebook, one of the most popular SNS whose users have exceeded one billion, the average number of friends a person has is 229 . How is it possible for a person to manage such a long list of friends?! SNS provide automated support for a person to recruit friends based on similarities in profile (e.g., same organization, school, etc.), and to recruit friends of friends. They also provide support for maintaining friendships, such as alerts of upcoming birthdays and new postings from friends. Messages posted and broadcast are not just text messages but can include images and multimedia. With the proliferation of mobile devices, messages can be posted every minute of the day!

The question thus arises: has the concept of friendship changed with the mass adoption of SNS. Are online friendships qualitatively different from offline friendships? Is the quality of the relationship different? Has SNS affected the kinds of information exchanged with different types of friends? What complicates the issue is that offline friends are also often connected online via these SNS as well. Friends now exchange not only mobile numbers but SNS account IDs as well. So, has SNS enhanced off line friendships?

This is a preliminary study with the modest aim of finding out:

1. What are the perceived categories of online friends that students have on SNS?
2. Are there any differences by gender, age and nationality?
3. What is the quality of online friendships, compared to offline friendships?

This study can be viewed as a study of social categorization: "the classification of people into groups based on their common attributes" (http://highered.mcgrawhill.com/sites/0072489049/student view0/glossary.html). van Knippenberg (1984) defined social categorization as "the ordering of the social environment in terms of social categories, that is, in terms of groupings of persons in a manner which is meaningful to the individual concerned." (p. 561). The difference between categorization of friends and other kinds of social categorization is that the attributes used for determining friendship categories are relational, i.e. based on the dimensions of relationship with self and the types of information exchanged. It is important to study the types of friends and friendship, as this is likely to have an impact on people's information seeking and
sharing behavior. On Facebook, friends lists are used to control different levels of access and types of information shared.

Past studies have found that the quality of offline friendships is generally higher than for online friendships (Anthenunis, Valkenburg \& Peter, 2012; Chan \& Chang, 2004). However, with continual advancement in SNS technologies and their user interfaces, rapid development of mobile devices and lifestyle adaptation to SNS and mobile technologies, the situation is continually evolving. The quality of relationship will have an impact on the type, quantity and depth of information shared.

## 2. LITERATURE REVIEW

There is a substantial amount of literature in sociology and psychology on the types of friendships, and their characteristics and value. Spencer and Pahl (2006) identified eight categories of friendships:

- Associates: people who do not know each other well, and only share a common activity, such as a hobby or a sport.
- Useful contacts: people who share information and advice, such as telling each other where to buy cheap things. Typically this is related to work or career.
- Fun friends: people who socialize together primarily for fun. They do not have a deep relationship, and do not provide each other with emotional support.
- Favor friends: people who offer each other practical help but not in an emotional manner.
- Helpmates: display characteristics of both favor friends and fun friends. They socialize together for fun and also provide practical help.
- Comforters: similar to helpmates but with a deeper level of emotional support.
- Confidants: disclose personal information to each other, enjoy each other's company and provide emotional support, but are not always in a position to offer practical help.
- Soulmates: display all of the above characteristics and are the people we are closest to.

As the complexity of friendship increases, the friendship will encompass more than one characteristic. It is clear that different kinds of friendships involve sharing of different kinds of information.

Kelley et al. (2011) carried out a study with 46 associates to find out how they would group and categorize their Facebook friends using four methods: card sorting, tagging, hierarchical file organization and using Facebook friend lists interface. The participants formed the following types of categories:

- General friends
- Location-based
- Generic friends
- Friends of friends
- College
- General college
- Club or group
- Other education
- High school
- Grade school
- Family
- Church
- Don't know

Friendships can be characterized by different dimensions of relationship quality: experienced closeness, trust, and understanding between friends (Marsden \& Campbell, 1984). Parks and Floyd (1996) developed a personal relationship scale to measure different dimensions of friendship: interdependence, breath, depth, code change, understanding, commitment, and network convergence. Breadth refers to the range of topics people exchange information about, and code change measures the number of communication channels between people. Depth measures the willingness of people to reveal more personal and intimate information. People with higher quality of communication tend to have more communication channels and develop their unique way to communicate with each other. The rest of the items measure the development and perception of the relationship. According to Parks (1997), over time people become more dependent on each other, are more committed to a relationship, and have better understanding of the interaction. Earlier studies have shown that the quality of offline friendship is perceived higher than online friendship (Chan \& Cheng, 2004; Parks \& Roberts, 1998). Chan and Cheng (2004) have also found out that quality of friendship for both online and offline will grow over time.

## 3. RESEARCH METHOD

The participants for this study were graduate students recruited from the MSc programs in Information Studies, Knowledge Management and Information Systems, at the School of Communication \& Information, Nanyang Technological University, Singapore. The sample was a convenience sample obtained by visiting classes, and inviting all the students to participate. In total, 104 students completed the questionnaire. The demographic profile of the respondents are given in Table 1.

The questionnaire consists of three sections.

- The first section was adapted from a questionnaire developed by Vitak (2008), and collected demographic information and SNS usage information from the respondents. The purpose of collecting information such as gender, age group and current program of study was to identify any association between these factors and categories of friends.
- The second section collected information on the main categories of friends students had. There are two parts in this section: an open-ended question to let the students write down five categories of friends they communicate most frequently with on their SNS; and a set of closed-ended questions where the respondents selected from a list of existing categories of friends adapted from (Spencer \& Pahl, 2006)-for both
online friends and offline friends. Online friends are defined as friends made online through SNSs; offline friends are friends made through face-to-face meeting and might have extended to the online setting.
- The third section collected information on the qualities of online and offline friendships. Participants were asked to choose one friend each from their online and offline category, and answer 12 questions which measure 7 dimensions of friendship. This section was adapted from the questionnaire used by Parks and Floyd (1996) to measure friendship qualities.


## 4. FINDINGS

### 4.1 Amount of SNS Use

$92.3 \%$ (i.e. 96 respondents) had one or more SNS accounts. For these respondents who had at least one SNS account, the amount of SNS use is summarized in Table 2. It was found that $80 \%$ had more than 100 friends, and $53 \%$ had more than 200 friends. $67 \%$ had online friends whom they had never met face-to-face. Such purely online friendships comprise more than $25 \%$ of the friends, for $21 \%$ of the respondents with SNS accounts. $4 \%$ had $75 \%$ or more of their friends being purely online.

Table 3 lists the commonly used Social Network Sites among the respondents, from which it can be concluded that Facebook was by far the most frequently used SNS. 66\% of the respondents with SNS accounts indicated that they accessed Facebook several times a day or were constantly logged on. Other than the SNS listed in the questionnaire, respondents also indicated the use of some SNS widely used in their home countries, such as Weibo and Renren.

### 4.2 Categories of Friends on SNS

In an open-ended question, respondents were asked to list, in their own words, five categories of friends on their SNS that they communicated most frequently with. The categories listed by the respondents were grouped into 17 categories (Table 4). Friends from primary school, secondary school, junior college, university, and classmates were grouped together as School Friends. Friends travelling together, shopping together, from same religion, sports activity or social dance group, friends sharing music or photos, and friends playing the same games were grouped as Friends Sharing Same Interest/Activities. Friends getting updates from each other and sharing information were grouped as Useful Contacts. Work-Related Friends include existing and former colleagues, and people from the same industry.

These are not all the types of friends that the respondents had. The labels and categories were based on free recall by the respondents, and thus represent the most salient and most readily recalled types of friends. The respondents were also offered a checklist of friend categories to select - to elicit information about categories of friends the respondent might not have thought of (see Table 5).

As expected, school friends and work-related friends were the most commonly recalled by respondents. There are also many friend categories related to common interest or activity, such as sports, dance class, church, and charity society. Some respondents had family-related categories, such as parents, siblings, cousins, and close relatives. Some respondents simply divided their friends into "close" friends and "others". Some respondents (11\%) listed mutual friends, who are friends of friends.

Given a checklist of friend categories (see Table 5) and asked to indicate which of the categories of friends they had, the respondents selected most of the categories. Most of the categories had $70 \%$ or more respondents selecting them. The exceptions are:

- Information sharing friends "whom you approach when you need information such as the best place to dine, cheaper place to buy something, etc." : 57\%
- Neighborly friends "who can help you look after pets, water plants, etc." : 47\%

It is not clear why the category of information-sharing friends obtained a relatively low percentage. It may be because people don't generally think of friends as primarily for information-sharing purpose. The relatively lower percentage for neighborly friends may be because these are likely to be offline (physical) friends. Given the high percentage of responses for most of the categories, it would be better in future to ask for the percentage of friends for each category, rather than a binary indication of yes $/ \mathrm{no}$.

We also analyzed the differences in friend categories by age, gender, nationality and number of friends (see Table 6 and 7). Figures in italics are at least 10\% higher than in the contrast category. The results from the respondent-defined friend categories (given in Table 6) are summarized as follows:

- More female respondents listed school friends, work-related friends, family and mutual friends, whereas more males listed friends with the same interest/activity.
- More young people (30 and below) listed school friends and family friends, whereas more older people (31 and above) listed work-related friends and mutual friends.
- Regarding different nationalities,
- School friends are more likely to be listed by Chinese and Indian students (international students), rather than locals (Singaporeans)
- Work-related friends were more likely to be listed by Singaporeans and Indians, rather than Chinese
- Friends with similar interest/activity are more likely to be listed by Singaporeans
- Family friends, close friends and mutual friends are more likely to be listed by Chinese and Indians.
- Respondents with more than 200 friends are more likely to list work-related, same interest/activity, family and mutual friends.

The results for the researcher-defined categories (Table 7) indicate that for most of the categories, a higher percentage of females selected them as well as a higher
percentage of young people ( 30 years and below), a higher percentage of respondents with more than 200 SNS friends, and a higher proportion of international students (Chinese and Indians).

### 4.3 Quality of Friends

The respondents were asked to "choose one of the friends you made online and often communicate with" to rate 12 statements relating to friendship quality on a 7 -point likert scale, with " 1 " indicating "strongly disagree", " 4 " indicating neutral and " 7 " indicating "strongly agree". Similarly they were asked to "choose one of the friends you made offline and often communicate with" to rate the same 12 statements.

Table 8 compares the mean rating for offline versus online friends, for the 12 statements. The mean scores are higher for offline friends compared to online friends: the quality of offline friendships was perceived to be higher than for purely online friends. In fact, for most of the items, the means scores are below "4" (neutral) for online friends. The items with higher scores (above " 4 ") are:

- Our communication ranges over a wide variety of topics
- I usually tell this person exactly how I feel
- This relationship is very important to me
- I would make a great effort to maintain my relationship with this person.

The items with the lowest scores (below " 3.5 ") are:

- The two of us depend on each other
- The two of us use private signals to communicate in ways outsiders would not understand
The results suggest that online friendships are not very close, but are valued for sharing information.

Friendship quality is also found to be better for friendships of longer duration. Table 9 compares the mean rating for online friendship durations of below and above 12 months. For online friendships of 24 months or more, the mean scores are above " 4 " for most items. For online friendships of shorter duration, the means scores are below " 4 ", except for the item "our communication ranges over a wide variety of topics."

## 5. DISCUSSION \& CONCLUSION

A survey of 104 graduate students in the Division of Information Studies found that 92\% had one or more SNS accounts. Of these, 66\% accessed Facebook several times a day or were constantly logged on, about half had more than 200 friends, and two-thirds had SNS friends that they had never met in person. The categories of SNS friends that participants most frequently listed were school friends, work-related friends, friends sharing same interest/activity and family.

The study also found differences by age, gender and nationality. Female respondents were more likely to list school friends, work-related friends and family friends than male respondents, who were more likely to list friends with the same interest/activity. Local

Singaporeans were more likely to list friends sharing same interest/activity, whereas international students from India and China were more likely to list family friends, close friends, mutual friends and school friends. Females, young people ( 30 and below) and international students tended to have a bigger range of friend types.

Respondents rated their offline friends higher in quality compared to their online friends. The results also show that friendships of longer duration are viewed as higher quality, for both online and offline friends.

Several other studies have found gender differences in the use of SNS. Women have been found to be more active in posting to SNS and commenting on other people's posts (Hampton, Goulet, Rainie, \& Purcell, 2011), and have more online friends (Pempek, Yermolayeva, \& Calvert, 2009). Muscanell and Guadagno (2012) found that women use SNS for maintaining existing relationships, whereas men use it for developing new contacts. Lin and Lu (2011) found that men tend to use SNS for task-oriented reasons than for interpersonal purposes. Age differences have also been found by other researchers. Younger users have been found to be more likely to use SNS frequently and have more SNS friends (e.g., Valenzuela, Park, \& Kee, 2009).

Friends are an important source of "everyday life information." Case (2012) noted that
in almost any information seeking context there is a strong preference for information that comes directly from other people. Use of other channels tends to be predicted by the social presence they offer, that is, how much they are perceived as being like a face-to-face conversation with another person, or as Johnson puts it "the extent to which they reveal the presence of other human interactants and can capture the human, feeling side of relationships" (Johnson, 1997, p. 92). (Case, 2012, p. 153-154)

SNS has provided more channels for people to share more types of information (including images and video), more frequently (all hours of the day), more conveniently (e.g., capture and upload via mobile devices), to more people. It also provides support for users to link up with current and past friends, and friends of friends, and to make new friends they have never met. Without doubt, SNS is having a major impact on informal information behavior, especially information sharing and serendipitous information discovery from friends' postings.
As Sin and Kim (2013) noted, there have been very few studies of active information seeking using SNS. This may be because SNS users generally view SNS as a means for online networking and socializing, and not for information seeking. This is likely to change as users learn to make use of their social network as an information network and resource, and increasingly solicit information in addition to passively receiving updates.

One group of users who are likely to actively seek information on SNS are the international students. International students have to adjust to a new living and academic environment, usually with fewer resources and less social support compared to local students. Sin and Kim (2013, in press) carried out a questionnaire survey of 180 international students at an American university, and found that nearly 70\% used SNS for "everyday life information" either "frequently" or "very frequently". They also found
that younger students, undergraduates and extroverted individuals were more likely to use SNS for everyday life information. The most important everyday life information needs listed by the respondents were: finance, health, news of one's home country, housing, and entertainment.

Our interest is in how people group online friends into different categories, and the different information behavior they exhibit towards the different friend categories. The information they share with different categories of friends is likely to differ in type, quantity and quality (comprehensiveness, accuracy and depth). A bigger scale study is being planned to cover primary and secondary school students, undergraduates and graduate students, and incorporating questions on types of information exchanged, and their quantity and quality.

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## TABLES

Table 1. Profile of Respondents $(\mathrm{N}=104)$

| Variables | Values | Percentage |
| :--- | :--- | :---: |
| Graduate | MSc in Knowledge Management | $29.8 \%$ |
| Program | MSc in Information Systems | $43.3 \%$ |
|  | MSc in Information Studies | $22.1 \%$ |
|  | Others (Exchange students and | $4.8 \%$ |
|  | student from other programs) |  |
| Mode of Study | Part-time | $35.6 \%$ |
|  | Full-time | $64.4 \%$ |
| Age | $21 \sim 25$ | $44.7 \%$ |
|  | $26 \sim 30$ | $27.2 \%$ |
|  | $31 \sim 35$ | $17.5 \%$ |
|  | 36 and above | $10.7 \%$ |
| Gender | Female | $40.4 \%$ |
|  | Male | $59.6 \%$ |
| Nationality | Singaporean | $41.4 \%$ |
|  | Chinese | $23.2 \%$ |
|  | Indian | $17.2 \%$ |
|  | Others (Italian, Myanmar, etc) | $18.2 \%$ |

Table 2. Social Network Site (SNS) Usage ( $\mathrm{N}=96$ )

| Variable | Value | Percentage |
| :---: | :---: | :---: |
| Number of friends on SNS | $\begin{aligned} & \text { Less than } 10 \\ & 10-49 \\ & 50-99 \\ & 100-199 \\ & 200 \text { and above } \end{aligned}$ | $\begin{gathered} 2.0 \% \\ 6.2 \% \\ 11.2 \% \\ 28.6 \% \\ 52.0 \% \end{gathered}$ |
| Have SNS friends never met offline | Yes: <br> Most (>75\%) <br> Some (25-75\%) <br> Few (<25\%) <br> No Response <br> No: | $\begin{gathered} 67 \% \\ 4.1 \% \\ 17.3 \% \\ 48 \% \\ 30.6 \% \\ 33 \% \end{gathered}$ |
| Number of offline friends without SNS account | Most <br> Some <br> Few <br> None <br> Don't know | $\begin{gathered} 1.0 \% \\ 13.0 \% \\ 50.0 \% \\ 15.5 \% \\ 21.0 \% \end{gathered}$ |

Table 3. Frequency of SNS use ( $\mathrm{N}=104$ )

|  | Constantly <br> logged on | Several <br> times per <br> day | Nearly <br> every day | At least <br> once a <br> week | Less than <br> once a <br> week | Not in use |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Facebook | $33.7 \%$ | $27.9 \%$ | $6.7 \%$ | $13.5 \%$ | $11.5 \%$ | $6.7 \%$ |
| Twitter | $6.7 \%$ | $3.8 \%$ | $5.8 \%$ | $4.8 \%$ | $42.3 \%$ | $36.5 \%$ |
| Linkedln | $1.0 \%$ | $4.8 \%$ | $5.8 \%$ | $16.3 \%$ | $38.5 \%$ | $33.7 \%$ |
| MySpace | 0 | 0 | $1.0 \%$ | $1.0 \%$ | $37.5 \%$ | $60.6 \%$ |
| Friendster | 0 | 0 | $1.0 \%$ | 0 | $39.4 \%$ | $59.6 \%$ |
| QQ | $14.4 \%$ | $3.8 \%$ | $5.8 \%$ | $1.9 \%$ | $21.2 \%$ | $52.9 \%$ |

Table 4. Main Categories of Friends Defined by Respondents ( $\mathrm{N}=96$ )

| Categories of Friends | Percentage |
| :--- | :---: |
| School friends | $84.5 \%$ |
| Work-related friends | $70.1 \%$ |
| Friends sharing same interest/activity | $41.2 \%$ |
| Family friends | $39.2 \%$ |
| Close friends | $14.4 \%$ |
| Mutual friends | $11.3 \%$ |
| Best friends | $3.1 \%$ |
| Neighborly friends | $3.1 \%$ |
| Room mates | $3.1 \%$ |
| Overseas friends | $3.1 \%$ |
| Old friends | $3.1 \%$ |
| Relationship friends | $3.1 \%$ |
| (boyfriends \& girlfriends) | $2.1 \%$ |
| Virtual friends | $2.1 \%$ |
| Useful contact | $1.0 \%$ |
| Friends from the same place | $1.0 \%$ |
| Competitors | $1.0 \%$ |
| Friends never met offline |  |

Table 5. Main Categories of Friends Defined by the Researchers ( $\mathrm{N}=96$ )

| Categories of Friends | Percentage |
| :---: | :---: |
| School friends who are/were your classmates or from the same school | 96.1\% |
| Hang-out friends you hang out with for fun, like having dinner, drinks and karaoke | 90.2\% |
| Work-related friends Friends you knew through your work | 89.2\% |
| Same organization Friends from the same organization, such as club or church | 85.3\% |
| Mutual friends Friends known through mutual friends | 81.4\% |
| Confidant whom you can confide in and who provide support during the ups and downs of your life | 80.4\% |
| Common interest <br> Friends who share a common interest, such as music or football | 73.5\% |
| Online friends, never met offline Friends made online through SNS and never met in person | 58.8\% |
| Information-sharing friends whom you approach when you need information such as the best place to dine, cheaper place to buy something, etc. | 56.9\% |
| Online friends, subsequently met offline Friends made online through SNS whom you subsequently met in person | 54.9\% |
| Neighborly friends who can help you look after pets, water plants, etc. | 47.1\% |

Table 6. Analysis of Respondent-Defined Friend Categories by Gender, Age, Nationality and Number of Friends ( $\mathrm{N}=96$ )

|  | School <br> Friends | Work <br> Related | Sharing <br> Same <br> Interest/ <br> Activity | Family <br> Friends | Close <br> Friends | Mutual <br> Friends |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender <br> $\bullet \quad$ Female | $97.4 \%$ | $76.3 \%$ | $36.8 \%$ | $47.4 \%$ | $13.2 \%$ | $15.8 \%$ |
| $\bullet \quad$ Male | $82.5 \%$ | $66.7 \%$ | $43.9 \%$ | $33.3 \%$ | $15.8 \%$ | $10.5 \%$ |
| Age |  |  |  |  |  |  |
| $\bullet \quad 30$ and below | $91.5 \%$ | $69.0 \%$ | $40.8 \%$ | $40.8 \%$ | $15.5 \%$ | $11.3 \%$ |
| $\bullet \quad 31$ and above | $79.2 \%$ | $75.0 \%$ | $41.7 \%$ | $33.3 \%$ | $12.5 \%$ | $16.7 \%$ |
| Nationality |  |  |  |  |  |  |
| $\bullet \quad$ Singaporean | $82.4 \%$ | $82.4 \%$ | $52.9 \%$ | $35.3 \%$ | $8.8 \%$ | $2.9 \%$ |
| $\bullet \quad$ Chinese | $95.7 \%$ | $52.2 \%$ | $17.4 \%$ | $47.8 \%$ | $21.7 \%$ | $21.7 \%$ |
| $\bullet \quad$ Indian | $93.8 \%$ | $87.5 \%$ | $31.3 \%$ | $50.0 \%$ | $25.0 \%$ | $18.8 \%$ |
| No. of SNS friends |  |  |  |  |  |  |
| $\bullet \quad$ Less than 200 | $90.9 \%$ | $65.9 \%$ | $34.1 \%$ | $29.5 \%$ | $15.9 \%$ | $6.8 \%$ |
| $\bullet \quad 200$ and above | $86.0 \%$ | $74.0 \%$ | $48.0 \%$ | $48.0 \%$ | $14.0 \%$ | $16.0 \%$ |

Table 7. Analysis of Researcher-Defined Friend Categories by Gender, Age, Nationalities and Number of Friends ( $\mathrm{N}=96$ )

|  | School <br> Friends | Hang- <br> out <br> friends | Work <br> Related | Same <br> Organiz <br> ation | Mutual <br> Friends | Confidant | Common <br> Interest | Neighborly <br> Friends | Online, <br> Never <br> Met <br> Offline | Online, <br> Later <br> Met <br> Offline |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | $100 \%$ | $90.5 \%$ | $95.2 \%$ | $83.3 \%$ | $90.5 \%$ | $88.1 \%$ | $78.6 \%$ | $52.4 \%$ | $50 \%$ | $50 \%$ |
| - Female | $88.7 \%$ | $87.1 \%$ | $80.6 \%$ | $80.6 \%$ | $71.0 \%$ | $71.0 \%$ | $67.7 \%$ | $41.9 \%$ | $62.9 \%$ | $58.1 \%$ |
| - Male |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| - 30 and below | $97.3 \%$ | $91.9 \%$ | $90.5 \%$ | $90.5 \%$ | $81.1 \%$ | $83.8 \%$ | $77 \%$ | $50 \%$ | $63.5 \%$ | $59.5 \%$ |
| - 31 and above | $83.8 \%$ | $80.0 \%$ | $76.7 \%$ | $60.0 \%$ | $73.3 \%$ | $63.3 \%$ | $60 \%$ | $36.7 \%$ | $43.3 \%$ | $43.3 \%$ |
| Nationality |  |  |  |  |  |  |  |  |  |  |
| - Singaporean | $87.8 \%$ | $78.0 \%$ | $90.2 \%$ | $80.5 \%$ | $70.7 \%$ | $65.9 \%$ | $68.3 \%$ | $34.1 \%$ | $56.1 \%$ | $53.7 \%$ |
| - Chinese | $95.7 \%$ | $91.3 \%$ | $87 \%$ | $82.6 \%$ | $87 \%$ | $91.3 \%$ | $82.6 \%$ | $56.5 \%$ | $69.6 \%$ | $60.9 \%$ |
| - Indian | $100 \%$ | $94.1 \%$ | $100 \%$ | $94.1 \%$ | $94.1 \%$ | $82.4 \%$ | $52.9 \%$ | $47.1 \%$ | $58.8 \%$ | $58.8 \%$ |
| No. of SNS <br> friends |  |  |  |  |  |  |  |  |  |  |
| - Less than 200 | $93.6 \%$ | $85.1 \%$ | $80.9 \%$ | $74.5 \%$ | $74.5 \%$ | $72.3 \%$ | $68.1 \%$ | $34 \%$ | $63.8 \%$ | $53.2 \%$ |
| - 200 and above | $98.0 \%$ | $96.1 \%$ | $96.1 \%$ | $94.1 \%$ | $86.3 \%$ | $86.3 \%$ | $78.4 \%$ | $58.8 \%$ | $56.9 \%$ | $60.8 \%$ |

Table 8. Quality of Friends for Offline and Online Friendships ( $\mathrm{N}=96$ )

| Dimension | Item | Offline |  | Online |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Dev. | Mean | Std. <br> Dev. |  |
| Interdepend- <br> ence | (a) The two of us depend on each <br> other | 4.38 | 1.58 | 3.47 | 1.62 |
|  | (b) The two of us have influence on <br> each other's thoughts | 4.73 | 1.50 | 3.85 | 1.43 |
| Breadth | (c) Our communication ranges over a <br> wide variety of topics | 5.09 | 1.50 | 4.55 | 1.51 |
| Depth | (d) I usually tell this person exactly <br> how I feel | 5.04 | 1.55 | 4.12 | 1.60 |
| (e) I feel I can confide in this person <br> about almost anything | 4.82 | 1.61 | 3.7 | 1.65 |  |
| (f) We have developed the ability to <br> 'read between the lines' of each <br> other's messages to figure out what is <br> really on each other's mind | 4.76 | 1.48 | 3.77 | 1.59 |  |
|  | (g) We have special nicknames that <br> we just use with each other | 4.34 | 1.88 | 3.73 | 1.86 |
| (h) The two of us use private signals <br> to communicate in ways outsiders <br> would not understand | 4.33 | 1.82 | 3.49 | 1.70 |  |
| Understanding | (i) I can accurately predict what this <br> person's attitudes are | 4.88 | 1.60 | 3.86 | 1.55 |
| Commitment | (j) This relationship is very important <br> to me | 5.38 | 1.45 | 4.11 | 1.74 |
| (k) I would make a great effort to <br> maintain my relationship with this <br> person | 5.37 | 1.38 | 4.21 | 1.62 |  |
| (I) We have introduced each other to <br> members of each other's circle of <br> friends and family | 4.97 | 1.83 | 3.86 | 1.66 |  |

Table 9. Relation Between Quality and Duration of Friendship (On-Line)

| Dimension | Item | Less than 24 months ( $\mathrm{N}=49$ ) | More than 24 months ( $\mathrm{N}=42$ ) |
| :---: | :---: | :---: | :---: |
| Interdependence | (a) The two of us depend on each other | 3.16 | 3.83 |
|  | (b) The two of us have influence on each other's thoughts | 3.55 | 4.19 |
| Breadth | (c) Our communication ranges over a wide variety of topics | 4.33 | 4.81 |
| Depth | (d) I usually tell this person exactly how I feel | 3.65 | 4.67 |
|  | (e) I feel I can confide in this person about almost anything | 3.10 | 4.40 |
| Code Change | (f) We have developed the ability to 'read between the lines' of each other's messages to figure out what is really on each other's mind | 3.37 | 4.24 |
|  | (g) We have special nicknames that we just use with each other | 3.45 | 4.05 |
|  | (h) The two of us use private signals to communicate in ways outsiders would not understand | 3.18 | 3.86 |
| Understanding | (i) I can accurately predict what this person's attitudes are | 3.51 | 4.26 |
| Commitment | (j) This relationship is very important to me | 3.65 | 4.64 |
|  | (k) I would make a great effort to maintain my relationship with this person | 3.65 | 4.86 |
| Network Convergence | (I) We have introduced each other to members of each other's circle of friends and family | 3.45 | 4.33 |

## ABOUT THE AUTHORS

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