

# An Investigation of Facebook Grouping

**Robin Brewer<sup>\*</sup>, Yael Mayer<sup>‡</sup>, Patrick Kelley<sup>†</sup>, Lorrie Cranor<sup>†</sup>**

*<sup>\*</sup>University of Maryland, College Park, MD*

*<sup>‡</sup>Harvey Mudd College, Claremont CA*

*<sup>†</sup>Carnegie Mellon University, Pittsburgh PA*

## Abstract

With increasingly large friend networks on Facebook, users have difficulty keeping track of who they are sharing information with through Facebook.<sup>1</sup> Group-based settings are a possible solution to help Facebook users have more control over their privacy. To make this viable, it is necessary to improve the Facebook friend lists interface. In order to do this, we investigate the grouping process of 26 participants as they categorize their friends through four different mechanisms. Our results show that people generally grouped their friends in two different ways: on a friend-by-friend basis and on a group-by group basis. The interface that people use affects how they group their friends. We detail these findings and present a preliminary analysis of possible interface features.

---

<sup>1</sup> [1].

## 1. INTRODUCTION

From 2005 to 2010, the popularity of social networking sites such as Facebook, MySpace and Twitter has increased dramatically. Currently with over 500 million users, [3] Facebook is the biggest. However, there have been rising concerns about the privacy of users at these sites as they post personal details about their life online. An iconic example is Stacy Syder, a teacher in training who was denied her degree as a result of posting a picture captioned “Drunken Pirate” on her MySpace page. There was also the 16-year-old British girl who was fired for complaining on Facebook, “I’m so totally bored!!” [8] and students in Kansas University who were disciplined for pictures on Facebook of a party which violated the school alcohol policy [7].

Perhaps making matters worse, Facebook’s privacy settings have changed over the years each time making more information public by default. **Error! Reference source not found.** Changing these privacy settings requires navigating through many different levels of settings. For each of these settings, users have the option to customize what they share by choosing different levels of access: “Everyone”, “Friends of Friends”, “Friends Only”, “Only Me” or “Customize.”<sup>2</sup> Currently, the most stringent default option besides “Only Me” that does not involve customizing your settings is “Friends Only.” However, users have increasingly large friend networks – the average number of Facebook users’ friends today has risen to 130 [3] and it is not uncommon to have as many as 500 friends or more. This leads to the question, “How many of your Facebook ‘friends’ are really your friends? Do you want to share the same information

with all of them?” For a lot of users, “Friends Only” may not be good enough.

In this report, we present our investigation on the process by which Facebook users group their friends under different privacy-related scenarios. We propose to use these results to make a better interface for people to make friend groups, making it easier for them to control their privacy.

## 2. RELATED WORK

### 2.1 Why group based privacy?

Users’ friend networks are made up of people that they meet in distinct contexts and at different life stages. Facebook and other social network sites put all of these people in one big bucket and call them all “Friends”. However, it is reasonable to suppose that users may want to share different kinds of information with different friends. It is especially important to consider this as studies such as [1] have found that people have a lot of misconceptions about who they are actually sharing their information with.

In a 232 participant survey Binder *et al* [2] found that “the diversity of a network predicts online tension as a consequence of visibility of communication across social spheres.” In another 20-participant online observation study, Lampinen *et al*

[5] **Error! Reference source not found.** McKeon, Matt. (2010). The Evolution of Facebook Privacy  
<http://mattmckeon.com/facebook-privacy/>  
July 2010

[6] investigated how people currently managed “group co-presence” on Facebook. Their results showed that participants managed the temporal and spatial multiplicity of their groups by dividing the platform into separate spaces such as closed Facebook Groups and by “using suitable channels of communication.” However, they also relied

---

<sup>2</sup> From Facebook privacy settings, [www.facebook.com](http://www.facebook.com)

on self-censorship and trusting their friends not to share inappropriate data and “being responsible”.

Ideally, social networking sites should do better than that. Indeed, Facebook allows users to make “friend lists” which can be used to customize users’ sharing preferences according to their groups of friends. However, in a small thesis study, Smart [9] found that none of his 10 participants used friend lists to control their privacy settings. The user’s primary task when using Facebook is seldom or never to sit down and make friend lists for privacy, so the current friend lists interface is not as good as it needs to be.

## 2.2 An automated approach towards grouping friends

In a recent experiment, Jones *et al* [4] worked on an automatic method to group Facebook users’ friends. For this study they downloaded 15 participants’ entire networks – that is, their friends and their friends’ connections – and used a clustering algorithm to group them. Participants also grouped their friends separately using the card-sorting software xSort<sup>3</sup> “as if they were grouping them for controlling their privacy on Facebook.” These groups were used as a base truth to compare against the algorithmic groups. Jones’ results showed that the algorithmic groups were at best around 70% accurate in comparison to the groups made by the participants.

In the final phase of this study, Jones *et al* asked participants to select a privacy-sensitive item from their profile and indicate their “willingness to share” this item with a each of 100 contacts. These contacts were a stratified sample of the groups that they had made earlier. The outcome of this data was that for group-based permissions, in the worst case 77.8% of contacts were correctly granted or

denied access, and in the best case the number rose to 90.8%. ‘Best case’ and ‘worst case’ were defined as the decision of granting group access based on “the lowest [or highest] number of contacts which contravene the overall group decision,” respectively. This data demonstrates that even groups that participants make themselves may not be adequate. However, further investigation could explore how this extends for different privacy-sensitive items, and whether and how it provokes any re-grouping.

Jones mainly focused on the feasibility of the grouping algorithm. Thus, their study has a few limitations for analysis of people’s grouping processes. First, the software used did not allow participants to place friends in more than one group. Thus, the xSort interface primed users to group their friends in a certain manner. The fact that participants were not able to look at the pictures of their friends is also important, as users may have had trouble identifying some friends correctly. In addition, 15 participants may be a relatively small study to draw conclusions about grouping thought processes, especially because the largest network examined only had 312 friends. Lastly, the study only gathered limited data on how the groups that participants made reflected their actual sharing preferences. Different scenarios may affect how users re-group and re-organize their friends and push them to create more useful groups.

## 3. METHODOLOGY

The user studies were carried out in semi-structured individual interviews. Participants were first asked to categorize their friends into different groups. When they had done this, the interviewers asked them a series of privacy-related questions such as “show us who you would share your phone number/ location with,” and “show us which of your friends you would invite to

---

<sup>3</sup> [www.xsortapp.com](http://www.xsortapp.com)

a party at your home.”<sup>4</sup> Participants could re-group their friends to answer the questions if they felt the need. In addition, two supplementary surveys were used to evaluate the current use of Facebook friend lists and the participants’ usual usage of Facebook in general.

The process by which a person groups their friends is likely to be related to the interface used for the grouping. To investigate how different interfaces prime participants to group their friends in varying manners, the participants were randomly given one of four grouping mechanisms for the individual interviews: card sorting, grid tagging, file hierarchy and the Facebook friend lists interface. Each mechanism worked as follows.

**1) Card sorting:** participants were given paper cards with the names and profile pictures of all of their Facebook friends. The participants sorted the cards into piles during the grouping process. If they asked for it, participants were free to place friends in multiple groups by creating card duplicates.



**2) Grid tagging:** the profile pictures each participant’s friends were printed out on a grid. Participants categorized them by tagging the pictures with different colored markers. These pictures could be tagged

more than once to place people in more than one group.

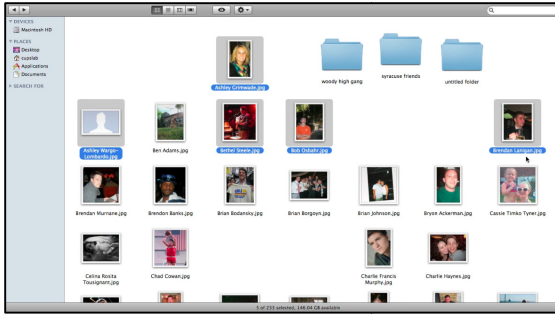


**3) Facebook Friend Lists Interface:** participants were asked to categorize their friends by making lists. The Facebook interface allows group overlap, so participants could use this feature if they wished.



**4) File hierarchy:** participants were shown one folder on a computer containing the profile picture files of the participant’s friends. The picture files were named with the corresponding friend’s name. To group their friends, participants made folders and put the appropriate pictures in the folders. Users could place a friend in multiple groups by copying or moving the picture file.

<sup>4</sup> Full questionnaire included in Appendix.



## 4. DISCUSSION

### 4.1 Demographics

In this study of 26 participants, 73% were between the ages of 18 and 25 showing an age distribution that is slightly atypical of Facebook's current age distribution. Figures 1 and 2 below show the different distributions.



**Figure 1 Facebook's Age Distribution**



**Figure 2 Our Age Distribution**

Further, these participants were more active than typical Facebook users. 70% of them logged on more than once per day while 50% of the typical Facebook users log on once each day. This data was taken from the online survey that the participants completed. Of the 26 participants, 14 were male and 12 were female. 19 of them did not have a background in technology. Participants had an average of 281 Facebook friends.

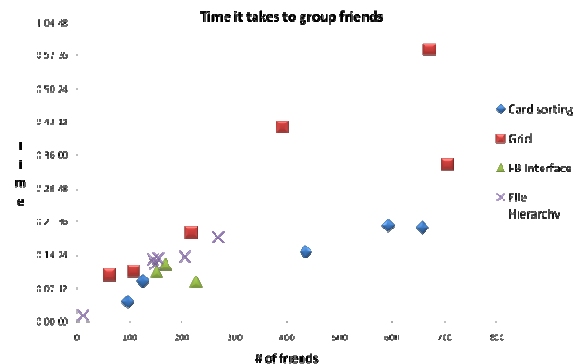
### 4.2 Interviews

#### 4.2.1 Creating the original groups

During the one-on-one interviews where we asked participants to place their Facebook friends into groups, we noticed people grouped their friends one of two

ways. With the first method participants created a group, placed all their friends in that group, and continued to create as many groups as they saw necessary. In this case the participant browsed their friend list  $n$  times for the  $n$  groups that they created. In the second method, people grouped one friend at a time. The user would look at one friend, place him/her into a group, and repeat the process until all friends had been grouped. While there was no significance in which grouping mechanism participants used, as a whole, clear patterns arose when we analyzed participants by method. All participants who sorted using cards grouped one friend at a time while all who used the current Facebook interface categorized their friends on a group by group basis. There was no clear pattern with those who used the grid and file hierarchy methods.

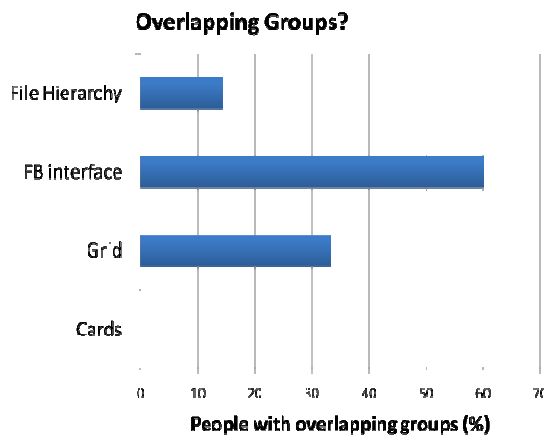
When comparing the number of friends someone had and the time it took to group all of those friends we observed, as expected, that the more friends a participant had, the longer it took for them to group their friends. In general, it takes longer to group using the "taggable" grid method than the card sorting method but we must observe more studies to better compare time differences because there was no observable correlation between time and interface. We the grid took longer because users had to flip through all pages of their friends multiple times.





**Figure 3 Time to group friends**

Some participants placed friends in more than one group. However, no one who used the card sorting method did this. 60% of participants using the Facebook interface, more than any other grouping method, placed at least one friend into more than one group. For file hierarchy and grid methods, some users also overlapped groups, as shown in the figure below.



**Figure 4 - overlap of groups**

Sometimes the users were aware that they were overlapping groups. For example, if they had a friend with whom they attended high school and college, they would place the friend in both the high school and college groups. But this number may be particularly high for the Facebook interface because once you place someone into a list on Facebook and you go to create another list, you cannot see if you have already placed the person in another group.

For the methods that group overlapping occurred, some participants would place friends into more than one group on their own but usually the participant would ask the researchers if they could place friends into more than one group. Therefore, it may need to be more obvious that they can do so.

#### 4.2.2 Previous Interface Ideas

Before running the study on participants, we ran many pilot studies and saw that most people change their groups based on different scenarios. From this, we thought maybe a better interface could be one where people give tags to their friends. This would make it easier to create new groups based on the situation. During the interviews we asked participants what tags they would give to their friends. While many said they would not use such feature because they would only search for their friends by name, we have gathered a list of common tags and they are as follows: school, city, occupation, native country, and where the user met them.

#### 4.2.3 Amount of Friends

After doing the 26 user studies, the above observation still holds – the groups change based on different scenarios, but in 2 ways. In the first way, participants combined entire groups. For example, they would allow their entire family or entire close friends group to have their phone number. However, some participants when creating new groups would create them by combining pieces of pre-existing groups. For example, they would only allow 2 people from their church and 5 people in their class to see their e-mail address.

Users also stated that they “could have been more accurate with fewer friends” hinting that the tasks asked of them could have been easier if they had less Facebook friends.

With 26 participants, there was an average of 281 friends. Those with fewer friends did not create fewer groups. There were a couple outliers, in which one participant created only 1 group and another created 30 groups. However, most people made between 3 and 9 groups with an average of 7 distinct groups being formed during the original grouping process. So far, the only observable difference is that for the Facebook friend

list interface the more friends someone had, the less groups they created. After continuing with the interviews, we noticed that sometimes participants added another group to their original set of groups such as a 'close friends' group. The most common names for the groups that participants created were: 'college', 'high school', 'family', 'close friends', 'others' and 'people I don't know'.

#### **4.2.4 Privacy-Related Observations**

Concerning privacy, we observed that many participants stated, "I assume everything is public once I put it on Facebook". These people used their discretion and did not post any comprising pieces of information or anything that could be misconstrued as being compromising on their Facebook profiles. Since many of our participants were 18-25 years of age, it was not surprising to observe that many were in college. They expressed concern that parents, family members who would convey information to their parents, and future employers would see privacy-sensitive parts of their profile.

In addition, participants were asked if they had any friends who sent too many application invites. If they answered yes, they were asked if they would consider placing these friends in a group to block them from sending application invites. What we found was that most would not do this and would continue to block the applications themselves. They "didn't want to censor their friends in any way", as one user put it. This shows that it's more that the applications themselves are annoying rather than the people who use the applications.

Another question asked was - 'Have you ever untagged yourself from a photo?' and why. More often, participants would tell us they did so because the picture was unflattering or perhaps inappropriate. This begs the question, what do people consider

inappropriate enough that they would restrict others from seeing the post.

#### **4.2.5 Method-Specific Observations**

For the card sorting method, 1 or 2 cards were unintentionally printed with just the friend's picture and no name. While this did not happen more than three times per participant, they were not able to recognize a friend using only a picture as identification. Moreover, name and picture may not be enough. Those grouping friends with computer-based methods constantly wanted to click on the name and picture to be linked to their friends' profiles. Specifically with the file hierarchy system, some participants were not familiar with the Mac hierarchy interface. With some, we could notice they were having trouble. Others would explicitly state "I'm more of a PC person". The time it took one participant increased due to the fact that she had to re-group an entire group because of the problems she encountered using a Mac. Therefore, her results were not counted in the analysis of data.

#### **4.3 Post-Interview Survey Responses**

At the end of the semi-structured interviews, participants were asked to complete a short survey mostly containing questions specifically related to Facebook privacy and friend lists. This was done so that participants did not bias their answers to the questions asked towards Facebook privacy. From this post-survey we found that, while many might assume the task of sorting all of one's Facebook friends to be a daunting one, 76% of participants agreed or strongly agreed that they enjoyed the study. Specific trends can be seen for the grid and Facebook interface methods that the more friends someone had, the more they enjoyed the study. This suggests that people that have a lot of friends may be more willing to group their friends using similar methods.

Of the 26 participants, 30.4% had friend lists in their Facebook accounts.

However, 40% of this 30% actually used friend lists to control their privacy settings as shown in figure 5. While this only represents 3 of the 26 people, more studies will be run in the future for better results.

In addition, approximately 60% of those who had friend lists never updated them after creating them, also shown in the figure below.

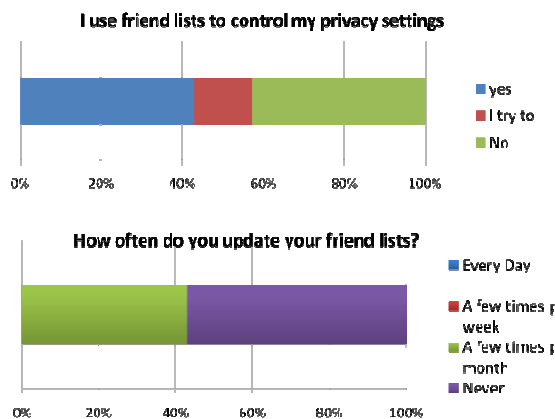


Figure 5 - friend list data

## 5. Conclusions

### 5.1 Recommendations

Based on our observations, there is no conclusive data on which method is best. However, we do have recommendations of features that an improved friend list interface should have. First and foremost, it must be easy to create and update the lists. If this happened, perhaps there would be an increase in the number of people who updated their friend lists. Next, since no participant was alike, the system needs to be flexible. There needs to be a grouping mechanism to handle those who group by friend and those who group by group. Because the system will be on a computer, users should be able to click on links that will connect them to a friend's Facebook profile while grouping.

### 5.2 Future Changes

Due to problems on the computer with participants who were unfamiliar with the Mac interface, in the future people will be given the choice between using a PC and a Mac. Further, we will advertise in different areas of the city other than college-dominated research websites to get more diverse participants and a more representative demographic.

### 5.3 Future Steps

More user studies will be run in the future until a pattern of which method is best becomes clear. After this, an interface will be designed and tested based on the best method(s). Perhaps this approach can be used to complement Jones' automated algorithm [4]. Jones' method can originally group the friends and the new friend list interface will be used to refine these groups.

## REFERENCES

- [1] Aquisti, A., and R. Gross. *Imagined Communities: Awareness, Information Sharing, and Privacy on the Facebook*, Pre-proceedings version. Edited by G. Danezis and P. Golle. PET 2006. Springer-Verlag Berlin Heidelberg. 36-58
- [2] Binder, J., Howes, A., and Sutcliffe, A. (2009). *Conflicting Social Spheres And Experienced Tension In Social Networking Sites*. In *CHI 2009* (Boston, MA, USA, April 4-9, 2009). ACM 978-1-60558-246-7/09/04.
- [3] Facebook Statistics (2010) <http://www.facebook.com/press/info.php?statistics> July 2010
- [4] Jones, S., and O'Neil, E. (2010). *Feasibility of Structural Network Clustering for Group-Based Privacy Control in Social Networks*. In *Symposium on Usable Privacy and Security (SOUPS)* July 14-16 2010, Redmond, WA, USA
- [5] **Error! Reference source not found.** McKeon, Matt. (2010). *The Evolution*



of Facebook Privacy  
<http://mattmckeeon.com/facebook-privacy/>  
July 2010

[6] Lampinen, A., Tamminen, S., and Oulasvirta, A. (2009). All My People Right Here, Right Now: Management of Group co-Presence on a Social Networking Site. In *Proceedings of the ACM 2009 international Conference on Supporting Group Work* (Sanibel Island, Florida, USA, May 10-13, 2009). GROUP '09. ACM, New York, NY, 281-290.

[7] Parker, R. (2006) Alcohol policy violated. *Kansan.com* February 28

[8] Rosen, Jeffrey (2010) The Web Means the End of Forgetting. *New York Times*, [http://www.nytimes.com/2010/07/25/magazine/25privacy-t2.html?\\_r=2](http://www.nytimes.com/2010/07/25/magazine/25privacy-t2.html?_r=2) July 2010

[9] Smart, D. (2009). How do people limit their behavior in response to their perception of potential social tension? A study of Facebook. *Manchester Business School Bsc. Interactive Systems Design*.

## **Appendix A.**

### **Online Survey**

=====  
Consent Form  
=====

This survey is part of a research study conducted by Lorrie Cranor at Carnegie Mellon University. The purpose of the research is to investigate Facebook users' Friends.

Procedures

Participants will be asked to give investigators access to their list of Friends on Facebook. They will then be asked a series of questions about their Facebook Friends in an interview. The interview should take no longer than 1 hour.

Participant Requirements

Participation in this study is limited to individuals age 18 and older. Participants must also have an active Facebook account.

Risks

The risks and discomfort associated with participation in this study are no greater than those ordinarily encountered in daily life or during other online activities. You might experience some boredom or fatigue during your participation.

Benefits

There may be no personal benefit from your participation in the study but the knowledge received may be of value to humanity.

Compensation & Costs

Participants will receive \$15.00 compensation for participation in this interview study.

There will be no cost to you if you participate in this study.

Confidentiality

The data captured for the research does not include any personally identifiable information about you. Your IP address will not be captured.

By participating in this research, you understand and agree that Carnegie Mellon may be required to disclose your consent form, data and other personally identifiable information as required by law, regulation, subpoena or court order. Otherwise, your confidentiality will be maintained in the following manner:

Your data and consent form will be kept separate. Your consent form will be stored in a locked location on Carnegie Mellon property and will not be disclosed to third parties. By participating, you understand and agree that the data and information gathered during this study may be

used by Carnegie Mellon and published and/or disclosed by Carnegie Mellon to others outside of Carnegie Mellon. However, your name, address, contact information and other direct personal identifiers in your consent form will not be mentioned in any such publication or dissemination of the research data and/or results by Carnegie Mellon.

#### Right to Ask Questions & Contact Information

If you have any questions about this study, you should feel free to ask them by contacting the Principal Investigator now at

Associate Professor Lorrie Cranor  
Computer Science, Engineering and Public Policy  
CIC 2207  
4720 Forbes Ave  
15213  
phone: 412-268-7534  
email: lorrie AT cs DOT cmu DOT edu

If you have questions later, desire additional information, or wish to withdraw your participation please contact the Principle Investigator by mail, phone or e-mail in accordance with the contact information listed above.

If you have questions pertaining to your rights as a research participant; or to report objections to this study, you should contact the Research Regulatory Compliance Office at Carnegie Mellon University. Email: [irb-review@andrew.cmu.edu](mailto:irb-review@andrew.cmu.edu) . Phone: 412-268-1901 or 412-268-5460.

The Carnegie Mellon University Institutional Review Board (IRB) has approved the use of human participants for this study.

#### Voluntary Participation

Your participation in this research is voluntary. You may discontinue participation at any time during the research activity.

1. I am 18 or older.  
 Yes  
 No
2. I have read and understand the information above.  
 Yes  
 No
3. I want to participate in this research and continue with the study.  
 Yes  
 No
4. I have registered for an appointment to participate in this interview study.  
 Yes  
 No

5. Please provide your name and appointment time:

6. Please enter your e-mail address.

=====  
Facebook and Privacy  
=====

7. How frequently do you log-in to Facebook?

- Many times per day
- Once a day
- A few times per week
- A few times per month
- Very rarely
- Never

8. How frequently do you update your status or post content on Facebook?

- Many times per day
- Once a day
- A few times per week
- A few times per month
- Very rarely
- Never

Do you use Facebook primarily to communicate with

=====  
9.

- Co-workers and business associates
- Family
- Friends
- Other

10. Facebook changes privacy controls too frequently

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

11. I trust Facebook with my personal information

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

12. I don't worry about Facebook privacy because I have a strong set of privacy rules

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

13. The idea of erroneous/ false information about me on Facebook concerns me (Ex: posts on walls/ groups, fake profiles/ pages)

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

14. While nothing on my Facebook is particularly sensitive, I worry people could combine this information with other sources to violate my privacy

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

15. Once I put information on Facebook, it's not truly "private" anymore

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

What do you think of the June 2010 changes to the Facebook privacy controls?

=====

16.

- I didn't know there were new controls
- I never looked at the old privacy controls
- The new controls are better
- The new controls are worse
- The new controls are about the same

17. I find Facebook's new privacy controls confusing

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

18. I don't really feel like I need a bunch of different privacy settings

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

=====

Facebook and Privacy

=====

19. If Facebook keeps violating my privacy, I'll stop using it

- Strongly Agree
- Agree
- Neutral



- Disagree
  - Strongly Disagree
20. Facebook should announce any planned changes in advance
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
21. Facebook can do whatever it wants - if you don't like changes, you can always leave
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
22. Facebook should ask for user input before making changes
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
23. If I become concerned about something on Facebook, I just remove it from my profile, and it is gone forever
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
24. Even if I set up my privacy preferences now, Facebook will just change things and make things public, so why bother trying?
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
25. I did not read Facebook's new privacy policy in detail
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
26. Do you have more privacy concerns now that you have taken this survey?
27. Do you have any other questions, comments, concerns, suggestions or opinions about Facebook that you weren't able to express in this survey? Write them here:

=====  
Demographics  
=====

28. What is your gender?

Male

Female

29. What is your age?

30. Are you majoring in or do you have a degree or job in computer science, computer engineering, information technology, or a related field?

Yes

No

=====  
Redirect instructions  
=====

Thank you for taking our survey. Your responses are very important to us.

To continue with the study, we need to acquire your public list of Facebook Friends and their profile pictures.

Clicking on 'Finished? Submit your Survey' will redirect you to the website of our Facebook Application.

Please Log in with your Facebook account to allow us to access your public information on Facebook. We will not collect any other data.

=====  
Thank You!  
=====

**Appendix B.**  
**Interview Script**

## FACEBOOK FRIENDS VS. REAL FRIENDS

---

*before giving them pictures*

Today we are going to be talking about the way you think about and manage your online relationships.

To start off, can you tell us about how many Facebook friends you have?

Using (the cards/the markers), categorize your friends into different groups and tell us what you're thinking as you do so.

Can you tell us a little bit about each group?

## CONTACT AND PERSONAL INFO

---

Okay now show us, using the cards in front of you again, who you would not give access to:

Which do you use more – your home phone number or cell phone number?

Your \_\_\_ phone? (from above question)

Your e-mail address?

Your religious views or political views?

Who you're interested in?

Relationship status?

## NEWSFEED

---

Are there some friends that send too many invites for applications?

Would you put these people in a group to block them from sending you application invitations? Can you show us these friends?

*(Supplementary question if stuck on the previous one)* Can you show us who plays Farmville, Mafia wars or other games too much?

Have you ever hidden anyone from your Newsfeed? (their posts)

Show us which of your friends' Newsfeeds do you find annoying? Are there anybody's posts that you don't care about?

Would you rather...

hide a group of friends from your Newsfeed, or  
pick a group of friends to always show up on your Newsfeed?

Show us that group using the cards.

## VACATION

---

Think about the last vacation you went on for which you posted pictures. Can you tell us a little bit about it?

Was there anyone that you would have liked to tell that you went on vacation (*prompt: "like all your friends in New York", or to let somebody know you arrived safely*)? Was there anyone that you definitely wouldn't have liked to notify? Please show us the groups with the cards.

Show us which of your friends you gave access to your album.

Who would you have given access to certain pictures in this album, if the feature were available?

Is there anyone that you didn't want to see it? Why not?

## PICTURES

---

Think about a picture that you untagged yourself from. If you're comfortable, tell us a little bit about it, and why you untagged yourself.

Are there any specific friends with whom you would have liked to share the picture? Anybody who you would definitely not like to see it? Show us these groups.

## OTHER POSTS

---

Are there any friends who post things on your wall which you'd rather they sent you privately?

Have you ever removed a post from your wall or pictures?

Have you ever posted something that was seen by somebody who shouldn't have seen it? Tell us a little bit about the post, and about who it was seen by.

Which of your friends would you have been okay with seeing the post?

Suppose that you want to complain about a professor/ boss (or an equivalent person of authority) with your peers. Which of your friends would you want to share this with? Not share this with?

Have you ever sent group messages using Facebook? Tell us about one example where you did this and show us the group.

Can you show us whose profile pages do you go to the most?

Which of your Facebook friends do you talk to the most ON Facebook?

## PARTY

-----  
If you wanted to host a party at your home and were thinking of inviting people using Facebook, to which of your friends would you send invites? And can you tell us what kind of party you're thinking of?

*Prompt 1:* Suppose you were throwing a birthday party for your friend, sibling or yourself... or it could be a barbecue...

Now can you think of a different party that you would invite a different group of friends to. What kind of party would it be and can you show us this group of friends?

#### LOCATION SHARING

-----

Show us who you want and don't want to share your location with for the following scenarios...

You go out on a weekend night?

You're at work/school?

You're at home?

Never?

All the time?

Thanks so much for your time. Please take the next few minutes to fill out this short survey.

Thanks again. We really appreciate your help. We will be using what you've shown us to design a better interface for friend lists on Facebook and other social networking sites.

### **Appendix C.**

#### **Post-Interview Survey**



**1. I enjoyed doing this study**

Strongly Agree   Agree                  Neutral                  Disagree                  Strongly Disagree

**2. Friend lists are a Facebook feature which allows “you to create private groupings of friends based on your personal preferences.” How many Facebook friend lists did you have BEFORE this study?**

**3. Do you use your friend lists to control privacy settings?**

Yes                  I try to                  No

**4. It is difficult to make Facebook friend lists.**

Strongly Agree   Agree                  Neutral                  Disagree                  Strongly Disagree

**5. If you use the ‘Limited Profile’ friend list, how many friends are included in this list?**

**6. How often do you update your friend lists?**

Every day                  A few times per week                  A few times per month                  Never

**7. How frequently do you accept friend requests “just to be nice”?**

Never                  Rarely                  Sometimes                  Very Often

**8. Do you have more privacy concerns now that you have done this study?**

**9. Do you have any other questions, comments, concerns, suggestions or opinions about Facebook that you didn’t feel able to express in the survey? Write them here:**