computational social media

lecture 2: friending

part 3

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16.03.2018
topic 3: identity presentation
how do people present themselves on facebook?
**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>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td>outgoing, enthusiastic, aloof, quiet</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>prone to stress &amp; worry, emotionally stable</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>organized, self-directed, spontaneous, careless</td>
</tr>
<tr>
<td>Agreeableness</td>
<td>trusting, empathetic, uncooperative, hostile</td>
</tr>
<tr>
<td>Openness</td>
<td>creative, imaginative, practical, conventional</td>
</tr>
</tbody>
</table>

(Tuples & Christal, 1961; Norman, 1963; Goldberg, 1981; Costa & McCrae 1985; Digman, 1990)
**TIPI: Ten-Item Personality Inventory (Gosling)**

You see the person in the video as...

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</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</td>
<td>Extraverted, enthusiastic.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P2</td>
<td>Critical, quarrelsome.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P3</td>
<td>Dependable, self-disciplined.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P4</td>
<td>Anxious, easily upset.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P5</td>
<td>Open to new experiences, complex.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P6</td>
<td>Reserved, quiet.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P7</td>
<td>Sympathetic, warm.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P8</td>
<td>Disorganized, careless.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P9</td>
<td>Calm, emotionally stable.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P10</td>
<td>Conventional, uncreative.</td>
<td>2 3 4 5 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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
ICC: intraclass correlation coefficient (Shrout & Fleiss ‘79):

\[ \text{ICC}(1,1), \text{ICC}(1,k) \]
measures of agreement when each target is annotated by \( k \) judges randomly selected from a population of \( K \) judges

\[ \text{ICC}(2,1), \text{ICC}(2,k) \]
measures of agreement when each target is annotated by \( k \) judges

- \( \text{ICC}(1,1), \text{ICC}(2,1) \): measure the degree with which two judges agree with each other
- \( \text{ICC}(1,k), \text{ICC}(2,k) \): measure degree of agreement when annotations are aggregated over the \( k \) judges to obtain a unique score

ICC varies for different traits
- extraversion: usually top ICC
- conscientiousness: often 2\(^{nd}\) top ICC

Wikipedia: Intraclass correlation
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>r (accuracy)</th>
<th>Actual personality</th>
<th>Ideal self</th>
<th>r partial (self-idealization)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extraversion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.81***</td>
<td>.39***</td>
<td>.13</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Single observer</td>
<td>.31***</td>
<td>.25***</td>
<td>.08*</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.59***</td>
<td>.22**</td>
<td>.16</td>
<td>.08</td>
<td></td>
</tr>
<tr>
<td>Single observer</td>
<td>.13***</td>
<td>.11*</td>
<td>.08*</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Conscientiousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.77***</td>
<td>.27**</td>
<td>.05</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>Single observer</td>
<td>.27***</td>
<td>.17**</td>
<td>.03</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.48***</td>
<td>.13</td>
<td>.12</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Single observer</td>
<td>.09***</td>
<td>.06</td>
<td>.04</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average observer</td>
<td>.72***</td>
<td>.41***</td>
<td>.24***</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>Single observer</td>
<td>.23***</td>
<td>.24***</td>
<td>.14***</td>
<td>.06</td>
<td></td>
</tr>
</tbody>
</table>
narcissism & facebook
Wired for Success
How to fulfill your potential
by Ray B. Williams

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.

...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 being liked in initial interactions”

“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></th>
<th>Owners’ Narcissism</th>
<th>Raters’ Narcissistic Impression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective Facebook page criteria</td>
<td></td>
<td></td>
</tr>
<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>
<tr>
<td>Subjective Facebook page criteria coded by research assistant (RA) raters</td>
<td></td>
<td></td>
</tr>
<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>
<tr>
<td>Impression ratings by participant raters</td>
<td></td>
<td></td>
</tr>
<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 ≤ .10. **p ≤ .05. ***p ≤ .01.
in summary…

“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
announcements

Easter holiday: no lecture on
   30.03.2015
   06.04.2015

Plan for today
   Conclude Facebook lecture
   Reading session 1
   Discuss about your project
topic 4:
role in social interactions
how does facebook affect relationships among groups & individuals?
Reading session:
M. Burke, L. Adamic, K. Marciniak, Families on Facebook, in Proc. AAAI Conf. on Weblogs and Social Media (ICWSM), 2013
topic 5:
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
Reading session:
M. Kosinski, D. Stillwell, T. Graepel, Private traits and attributes are predictable from digital records of human behavior, PNAS, 2013
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

https://www.facebook.com/help/292517374180078
“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

credit: deepstereo @ flickr (cc): http://www.flickr.com/photos/deepstereo/9660110583/

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

facebook profiles tend to reflect actual personality online expressions of traits, like in the physical world

the real-name web

not a technology, but a practice and a value system «simple» design feature that shapes collective behavior enables identity services and machine learning a source of privacy risks & power disparities
course project

defining your project idea
evaluation & schedule
defining your project

something that you can do between now and second half of June

you can work in teams of 2-3 people (highly encouraged) or individually (only if you cannot find a project partner)

options for project

define your own idea: data analysis (qualitative or quantitative), machine learning, visualization, theoretical critique, etc.
talk to me if you don’t have your own proposals to get some ideas

data

use ready-to-use publicly available datasets
collect your own data
project schedule & evaluation

0. team building
   send me list of your team members by 12.04.1028

1. project definition talk (13.04.2018)
   five-minute presentation of your project proposal in class
team, title, problem, goals, approach, evaluation measures

2. project progress talk (18.05.2018)
   five-minute presentation of your project progress in class

3. final project talk (on presentation day, second half of June)
   20-minute presentation

4. final project report (on presentation day, more details later)
   ACM conference short paper format (5 pages + references)
some pointers to datasets

ICWSM data repository (mainly Twitter but other things too)
Crowdflower data for everyone
http://www.crowdflower.com/data-for-everyone
Yelp data sets
http://www.yelp.com/dataset_challenge
mypersonality project data
http://mypersonality.org/wiki/doku.php?id=download_databases
KDD nuggets (most are not social data)
http://www.kdnuggets.com/datasets/index.html

text examples of previous projects:
http://www.idiap.ch/~gatica/teaching-csm/2018/lectures/examples.zip
questions?

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daniel.gatica-perez@epfl.ch
@dgaticaperez