# What Message Do Exclamation Points Convey in Text Based Communication?

Nicholas Chen Final Project Proposal January 27, 2017 W241 Experiments and Causality

### **Research Question**

Do exclamation points signal sincerity and friendliness in an email to a prospective landlord? Operationalized, does including an exclamation point (or more) make you more likely to receive a positive response when applying to an apartment? I plan to test the null hypothesis: Including one or more exclamation points in a response to a for-rent ad does not increase the likelihood of receiving a reply to the initial inquiry.

# **Background**

In 2004, Marianne Bertrand and Sendhil Mullainathan published quite a famous study<sup>1</sup> in which they studied the impact of the racial associations of a job applicant's name on the likelihood of that applicant being called in for an interview. The study found that stereotypically black names like Aisha, Rasheed, and Jamal received nearly 50 percent fewer responses to initial job applications than typically white sounding names like Greg, Sarah, and Emily. The researchers found this effect to be robust across occupation, industries, and firm sizes.

The research question I propose is inspired by this line of research in an attempt to better understand factors impacting the decisions not of employers, but of potential landlords. My proposed research question is as follows: Do exclamation points in an email to a posting on Craigslist signal sincerity and friendliness in an email to a prospective landlord? Operationalized: does including an exclamation point (or more) in your response to a for-rent ad make you more likely to receive a positive response when applying to rent an apartment?

The study by Bertrand and Mullainathan, though extremely important in showing that implicit racial biases do seem to still affect hiring practices in modern day American cities is somewhat problematic for job seekers. The result of the paper is problematic in that if you have a stereotypically black name, you are, in a way stuck with that name. There is nothing that you, as an individual can do to change your name and better your chances at receiving a call back. The result is a bit of a conundrum for individuals with stereotypically African-American names.

**Motivation: Why the Research Question is Important** 

<sup>&</sup>lt;sup>1</sup> Bertrand and Mullainathan, "Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *The American Economic Review*, Vol. 94 No. 4, 2004.

The question that I propose however, deals with a treatment that potential renters have the ability to control – whether or not to include exclamation points in their response to for-rent ads. In recent years, I have noticed the prevalence of exclamation points in written communication has increased substantially. I for one am still unsure about when to use exclamation points and when to leave them out. In grammar school, I was taught that an exclamation point was used to indicate a substantial emphasis on a point – their use was to be sparing, and usually not just to show ones' excitement.

As a result, on the one hand I feel somewhat insincere when utilizing exclamation points in everyday communications, but on the other hand, as the social norms of the meaning of the exclamation point continue to develop, I feel that I may come off as terse for sending emails containing no exclamation point. Whether I do or do not include an exclamation point in my communications, I am left feeling that I did the wrong thing. As I have hinted at above, I believe that we as a society are still in the process of establishing the social norms of what an exclamation point means in every day communication. The goal of my research question is to address exactly this question – do exclamation points convey friendliness (and conversely, does the lack of any such mark convey terseness)?

Though this may sound like a trivial question, the effects of employee's workplace attitudes, emotions, and behavior is an active area of research<sup>2</sup> so it is clear that perceptions about an individual's attitude could have real measurable effects in the workplace. It is thus a logical extension to see whether such perceptions are important in another market in which many of us participate: the rental market. If perceptions about emotional demeanor are important, then we must ask if it is possible to manipulate those perceptions to the advantage of a prospective renter. I propose the use of exclamation points as one possible manipulation of those perceptions that may influence whether or not an individual is selected as a legitimate candidate to rent an apartment.

### **Experimental Design and Description**

I propose modeling the experimental design for this question on the labor market study conducted by Bertrand and Mullainathan. In brief, I propose sending dummy responses to forrent ads and measuring, varying the number of exclamation points in the responses, and measuring the response rates among the groups of responses that contained or did not contain exclamation points.

The subjects in this experiment will be landlords who post ads for their apartments on Craigslist.org, a well-known online market place for housing rentals. Craigslist.org is an online market place that exists in every major market in the United States with new rental opportunities being posted each day. There will be no shortage of ads to respond to and thus no issue in finding

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<sup>&</sup>lt;sup>2</sup> How perception of an employee's emotional state affects views about that employees power status; Brescoll and Uhlmann, "Can an Angry Woman Get Ahead? Status Conferral, Gender, and Expression of Emotion in the Workplace," *Psychological Science* Vol. 19 Iss. 3, 2008. How employee attitudes can impact organizational change; Avey, Luthans, and Wernsing, "Can Positive Employees Help Positive Organizational Change? Impact of Psychological Capital and Emotions on Relevant Attitudes and Behaviors," *The Journal of Applied Behavioral Science* Vol. 44, Iss. 1, 2008.

subjects for the experiment. I anticipate that the effect size of including exclamation points in emails will be relatively small. I also anticipate that the variance of the treatment effect should be small as well should a treatment effect exist in reality. I will plan to send a relatively large number of emails, at least 300 - 400, in order to give myself a reasonable likelihood of observing an effect if one exists.

The treatment that I plan to induce is to vary whether or not the dummy responses that I send include exclamation points or not. I plan to draft a set of standardized mock-up emails. Each email I draft will have three iterations, one with no exclamation points, one with a single exclamation point substituted for a period, and one with three exclamation points scattered throughout the response, again substituted for periods in the baseline email. These three iterations of each email will represent the treatment groups. The control group will receive emails with no exclamation point, the first treatment group will receive an email with a single exclamation point, and the third treatment group will receive an email with three exclamation points. Nothing else about the emails will vary except for the use of exclamation points.

Subjects, or for-rent ads, will be randomly assigned to one of three treatment groups. Based on this assignment, I will take a random draw of the emails for the appropriate group and respond to the ad with the appropriate randomly selected response. Craigslist has a mail relay feature that hides email addresses of the potential renter and landlord so that there is little risk of my being by my email address should a single landlord manage multiple properties. Given that Craigslist is present in all of the major cities in the United States, I plan to respond to for-rent adds in numerous cities to serve as a reassurance of robustness upon analysis of the results. To introduce yet more variation into the study, I plan to respond to ads for studios, one bedroom, and two bedroom apartments across each of these cities.

### **Potential Pitfalls**

One potential pitfall of this analysis is that I may simply not get enough responses to my replies to for-rent ads. This is especially likely in extremely competitive rental markets like San Francisco or Denver where landlords receive many inquiries to rent their available apartments. My plan to address this risk is to respond to ads in numerous cities, some of which will have less competitive rental markets should yield more responses. The number of responses I plan to send also should mitigate this concern.

Another potential pitfall of this analysis is the opposite – that I will receive too many responses to the treatment and control emails to measure any difference in response rates among the groups. However, I do not believe that either of these potential pitfalls is likely to occur.

#### **Statistical Analysis**

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<sup>&</sup>lt;sup>3</sup> I also considered the possibility of sending multiple emails to each for-rent ad, but based on my design, the only feature of the emails I plan to change between treatment and control is how many exclamation points a response contains. Thus, sending multiple emails to the same land lord might elicit suspicion if they are paying close attention and see that they are receiving multiple versions of nearly identical emails.

I plan to use randomization inference to estimate the statistical significance of the average treatment effect of sending an inquiry containing one or more exclamation points on the likelihood of response to that inquiry. The experimental design that I have described above lends itself to blocking on observable apartment characteristics intuitively. I will consider the possibility of using blocking to increase the power of my test for statistical significance across attributes such as city and the number of bedrooms in the apartment.