

Perspectives- Literature Review

Note:

The previous draft of this paper was focused on the role of race in online dating preferences. More specifically, the specific question involved identifying the differences across racial backgrounds (white vs. non-white) in how heterosexual males on dating sites in the United States describe themselves to potential romantic partners.

However, on further exploration of the data, it has emerged that race may no longer serve as the primary fulcrum of interest. A large proportion of respondents appear to have completely misunderstood the dating website's question on ethnicity. Even with the limited options (as checkboxes), there are as many as 201 distinct answers provided for the ethnicity variable. This leaves a very small proportion of the non-white respondents with clearly enunciated ethnic backgrounds. Hence, this line of inquiry will have to be subsumed in a larger overarching exploration.

Research Question

What are the different ways in which heterosexual male users of dating apps in the United States who do not fit conventional standards of attractiveness (in terms of race, education and height) strategically structure the written section of their profiles- specifically, their self-introductions and elucidation of mate preferences - so as to attract long-term romantic partners?

LITERATURE REVIEW

Self-Concept and Mate Selection

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). Kinch (1963) drew on Mead's (1934) formative ideas to refer to self-concept as an organization of qualities that the individual attributes to himself, which in turn consists of both attributes and roles. Leary and Tangney (2011) argue that this ability to "reflect on themselves in symbolic and abstract ways" may be seen as uniquely relative to humans.

This 'self' turns out to not be a unitary or fixed concept. The recent spread of social networking and its specific affordances have allowed individuals to build different online 'selves' (Papacharissi, 2010). Arguably, this tendency merely replicates an offline parallel- the need to adapt behaviour- and by extension, identity- depending on the specific needs of a social situation.

This study argues that one such critical domain of behaviour pertains to mate selection. The process of courtship requires- in the sense mentioned by Kinch- specific behaviours and roles. However, this shift in behaviour has been observed across a large spectrum of species- regardless of a formal self-concept in the sense suggested by Leary and Tangney.

Bruch et al (2019) focus on a specific 'online self'- the dating profile- when drawing parallels between human and animal mating behaviour. They cast these selection processes into two main channels: opportunity and preference.

The Opportunity Dimension

Opportunity refers to available romantic options within an acceptable distance. For example, in 'thinner' markets- such as rural areas, or for homosexual couples, options are limited relative to heterosexual couples in metropolises. However, opportunity has long been a constraining factor. Across diverse cultures, the selection of mates in heterosexual couples has typically been characterized by homophily (Fiore, 2005) as established by the macrosocial order (Blau, 1977).

Historians such as Coontz (2006) and Karandashev (2015) argue that the selection of marriage partners on the grounds of personal compatibility and romantic love over and above purely economic considerations has been recent in human history, and has emerged in the post-Industrial Revolution era, parallel with the rise of women's earning power. Economists such as Hitsch et al (2010) have represented these dynamics in the form of 'marriage markets'. The tendency to marry within similar groups are attributed to the requirements of work and education and cast as 'frictions' to a freer selection of mates purely on preference. Selection has thus been horizontal (among the same social stratum) rather than vertical (open to all individuals acceptable based on individual preferences).

In the last twenty years, the widespread adoption of dating services providers in developed countries- both online and offline matchmakers- may overcome these frictions and facilitate expansion of potential mates beyond the limits of even extended offline social networks (Piskorski, 2014). Caciopo et al (2013) assert that as many of one in three marriages in the United States is facilitated through these portals- a finding that has been referenced by several players in the industry as evidence of deep, fulfilling relationships on offer.

The Preferences Dimension

These developments bring to the fore Bruch et al (2019)'s second key factor to selection- preferences. In earlier work (2015), they suggest that users of dating sites select whom to contact through a three-stage decision process. In the presence of a vast number of options, and given the constraints of time, working memory and computation ability, individuals may rely on more automatic heuristics. At the first stage, screening may be conducted based on either on conjunctive (deal breakers) or disjunctive (deal maker) factors. Given the tendency towards homophily observed above, it would not be surprising for users to shrink the applicant pool by screening on the grounds of ethnicity and education. At a more biological level, female users may also use height as a filter (Toma et al, 2010). This mechanism will be explored extensively in this study.

Contrary to standard model of rational choice, Slovic (1995) points out that preferences are often discovered ex-ante. A number of studies have already explored the dynamics of this process in the context of potential romantic partners meeting in person. Speed dating provides the benefit of greater 'revealed preference' flexibility by allowing every male participant to interact with every female participant. MacFarland and Jurafsky (2013) delineate how vocal projection by men, and interrupting women to demonstrate empathy were highly correlated with selection by the latter. However, since such opportunities afforded by live interaction are typically unavailable to those using dating apps, the cues provided to the other party now depend entirely on what the users choose to share and conceal in their virtual self-description. This is where self-concept and presentation gains further importance.

Heino et al (2010) argue that these preference-driven avenues further entrench the economic dimension of mate selection through an acute, implicit awareness of 'relationshopping'. Herein, potential partners are reduced to entries in a catalogue 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.

This attempt to build 'desirable' profiles then raises Bruch (2015)'s secondary concern with respect to preferences- are they idiosyncratic and specific (the matching hypothesis) or does there exist consensus on what constitutes an attractive profile (the competition hypothesis). If the latter is found to hold true- as it does across a range of species (ibid)- then there exists a hierarchy of desirability. Individuals would then place themselves along this hierarchy, and attempt self-presentation that raises their position. This study is concerned with three specific variables where such self-perceptions may exist.

Firstly, female users cited height as an important element of their preferences for male partners (Shepperd & Strattman, 1989). Interestingly, height did not feature as an important factor in rating attractiveness of their partners post-hoc. This fits with the Slovic's revealed preference hypothesis. Nonetheless, OkCupid (2010) found for both American men and women that median height lay two inches above that of the United States, suggesting over-representation. Men demonstrated a tendency to inflate number closer to the benchmark of 'six feet'. These trends highlight a consensus- in line with the competition hypothesis- that these particular traits are fundamental to the attractiveness of a potential partner.

Secondly, race has been a contentious issue, as the United States evolves from a biracial to multiracial society. Lin and Lindquist (2013) provide a comprehensive review of the racial dynamics of interactions initiated and sustained across users from different backgrounds. They leverage data from an unidentified online dating platform and discover preferences of racial homophily across male and female participants. In particular, women were found to respond to messages sent by men belonging to a group with equal or higher perceived racial

status. Over 50% of respondents in this dataset identify as white, with a number of mixed ethnicities.

Finally, education has been considered an important element of the attractiveness of mates, often in different directions based on gender. Preference for women's education stays limited in the United States to a bachelor's degree, and falls sharply thereafter (Bruch et al, 2019). The preference for highly educated men as partners has been observed widely (Stevens & Schaefer, 1990), potentially due to correlations with intelligence and earning power. Less educated male users on the site may adopt strategies to gloss over this perceived shortcoming.

The Opportunity and Preferences Dimension

Bruch (2015) emphasizes that the two dimensions are not mutually exclusive. The perceived preferences of an individual may be shaped by what is repeatedly observed among potential mates. In this sense, homophily may be seen purely as a reaction to limited exposure to groups distinct in their ethnic or educational background, rather than a clearly defined decision. Under this condition, we would expect that 'disadvantaged' male users would see no need to adopt 'compensatory' strategies. They would simply represent themselves as a novel experience, and market themselves accordingly.

In the context of online dating, the status quo can be seen to be constructed in terms of what is seen repeatedly. In this sense, the distribution of topics across profiles would paint an image of what is increasingly perceived as 'normal'. Whether a preference for this norm develops cannot be realistically determined with this data. Nonetheless, we will be able to test which subgroups of individuals aim to either confirm or deviate from these norms- perhaps as an extension of Heino' (2010)'s self marketing.

Using the same OkCupid Dataset, Shishido (2015) finds that self-expression in the same introductory essay can be clustered into roughly 25 'topics', with roughly equal representation thereof across male and female profiles. The only exception was that of 'enthusiasm' where female users were found to make considerably higher use of terms such as 'love', 'like', etc.

Instead of for gender, our study will evaluate differences in these topics among racial groups and men with limited height or education. This would suggest if there is any attempt to 'compensate' for less perceived attractiveness in their self-concept. Due to the absence of messaging data from OkCupid, their 'success' will remain unknown. Nonetheless, it is the strategy and its underlying rationale that assumes greater importance here.

The Elements of Online Self-Representation

Self-presentation on online dating sites typically includes one or more profile pictures, fixed-choice responses (for demographic details such as age, race, education, etc) and at least one

free-form text for self-introduction. Fiore (2010) found no relation of the fixed choice responses to overall profile attractiveness.

Several studies have explored the independent and relative role of pictures vis-à-vis the rest of the features. Hitsch et al (2010) build a model around attractiveness that depends exclusively on physical appearance in photos. Moreover, Fiore et al (2010) find that photos play the largest role in determining overall profile attractiveness for both men and women. Emory (2017) add that women in the US typically accord 50% higher importance to their suitors' descriptions relative to men (who place greater weight on the photos). Thus, our study will focus exclusively on the text descriptions for men.

For male users, Fiore et al (2010) found no association between the perceived attractiveness of text descriptions with the length of the text itself, use of self-reference, or the proportion of emotionally-charged words. Intriguingly, Nagarajan and Heast (2009) did find such a relationship for text essays rated as feminine. This connects with the claim by Brand et al (2012) that aggression is correlated with masculinity and by extension to testosterone, and is seen as desirable only by women at a certain stage of their ovulation cycle.

This counter-intuitive finding would allow for testing some of the ramifications of Social Role Theory (Sarbin, 1984), where men may present themselves in line with expected gender roles, and exhibit characteristics associated with heterosexual masculinity, such as independence, dominance, success, and achievement. (Herek, 1986). Conversely, they may contradict these gender stereotypes, as seen in Chapetta and Barth (2016). These can be tested in the essays themselves through topic modelling.

In the same study, Brand et al (2012) also uncovered strong correlations between attractiveness of photos and text components of men when viewed independently by women so as to prevent a spillover halo effect (Dion & Walster, 1972). They hypothesize that the confidence observed in the text served as the mediating variable. This confidence, in turn, may result from habituation to receiving the appreciation of the opposite sex, which in turn may be linked to their physical attractiveness. However, in the absence of photos and given the limited direct relevance of fixed choice options, confidence would need to be determined through alternative means.

The OkCupid Dataset includes 9 essays, of which this study will focus on two- 'About Me' (which addresses the self perception) as well as 'What I'm Looking For' (that addresses preferences among mate). Selectivity about mates has typically been observed more in women than men (Finkel et al, 2011). The setting of high expectations could act as a signal of high demand by other women, and the ability to choose. It would also reflect self-awareness. Alternatively, many responses may reflect the woman's preferences- that the man is on board provided that the woman is. These two distinct groups would highlight confidence even in the absence of any photographs.

In this manner, we will have captured strategies to demonstrate confidence and distinctiveness with respect to self concept, even in groups of men who may perceive themselves at a disadvantage in the frictionless dating markets afforded by internet technologies.

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