## 62-150 Assignment\#2AnalysisReport

Profile pictures are usually the first impressions. With online media, people "can" and most "will" choose their "profile pictures", choose how they want to be viewed by others. And it is often interesting to explore the relationship between what a person really is and what he chooses to be. To conduct a small analysis, I chose Facebook because it is the largest social network online and most people use it for the most general purposes.

## Image Collection

I collected 61 profile pictures from my Facebook friend list. They are the friends that I am relatively closer to so that I have a better idea of their images and personalities in the real life. I mostly screenshotted the thumbnails with the names and the number of their friends on the side.

## Question and Framework

In this report, I will particularly look into the relationship between people' s level of sociability in the real life and his choice of profile pictures. What kind of profile picture would a social and outgoing person choose to represent himself and what for an introverted. What are the elements in a profile picture that can be perceived to be social and what are perceived to be the other way. Will some certain profile pictures gain you more friends on Facebook?

To easily and quantitatively represent someone's level of involvement in social activities, I found number of friends a good rough indicator - the more friends you have on Facebook usually means that you are actually more sociable. A quick glance of all the profile pictures on hand, I have identified the following features that are descriptive of a profile picture and might be potential factors that relate to different number of friends on Facebook: gender, child photos, selfies, group photos, outdoor settings, objects, promotional photos, far distance/not seeing faces clearly.

To make it easy for the quantitative analysis, I construct my data points with the following assigned values:

| Number of Friends | $\# /$ not available if this information is private |
| :--- | :--- |
| Gender | $\mathrm{M}(1) / \mathrm{F}(0)$ |
| Child Photo | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |
| Selfie | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |
| Group Photo | With Friends(1)/Couple Photo(2)/With Family(3)/Others(4) |
| Outdoor | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |
| Object | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |
| Promotional | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |
| Far Distance/Not Seeing Faces Clearly | $\mathrm{Yes}(1) / \mathrm{No}(0)$ |

## Data Analysis

## Quantitative Analysis

Among the 61 friends I analyze, there are 45 friends have their number of friends information public. Otherwise, I can only see the number of mutual friends with him/her. Most of the quantitative analysis are done on the 45 data points excluding the ones that don't have number of friends available. The comparison between profile pictures by those who reveal their number of friends and profile pictures by those who don't will be discussed in the qualitative analysis.

My sample has an average of 849.7 friends per person with the smallest being 208 and largest being 2127. There are 27 females and 18 males. Before looking into the features of their profile pictures, I first of all checked that gender doesn't have significant impact on the number of friends. Figure 1 shows that in my sample, females and males have similar distribution of number of Facebook friends.


Figure 1

Number of people on the profile picture as well as who else are on the profile pictures is one of the obvious features. As shown in Figure 2, most of my friends' profile pictures are by themselves, some are group photos with their friends, couple photos and some are at some specific settings such as a camp, a dance show where he/she is part of the group. Group photo with friends relates to a number of friends distribution with similar mean as those who just have themselves on the profile pictures. However, people who have group photos at some certain settings tend to have higher number of Facebook friends. Also, no one in my sample put their group photos with family as their profile picture.


Figure 2

Among those who just have themselves on the profile pictures, some of them put up their selfies. From Figure 3, we can see that the selfie profile pictures relates to a slightly higher average of number of friends.


Figure 3
Another interesting feature of profile pictures is its general settings. There are even number of people choose an indoor picture or an outdoor picture as their profiles. Figure 4 demonstrates a moderate relationship between outdoor profile pictures and higher number of Facebook friends.


Figure 4

Not all of the profile pictures show a clear image of someone's face and expressions. Some friends choose to present themselves from far distance or even use an object, usually a character from entertainment media. I even have a friend use a food image as his profile picture. It is surprising to me that the average number of friends of those who have a vague profile pictures turns out to be slightly higher.


Figure 5

## Qualitative Analysis

There are 16 people in my sample who don't have their number of friends public. For these data points, I manually look through their profile pictures and relate the features to what I know about my friends. A more qualitative rather than quantitative comparison between these two set of data, it seems that people who choose to hide their number of friends tend to be either very social or the opposite. Comparing the profile pictures of the more sociable people, the features in the range of this report indicate similar sociability no matter he/she has the number of friends public. However, when comparing those of the less sociable people, people who hide the number of friends are more likely to have objects as their profile pictures, and less likely to have outdoor settings. Other features including child photo and promotional photo are not mentioned in the quantitative analysis because there is only one instance for each feature.

## Limitation

This research is conducted on a very small scale and has a lot of considerable limitation. First, all the images are sampled from my friends' list, which only represent a certain group of college students. Second, the sample size is very small so the relationship can't be generalized to a much larger scale. Third, number of Facebook friends sometimes doesn't correspond to the sociability of a person in real life. Last but not the least, I only analyze the relationship between a single feature and the number of Facebook friends, but there are a lot of potential interactions among different features.

## Conclusion

It is not difficult to explain some of the founding from the analysis above. Group photos that show someone's "involvement" in some group activities, selfie photos that require underlying confidence of someone's appearance and social ability, outdoor settings that reflect someone's active life - these are all features that can be perceived to be sociable, outgoing and energetic. Sociable people want to present themselves on social media as outgoing, happy and well-connected and this corresponds well enough with the fact in my sample. Furthermore, sociable people love to post what they do, for example, a camp, a service trip and some sports activities, as their profile pictures rather than a clear image of their faces. These activities demonstrate their active status in interacting with groups of people, pursuing something fun and interesting.

