computational social media

lecture 2: friending

part 3

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08.03.2019
announcements

- assignment #1 will be discussed today
- assignment #2 will be given today
- all reading assignments are available online
- reading #1 will be presented today
- reading #2 will be presented next week
this lecture (continues the previous one)

a human-centric review of research on facebook
  descriptive analysis of users
  user motivations
  user identity
the real-name web: privacy & information disclosure
topic 3: identity presentation
how do people present themselves on facebook?
personality & facebook
what is a personality trait?

« stable individual differences in the reactivity of mental mechanisms designed to respond to particular classes of situations »

source: oxford university press
## the big-five personality traits

“the Big-Five traits have been broadly accepted as a way of presenting all the major traits of a person at the highest level of abstraction” (Gosling, 2003)

<table>
<thead>
<tr>
<th>Trait</th>
<th>Positive Description</th>
<th>Negative Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>outgoing, enthusiastic</td>
<td>aloof, quiet</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>prone to stress &amp; worry</td>
<td>emotionally stable</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>organized, self-directed</td>
<td>spontaneous, careless</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>trusting, empathetic</td>
<td>uncooperative, hostile</td>
</tr>
<tr>
<td>Openness</td>
<td>creative, imaginative</td>
<td>practical, conventional</td>
</tr>
</tbody>
</table>

(Tupes & Christal, 1961; Norman, 1963; Goldberg, 1981; Costa & McCrae 1985; Digman, 1990)
the lens model: a basic model for interpersonal perception

actual personality

self-reports

perceived personality

impressions

Figure 2. The interpersonal circle. Adapted from “A Psychological Taxonomy of Trait-Descriptive Terms: The Interpersonal Domain” by J. S. Wiggins, Journal of Personality and Social Psychology, 1979, Vol. 37, p. 400. Copyright © 1979 by the American Psychological Association. Adapted by permission.

Instruments to measure big-five traits: NEO FFI

NEO FFI - Five-Factor Inventory
(Costa & McCrae, 1992)
60 questions in total, 12 questions per trait
7-point Likert scale (from “strongly disagree” to strongly agree”)

Conscientiousness items
I am always prepared
I pay attention to details
I get chores done right away
I like order
I follow a schedule

Extraversion items
I am the life of the party
I don’t mind being the center of attention
I feel comfortable around people
I start conversations
I talk to a lot of people at parties

Agreeableness items
I am interested in people
I sympathize with others’ feelings
I take time out for others
I feel others’ emotions
I make people feel at ease

Openness items
I have a rich vocabulary
I have a vivid imagination
I have excellent ideas
I am quick to understand things
I use difficult words

Neuroticism items
I am easily disturbed
I change my mood a lot
I get upset easily
I have frequent mood swings
I worry about things

http://en.wikipedia.org/wiki/Big_Five_personality_traits
instruments to measure big-five traits: TIPI

TIPI - Ten-Item Personality Instrument (Gosling, 2003)
10 questions, 2 per trait
7-point Likert scale

<table>
<thead>
<tr>
<th>Question</th>
<th>1-Disagree strongly</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7-Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1. Extraverted, enthusiastic.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P2. Critical, quarrelsome.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P3. Dependable, self-disciplined.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P4. Anxious, easily upset.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P5. Open to new experiences, complex.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P6. Reserved, quiet.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P7. Sympathetic, warm.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P8. Disorganized, careless.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P9. Calm, emotionally stable.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
<tr>
<td>P10. Conventional, uncreative.</td>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7-Agree strongly</td>
</tr>
</tbody>
</table>
facebook profiles
(Back et al., 2010)

credit: chadica @ flickr (cc) http://www.flickr.com/photos/chadica/2990938779
do facebook profiles convey accurate impressions? (Back et al., 2010)

**NO**

idealized virtual-identity hypothesis
+ people display idealized characteristics
+ personality impressions should reflect ideal-self views rather than real ones

**YES**

extended real-life hypothesis
+ people communicate real personality
+ impressions should reflect real self views

why?
+ accountability with friends
+ ideal-self difficult to control

facebook profiles, actual personality, self-idealization

133 FB users (USA)
103 StudiVZ users (DE)

**actual personality**
- self-reports & four close friends
- TIPI+NEO (US), BFI-10 (DE)

**ideal-self**
- self-report: “describe yourself as you ideally would like to be”

**impressions**
- 9-10 external annotators
- TIPI (US), BFI-10 (DE)

**task**
1. reliability of impressions (ICC)
2. correlation analysis (r)
   - actual personality vs. impressions
   - self-ideal vs. impressions

credit: chadica @ flickr (cc) http://www.flickr.com/photos/chadica/2990938779
Interrater reliability
**ICC: intraclass correlation coefficient (Shrout & Fleiss ‘79):**

**Reliability:** extent to which measurements can be replicated

**Interrater reliability:** variation between two or more judges (a.k.a. raters) who measure (or rates) the same group of targets

**ICC(1,1), ICC(1,k):** agreement when each target is rated by a different set of k judges randomly selected from a larger population of judges

**ICC(2,1), ICC(2,k):** agreement when a random sample of k judges is selected from a larger population, and each judge rates each target

**ICC(1,1), ICC(2,1):** expected reliability of a single judge’s ratings

**ICC(1,k), ICC(2,k):** reliability when ratings are aggregated over the k judges to obtain a mean rating

**ICC varies for different traits**

- **extraversion:** usually top ICC
- **conscientiousness:** often 2nd top ICC


results

Table 1. Consensus, Accuracy, and Self-Idealization: Agreement Among Observer Ratings Elicited by Facebook Profiles and Correlations With Actual Personality and the Ideal Self

<table>
<thead>
<tr>
<th>Observer rating</th>
<th>ICC (consensus)</th>
<th>Actual personality</th>
<th>Ideal self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.81***</td>
<td>.39***</td>
<td>.13</td>
</tr>
<tr>
<td>Single observer</td>
<td>.31***</td>
<td>.25***</td>
<td>.08*</td>
</tr>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.59***</td>
<td>.22**</td>
<td>.16</td>
</tr>
<tr>
<td>Single observer</td>
<td>.13***</td>
<td>.11*</td>
<td>.08*</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.77***</td>
<td>.27**</td>
<td>.05</td>
</tr>
<tr>
<td>Single observer</td>
<td>.27**</td>
<td>.17**</td>
<td>-.02</td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.48***</td>
<td>.13</td>
<td>.12</td>
</tr>
<tr>
<td>Single observer</td>
<td>.09***</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.72***</td>
<td>.41***</td>
<td>.24**</td>
</tr>
<tr>
<td>Single observer</td>
<td>.23***</td>
<td>.24***</td>
<td>.14***</td>
</tr>
</tbody>
</table>

Note: ICC = Intraclass Correlation Coefficient; $r$ = Correlation Coefficient; $r_{\text{partial}}$ = Partial Correlation Coefficient.
Welcome to the myPersonality Project Website

This wiki was established to share the data with researchers. Go HERE if you want to take a psychological test, or visit Apply Magic Sauce, to predict your personality from your Facebook Likes.

News

Introduction

myPersonality was a popular Facebook application that allowed users to take real psychometric tests, and allowed us to record (with consent!) their psychological and Facebook profiles. Currently, our database contains more than 6,000,000 test results, together with more than 4,000,000 individual Facebook profiles. Our respondents come from various age groups, backgrounds, and cultures. They are highly motivated to answer honestly and carefully, as the only gratification that they receive for their participation is feedback on their results.

A wide variety of data is available to the registered collaborators, including:

- Psychometric tests' scores
- Records of users' Facebook profiles
- Item-level data

http://mypersonality.org/wiki/doku.php
M. Kosinski, D. Stillwell, T. Graepel, Private traits and attributes are predictable from digital records of human behavior, PNAS, 2013

Presenter: Marion Kramer
Discussant: Antonio Sunjerga
Scribe: Anton Aminul Sherstiuk
narcissism & facebook
Do Facebook and Other Social Media Encourage Narcissism?

Excessive use of some social media may be narcissistic.

Published on June 13, 2013 by Ray Williams in Wired for Success

Does Facebook enhance your self-esteem or does the popular method of connecting with people and "making friends," actually detract from a strong sense of self and promote narcissistic behavior? There appears to be conflicting perceptions and evidence regarding this question.

Facebook has more than 750 million users worldwide. It facilitates people keeping in touch online with a network of "friends" and the size of these networks varies from a handful to hundreds of thousands. One of the things that has not been clear is whether there is any relationship between the number of friends a person has and the number of their real-life friends. Some experts have observed anecdotally that social network friends are very different than real-life friends.

To provide a more scientific perspective, researcher Geraint Rees, and his colleagues at the University College of London examined the fMRI brain scans of 125 frequent Facebook users. After the scans, the number of online and offline friends were recorded. The researchers reported that the typical subject had on average, 300 friends on Facebook. They concluded that having more friends online did not significantly make particular regions of the brain larger or more active. However, the researchers concluded there was a positive correlation between the number of friends the subjects had online with the number of friends they had offline.

work, The Narcissistic Epidemic: bell) explains: “In data from as fast as obesity from the 1980s to the present.” The comparison to obesity suggests that narcissism is another epidemic in America.
narcissism: basic concepts

“personality trait reflecting an inflated self-concept”

“associated with high extraversion and low agreeableness”

“associated with using relationships as opportunity for self-enhancement”

“negatively associated with seeking out long-term relationships that have qualities of closeness, empathy, and warmth”

research question: how does narcissism manifest in Facebook?

narcissism in facebook 
(Buffardi & Campbell, 2008)

129 FB undergraduates (USA)

narcissistic personality inventory
+ NPI
+ 40-item questionnaire
+ “I like to look at my body”
+ “I am more capable than others”

FB profile
+ profile info available in 2007
+ 20 photos: “View Photos of Me”

objective coding
+ number of friends
+ number of wall posts
+ number of groups
+ number of lines in “About me”

http://www.flickr.com/photos/dullhunk/3914761467/
narcissism in facebook (2) (Buffardi & Campbell, 2008)

**subjective coding** (7-point Likert)
- + content of “About Me” section
  * self-absorbed
  * self-conscious
  * self-important
  * self-promoting
- + content of “Quotes” section
  * arrogant
  * clever
  * entertaining
  * self-promoting
- + profile photo
  * amount of clothing worn
  * physically attractive
  * self-promoting
  * sexy
- + photos from “View Photos of Me”
  * exciting
  * fun
  * self-promoting
  * provocative

**profile impressions** (7-point Likert)
- + external observers of FB profiles
- + believes about FB user (37 traits)
- + collapsed into 3 dimensions
  - + agency
    * assertive, active, confident, entertaining
  - + communion
    * affectionate, cooperative, generous
  - + narcissism
    * arrogant, narcissistic, self-centered

**task**
**correlation analysis (r)**
- + objective & subjective coding vs. self-reported narcissism
- + objective & subjective coding vs. impressions
- + self-reported narcissism vs. impressions
**TABLE 1:** Facebook Correlates With Owners’ Narcissism Scores and Raters’ Narcissistic Impression Ratings

<table>
<thead>
<tr>
<th>Objective Facebook page criteria</th>
<th>Owners’ Narcissism</th>
<th>Raters’ Narcissistic Impression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of social interaction ($\alpha = .75$)</td>
<td>.23***</td>
<td>.31***</td>
</tr>
<tr>
<td>Quantity of information listed about self</td>
<td>.07</td>
<td>.29***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjective Facebook page criteria coded by research assistant (RA) raters</th>
<th>Owners’ Narcissism</th>
<th>Raters’ Narcissistic Impression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-promoting information about self ($\alpha = .76$)</td>
<td>.18*</td>
<td>.32***</td>
</tr>
<tr>
<td>Self-promoting quotes ($\alpha = .94$)</td>
<td>.19*</td>
<td>.21**</td>
</tr>
<tr>
<td>Entertaining quotes ($\alpha = .88$)</td>
<td>-.28***</td>
<td>-.11</td>
</tr>
<tr>
<td>Main photo attractiveness</td>
<td>.18**</td>
<td>.33***</td>
</tr>
<tr>
<td>Main photo self-promotion ($\alpha = .89$)</td>
<td>.19**</td>
<td>.37***</td>
</tr>
<tr>
<td>Main photo sexiness ($\alpha = .71$)</td>
<td>.20**</td>
<td>.33***</td>
</tr>
<tr>
<td>Self-promoting pictures ($\alpha = .95$)</td>
<td>.10</td>
<td>.28***</td>
</tr>
<tr>
<td>Provocative pictures ($\alpha = .85$)</td>
<td>.07</td>
<td>.34***</td>
</tr>
<tr>
<td>Fun pictures ($\alpha = .88$)</td>
<td>.18**</td>
<td>.17*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impression ratings by participant raters</th>
<th>Owners’ Narcissism</th>
<th>Raters’ Narcissistic Impression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communal impression ($\alpha = .95$)</td>
<td>-.09</td>
<td>-.60***</td>
</tr>
<tr>
<td>Agentic impression ($\alpha = .93$)</td>
<td>.28***</td>
<td>.39***</td>
</tr>
<tr>
<td>Narcissistic impression ($\alpha = .92$)</td>
<td>.25***</td>
<td></td>
</tr>
</tbody>
</table>

* $p \leq .10$. ** $p \leq .05$. *** $p \leq .01$. 
“the expression of narcissism online is **similar** to that in other domains:
- higher number of social relationships
- self-promotion
- perception of having agency”

“viewers use **page content** to form impressions of narcissism
- amount of social interaction
- main photo”

“more modest, less self-centered individuals **do not appear to be self-promoting** compared to individuals scoring higher in narcissism”

“it remains **unclear** whether social networking results in an increase in dispositional narcissism for individuals with low narcissism scores”


source: http://www.dailymail.co.uk/news/article-2001739/Facebook-tattoo-hoax-video-viewed-1-5m-times.html
topic 4:
privacy and information disclosure
why do people disclose personal information despite potential risks?
Identifié(e) par Ton Patron

Ne laisse pas ton image t'échapper.

www.actioninnocence.org
the real-name web
Facebook’s Name Policy

What names are allowed on Facebook?

Personal Accounts

Facebook is a community where people use their real identities. We require everyone to provide their **real names**, so you always know who you’re connecting with. This helps keep our community safe.

Names can’t include:

- Symbols, numbers, unusual capitalization, repeating characters or punctuation
- Characters from multiple languages
- Titles of any kind (ex: professional, religious, etc)
- Words, phrases, or nicknames in place of a middle name
- Offensive or suggestive content of any kind

Other things to keep in mind:

- The name you use should be your real name as it would be listed on your credit card, student ID, etc.
- Nicknames can be used as a first or middle name if they’re a variation of your real first or last name (like Bob instead of Robert)
- You can also list another name on your account (ex: maiden name, nickname, or professional name), by adding an alternate name to your Timeline
- Only one person’s name should be listed on the account – Timelines are for individual use only
- Pretending to be anything or anyone is not allowed
“having two identities for yourself is an example of a lack of integrity”
“Use your full first and last name in a single language… Put nicknames of pseudonyms in the Other Names fields.” (summer 2011)

“google+ essentially provides an identity service … the internet would be better if we had an accurate notion that you were a real person as opposed to a dog or a fake person … if you don’t want to use it, you don’t have to.”


E. Banks, Eric Schmidt: If You Don’t Want To Use Your Real Name, Don’t Use Google+, Mashable, Aug. 28 2011. Full transcript: https://plus.google.com/+AndyCarvin/posts/CjM2MPKocQP?fww=1
Create your Google+ profile name

⚠️ Your account may be suspended if we determine your profile name violates our user conduct and content policy. We’ll notify you if that happens and provide you with some options including how to appeal.

Google+ makes connecting with people on the web more like connecting with people in the real world. It’s recommended that you go by your first and last name because it will help you connect with people you know and help them find you.

Google+ profiles are for individuals so if you want to use Google+ to represent something else like your business, your band, your family, or your pet, create a Google+ page instead.

As you create your Google+ profile, please keep the following guidelines in mind:

- **First and last name required:** You need to provide both your first and last name for your Google+ profile so it’ll help you find people and enable people to find you. Using only one name is not permitted. You can use an initial for one of the names, but not both. For example, “J. Smith” but not “J.S.” If you actually have a single-part name, then you should enter it as your first name, and a simple dot (“.”) as your last name, then go through the appeals process.

- **Nicknames optional:** A nickname can be displayed in addition to your first and last name. For example, John “Moose” Davis. Here’s how to add a nickname to your profile.

- **No professional titles:** You can’t include titles like “Dr.” or “Rev.” in your profile name but you can add professional affiliations to your profile’s “Other Names” section like “Bill Smithwick, DDS”, or “Jim Copley, Esq.”

- **No special characters:** You can’t use special characters or punctuation to make your name look different. For example, “MikeJones!!” or “J@son W@l$on” aren’t allowed.

- **No celebrity, historical, or other people’s names:** You can’t create a profile using someone else’s name or impersonate a celebrity. Pretending to be someone else could cause your profile to be suspended.
«the real-name web is not a technology, it is a social practice and a system of values»
HELLO
I'M
AWESOME
sharing your real name in physical life: not expected, not immediate, not forced

personal judgment, familiarity & trust

the pre-2.0 web was

+ textual & simplified
  + no images, audio, video
  + users were authors of text
  + easier to be someone else

+ sparsely connected
  + discussions created about topics & interests, not people

+ strange
  + biased to tech-skilled people
  + one never knew exactly who was on the other side of screen

the real-name web is

+ detailed
  + images, audio, video
  + difficult to be someone else

+ densely connected
  + friends & family are online
  + discussions about people

+ familiar & day-to-day
  + the more people, the less strange
  + from “a place out there” to “data about here”
facebook: management & consolidation of identity

thefacebook (2004)
+ online real-name directory
+ extension of campus life
+ safe option to mySpace
+ new users adopted norms
+ network effects

facebook (2016)
+ identity service
+ used by thousands of apps to validate identity

implications: real-name photo tagging

FB photo tagging (fall 2005)
+ only one way: real names
+ no longer topics, objects, scenes
+ became world’s largest photo site

uses:
+ access: personal data + physical appearance
+ generation of relational data (events, groups)
+ identity verification when device is not identified
+ data labeling for AI

credit: ambuj saxena @ flickr (cc): http://www.flickr.com/photos/ambuj/4417975055
when was the last time this happened to you?
what to remember

identity presentation
personality is expressed both online and in physical world
twitter profiles tend to reflect actual personality
personal traits captured through facebook activity

the real-name web
not a technology, but a practice and a value system
design shaping collective behavior & driving profits
enables identity services and machine learning
a key source of privacy risks & power disparities
questions?

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