# Experiment Proposal - Essay 2

Impact of emoji usage in professional communication



Does the use of emojis in LinkedIn messages discourage recipients from writing back favorably?

This question is interesting to me because the widely-accepted belief is that emoji-usage is unprofessional, especially in the recruiting process, especially when first establishing communication -- but this has not been verified in any reliable way. Emoji usage has been tested in various other contexts (customer support via chat, product reviews etc) and researchers have found positive outcomes that show emojis are critical paralingual cues. So much can be deduced about a person based on emoji usage, so why wouldn't recruiters encourage applicants to be their authentic selves? Even though culturally emoji usage in professional/work settings has been frowned upon, I have observed that people, especially those who are now in their 30s or younger, secretly find emojis comforting and warm. Because emojis have become such an important part of our digital communication, my hypothesis is that the boundaries between contexts are blurring and that a recruiter's attitude towards emojis would be positive, and not negative. It is also possible that messages with emojis will stand out amongst others, and actually increase the likelihood of getting a response/call back from a recruiter.

## **Subject Recruitment**

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The subjects for this experiment will be recruiters/hiring managers/employees at tech companies of all sizes (startup, VSB, SMB, Enterprise) in the San Francisco/Bay Area. The list of companies to target for this study will be taken from:

- 1. Angel List, Product Hunt, Ycombinator for very early state startups
- 2. Saas1000.com for SaaS/B2B companies

3. Handshake, UC Berkeley Job Boards, Glassdoor, Great place to work, and LinkedIn for both consumer Tech and SaaS

From this consolidated list of companies, a list of recruiters/hiring managers/employees will be scraped from Linkedin. To ensure the sample of recruiters is representative of all company sizes, blocks will be created by company (Google, Uber, Facebook, Atlassian, Calm etc) and then within each company block, another layer of blocking will help draw a balanced number of recruiters. Randomization by blocking will allow a deeper analysis of reactions to emojis by company size/type and employee title. It will be easier to assess whether startups are more open to emoji use than enterprises. Gender-based blocking at each company might also be worth investigating.

### **Blocked Randomization**

This study will be run on 60 companies, with 20 randomly selected from each of the 3 blocks - Startup (< \$10), Small & Medium Business (\$10M - \$50M revenue), Enterprise (\$50M +). This random selection will be done using a simple Python script. A list of employees with the title "recruiter" will be taken for each company from Linkedin. From each list, 4 male recruiters and 4 female recruiters will be drawn at random. In total, 480 subjects will be part of the study, and 240 will be randomly assigned to both control and treatment (ensuring 2 male and 2 female recruiters from each company are represented in both control and treatment).

#### The Treatment

A request to connect over the phone/in-person for possible opportunities will be sent to all subjects via LinkedIn, however, subjects in the treatment group will receive the message with emojis. These messages will be sent from the same profile and the only difference in the content will be emojis. The messages will be sent out at exactly the same time, on the same weekday to all recipients.

#### The Outcome

The subjects in both treatment and control will be given a period of 2 weeks to respond - after which response rates and level of interest will be recorded for further analysis. The "waiting"

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period of 2 weeks has been chosen for no reason, but a pilot would perhaps help estimate median time-to-response on LinkedIn. I will be interested in measuring 3 outcomes:

- 1. Response rate for control and treatment (how many recruiters responded?).
- 2. Time-to-response (how many days/weeks did it take to get a response?)
- 3. Valence of response (is the recruiter willing to take things forward?). Positive messages will be recorded as +1, and negatives as -1.

While #1 would be an important outcome to measure, the one I would be most interested in is the Valence of response since this would actually be the most critical for a two-tailed test to examine whether Emoji usage is harmful, neutral or beneficial.

#### **Sources of Error**

Several factors could lead to misleading results in this study. First and foremost, this experiment will be only one of the many realizations possible and thus the average treatment effect may not be anywhere near the true treatment effect. Due to the small number of subjects in the study, small effects generated by the following factors could substantially exaggerate outcomes:

- 1. The wait time of 2 weeks may be too short and thus not yield the right results.
- 2. Recruiters in the study may miss the Linkedin message altogether, which should be accounted for in the response rates but this will effectively reduce the sample size, especially if the proportion of unread messages is large. Recruiters might not respond at all!
- 3. Recruiters sometimes see the preview but don't click on unsolicited messages from applicants. So even though a recruiter may choose to ignore a message, we can only interpret that as an honest miss.

A pilot experiment might help determine the waiting period, type of employee to reach to (recruiter versus regular employee), content for the message, and emojis that can be used. Additionally, a pilot will ensure a better understanding of how to navigate Linkedin as a platform.