SELF- MARKETING APPROACHES- AN ANALYSIS OF ONLINE DATING

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Abstract

"So tell me about yourself!'' This seemingly straightforward question in day-to-day interactions is usually met with silence and hesitation. That can no longer be the case for the 1.67 trillion online dating industry, which has grown exponentially in popularity over the last decade and is entirely predicated on the exercise of 'getting to know' people and locate prospects for both short and long-term romantic relationships. Self-introduction, and by extension- self-marketing now assumes central importance. However, the different approaches undertaken by distinct demographics to find prospective partners remain largely unknown.

We plan to explore the dynamics of a 'self-marketing' based dataset of 60,000 users of a popular online dating site in San Francisco extracted in 2012. We will attempt to develop 'groups' of words or communicative choices that can be thus compared against existing demographic variables in the dataset. These will include abstract clustering of profile essays using vector-based methods, followed by topic modeling supplemented by factor analysis.

Research Questions

Broadly this project intends to investigate whether OkCupid users with similar characteristics market themselves in similar ways in their dating profiles. We would expect that OkCupid users with similar backgrounds and personalities to portray themselves on their profiles in a similar manner. However, among each group of similar people, there will be variation in the similarity of profiles, and perhaps some groups are more homogenous in their

self-marketing than others. If the differences between groups are significant, there is the potential for many meta-analyses to be conducted as well.

Data

To fill these gaps, this study will leverage publicly open and anonymized user profile data for 59,946 users of OkCupid from the San Francisco region that were extracted with permission (Kim & Escobedo-Land, 2012). The data set includes "typical user information, lifestyle variables, and text responses to 10 essay questions" (ibid).

The study would face specific limitations. Without data on the eventual online matches and offline meetings from these dates, we do not know which profiles were selected more often/ rated as more attractive. Without follow-up interviews, it is impossible to measure whether the specific choice of words was aimed at authenticity or matches with an awareness of 'relationshopping'. The latter could have potentially been inferred by the date of creation of the profile, with longer-term users perhaps gaining more 'experience' and conscientiousness of what achieves their self-designated 'dating success'.

Methods

We plan to use a variety of methods to conduct our three-pronged analysis. First, we would build a text analysis would be conducted using data from each OkCupid's profiles. This would mainly consist of topic modeling, building off of previous work in this area such as Shishido(2016) so as to parse apart the general concepts users discuss in their profiles. For example, we found that male users of differing education levels differ in the proportion who speak prominently about 25 topics inferred from their self-description essays (see figure below).

The topic modeling would be supplemented by clustering methods on principal components derived from the essay text (through Word2Vec/Doc2Vec) and possibly in combination with categorical variables. The intention of these analyses would be to gain additional insight into where users fall on different spectrums that are not reflected in the demographic data, such as socioeconomic background, psychographics or political ideologies, or behavioral characteristics, such as moral ideologies or egocentrism/narcissism.

Topics in OkCupid Male Self-Introductions Across Education Levels
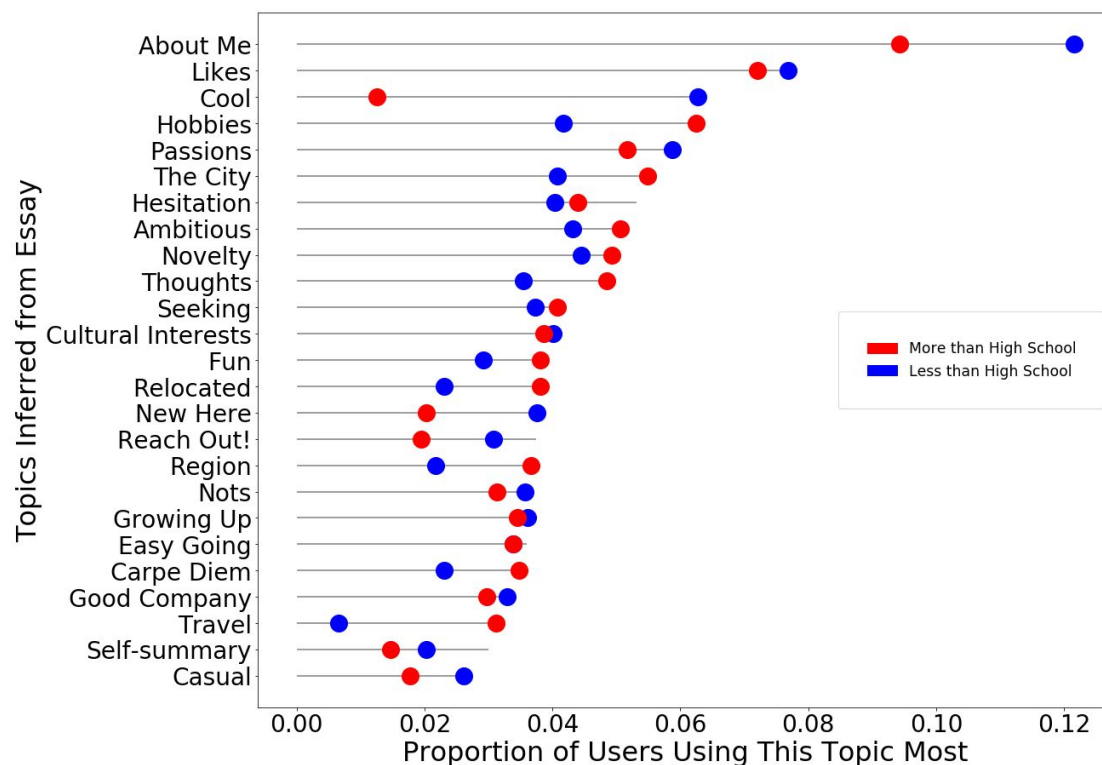
In stage two of the analysis, unsupervised clustering would be used on the demographic data to cluster or partition users along meaningful dimensions. Some of these additional features would be engineered from the text analysis from the previous step. Dating preferences and attitudes are expected to not only vary greatly along a singular dimension, such as age,

race, and gender, but also among many interactions of each of these variables. Unsupervised clustering would allow for multi-dimensional cohorts to be analyzed, which would be more representative of specific dating dynamics in the population.

Once users are clustered we plan to conduct several meta-analyses to propose additional avenues of research for future studies. These could include very simple inquiries, such as which groups say more in their profiles or are most positive, to more complicated analyses, such as using text data to determine what users are looking for in a potential partner and matching this to a cluster of users. We could then even attempt to gauge whether a user is likely to be successful in their dating endeavors, by comparing whether the cluster of people they are looking for would be likely to also be looking for someone like them. This portion of the analysis, while likely the most insightful part of the project, is also highly dependent on the previous analyses.

Literature Review

Self-concept and self-representation have long served as grounds of debate in cognitive and positive psychology (Bruning et al, 1999) as well as social anthropology (Goffman, 1975). The recent spread of social networking and its specific affordances have allowed individuals to build different online 'selves' (Papacharissi, 2010).

One such critical scenario may be that of mate selection, which several economists and sociologists have likened this to 'marriage marketplace' (Hortascu & Ariely, 2014). A number of online dating service providers in developed countries may facilitate the expansion of potential mates beyond the limits of even extended offline social networks Caciopo et al (2013) assert that as many as one in three marriages in the United States is facilitated through these portals.

Heino et al (2010) argue that these avenues further entrench the economic dimension through an acute, implicit awareness of 'relationshopping'. Herein, potential partners are reduced to entries in a catalog to be scrolled through. In this sense, they suggest an emerging conscientiousness of 'marketing', with the product being themselves, and the potential mate assuming the role of a buyer (ibid). This perception thus links the private worlds of romantic intimacy with those of mass consumption and broader perceived appeal to the opposite sex.

Potentially, we will also use some marketing theories to understand our findings. Selling themselves and finding a mate on OkCupid is not very different from selling a product on eBay. Economists have been interested in the matching problem of demand and supply, such as Hitsch et al. (2010). Since we do not have data on users' interactions, we will focus primarily on understanding how people brand themselves to stand out in a crowd. For example, brand awareness is a key metric in marketing to quantify the degree to which people recall or recognize a brand. A high level of brand awareness helps a product stand out and get chosen when consumers face many alternatives.

This could be applied to understand online dating. Let us imagine your future mate uses the filter to narrow down the consideration sets. He/She might still face many similar choices with high matching scores to choose from. If you want to stand out from the pool, you have to make yourself memorable by highlighting the uniqueness. Thus, one possible idea in this project is to explore and understand how could users increase their brand awareness and differentiate themselves in their segments.

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