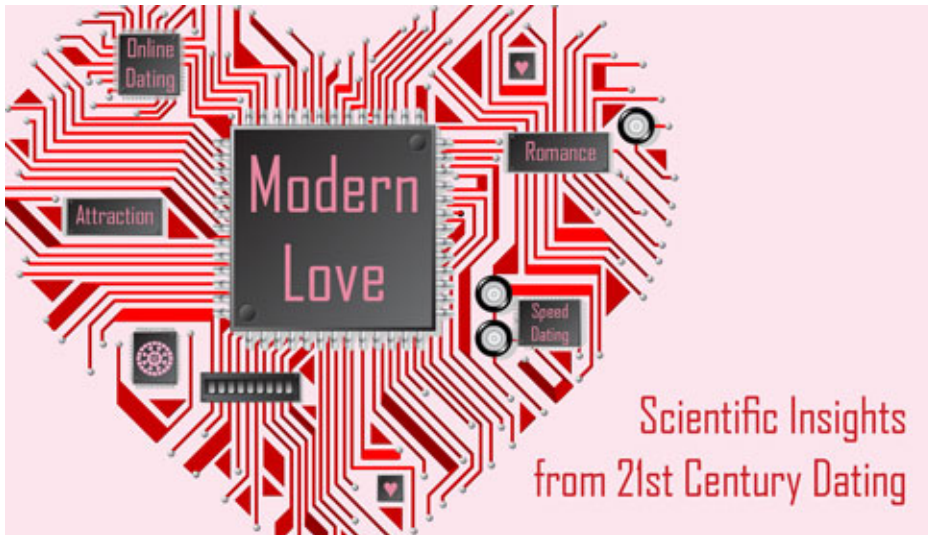


# Modern Love: Scientific Insights from 21st Century Dating

February 01, 2010



The modern world provides two new ways to find love — online matchmaking and speed dating. In the last few years, these methods have moved from a last resort for the loveless to a more accepted way for millions to try to meet their mates. While this has led to dates, relationships and marriages around the globe, it has also been a boon for enterprising researchers — providing huge datasets chronicling real world behavior. Psychological scientists have been studying attraction, love, and romantic relationships for decades, but online matching and speed dating have given researchers unprecedented opportunity to explore who's attracted to whom and why.

## Take Your Pick

For millions of years, humans have been selecting mates using the wealth of information gleaned in face-to-face interactions — not just appearance, but characteristics such as tone of voice, body language, and scent, as well as immediate feedback to their own communications. Does mate selection differ when those looking are presented with an almost overwhelming number of potential partners, but limited to a few photos, statistics, and an introductory paragraph about each one? What information do online daters focus on? Is it all about the photo? Or are words the key to someone's heart (or at least their Match.com inbox)? In one survey of Australian online daters, 85% said they would not contact someone without a posted photo, so physical appearance is indeed important (Fiore et al., 2008). A 2008 study in which participants rated actual online profiles confirmed this, but also explored the criteria that made certain photos attractive (Fiore et al., 2008). Men were considered more attractive when they looked genuine, extraverted, and feminine, but not overly warm or kind. (Although feminine male photos were seen as attractive, whole male profiles were rated more attractive when they seemed more masculine, a perplexing result worthy of more study.) Women were deemed more attractive when they looked feminine, high in self-esteem, and not selfish. This study also found that the narrative self-descriptive sections of the profiles played a key role in attractiveness, but the fixed choice sections of the profiles (where users have to pick from a specific set of descriptors, i.e., "Have children now," "Want children

someday,” “Don’t want children,” smoker/non-smoker, etc.) only minimally affected attractiveness ratings. However, these fixed choice descriptors allow users to triage by easily weeding out those who don’t meet their dealbreaker criteria for a partner (Fiore et al., 2008).

Researchers believe that users make up for the lack of information in online profiles by filling in the blanks with guesses based on small pieces of information. Some theorize that online daters may be wearing rose colored glasses when looking at potential dates — filling in the information gaps with positive qualities in a potential partner (Gibbs et al., 2006). In one study, knowing more information about a potential date generally led to liking them less, possibly because it called out inconsistencies and reduced opportunities to fill in the blanks with positive inferences. But, with a particularly compatible partner, more information led to more liking. For online daters, this means that a very detailed profile might attract fewer, but more compatible suitors (Norton et al., 2007).

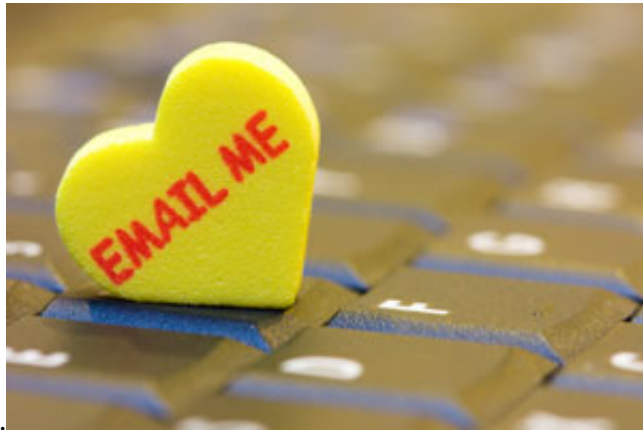
Research has also revealed gender differences in both preference and messaging behavior on online dating sites. In particular, women and men differ in the relative importance they assign to various attributes of potential partners. A forthcoming study conducted by Günter Hitsch, Ali Hortaçsu (both at University of Chicago), and Dan Ariely (Duke University) confirmed existing evolutionary theory, finding that in a sample of 22,000 online daters women weigh income more than physical attributes, including facial attractiveness, height and body mass index, when deciding who to contact (Hitsch et al., 2009). Interestingly, these differences persist even when reproduction is no longer a factor. In a study that looked at online daters across the lifespan, even older men “sought physical attractiveness and offered status-related information more than women” and women continued to be the more selective gender (Sears-Roberts Alterovitz & Mendelsohn, 2009).

In a nine-month study of participants on a dating site in 2008 and 2009, Andrew Fiore, a graduate student at the University of California, Berkeley, and his colleagues examined stated preferences and actual messaging behavior (Fiore et al., 2010). In general, women really are pickier than men — listing smaller ranges in their preferences for age and ethnicity. Women also initiate and reply to contact less than men. They were contacted much more than men and, hence, generally had their choice of who to reply to. But, just as in the face-to-face dating scene, respect is important — users who respected others’ listed preferences for a potential partner were more likely to get a response. In light of these findings, the researchers presented some advice to potential online daters: “Choose wisely and, if possible, be female” (Fiore et al., 2010).

This study also leads to some intriguing design ideas for online dating sites’ automatic matching systems, which present users with sets of likely partners. More popular users are contacted more and, therefore, are less likely to respond to any one user. Taking this into account, dating sites may want to steer users toward slightly less popular potential dates who are more likely to respond, “a trade-off many users may willingly accept” (Fiore et al., 2010).

## **What I Like About You-Me**

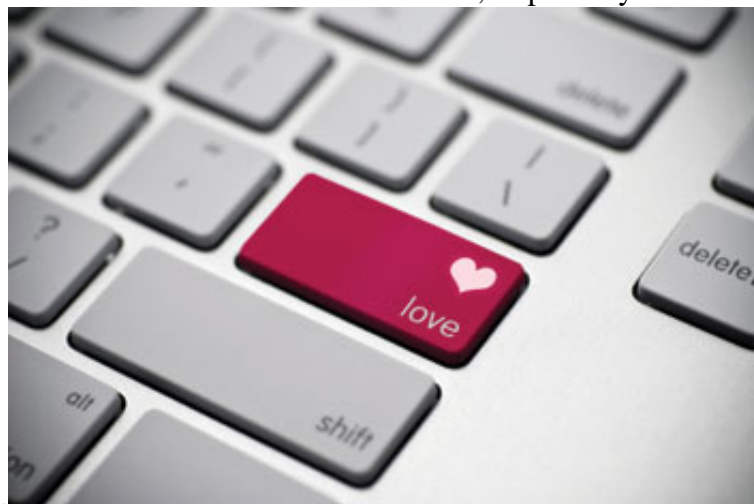
Research has also shown that although the old adage “opposites attract” seems to ring true, it may actually be a false note — we are more likely to seek out a mate similar to ourselves and then grow even more like each other as the relationship continues. This idea is supported by online dating research



(Fiore & Donath, 2005; Hitsch, et al., 2009).

In a 2005 study, Fiore and Judith Donath (Massachusetts Institute of Technology) examined messaging data from 65,000 users of a United States-based dating site. They found that users preferred sameness on all of the categories they tested (a variety of features from child preferences to education to physical features like height). But some factors played a larger role than others, with marital status and wanting or already having children showing the strongest same-seeking. Fiore has also found that women responded more frequently to men whose popularity on the site (a measure based on the average number of people contacting the user per day) was similar to their own (Fiore, 2010).

Hitsch and colleagues found that similarity was strongly preferred in a variety of factors, including age, education, height, religion, political views, and smoking. They also found a strong same-race preference. Interestingly, women have a more pronounced same-race preference, and this preference is not always revealed in their stated preferences (Hitsch, et al., 2009). Although males' race preferences tended to coincide with their stated preferences, women either did not want to admit to, or possibly were not even



consciously aware of, these preferences.

Online dating service users tend to contact people who are about as attractive as they are, but does your own attractiveness level influence how attractive you believe others to be? One research team put this question to the test on the website HOTorNOT.com. The site was launched in 2000 purely for users to rate each other on how attractive (or, obviously, not) they were. Later, the site added an online dating component. This provided an extra set of information for researchers — not only knowing who's talking to whom, but the overall attractiveness ratings of those users from everyone on the site. Consistent with

previous research, this study, published in *Psychological Science*, found that people with similar levels of physical attractiveness indeed tend to date each other, with more attractive people being more particular about the physical attractiveness of their potential dates. Compared to females, males are more influenced by how physically attractive their potential dates are, but less affected by how attractive they themselves are when deciding whom to date. (But these findings about gender bias in attraction are being challenged in other studies – more on this later.) Also, regardless of how attractive people themselves are, they seem to judge others' attractiveness in similar ways, supporting the notion that we have largely universal, culturally independent standards of beauty (e.g., symmetric faces; Lee et al., 2008).

### **Stretching (or Shrinking) the Truth**

Assessing potential partners online hinges on other users being truthful in their descriptions. But what if they aren't? Psychological scientists have turned to online dating to examine how truthful people are in their descriptions of themselves, both with themselves and to others. Online daters walk a fine line — everyone wants to make themselves as attractive as possible to potential dates, making deception very tempting. But, daters can't be too deceptive, lest they actually get to the point of a real life meeting in which they could be exposed. Catalina Toma, Jeffrey Hancock (both at Cornell University), and Nicole Ellison (Michigan State University) examined the relationship between actual physical attributes and online self-descriptions of online daters in New York. They found that lying was ubiquitous, but usually fairly small in terms of magnitude. Men tended to lie about height and women tended to lie about weight. And the lying wasn't due to self-deception — self-ratings of attributes tended to be accurate, even when information on the dating site was not (Toma, 2008).

### **The Need for Speed**

Dan Ariely, a behavioral economist and co-author of the HOTorNOT.com study and the forth-coming article with Hitsch and Hortacsu, was initially drawn to online dating because it seemed like a very nice solution to a common problem — people in need of partners and no market for them to find each other. But while online dating has yielded fascinating results about preferences and many real-world matches, it doesn't work for every person looking for a mate because it is so difficult to quantify the qualities that lead to and keep attraction going. As Ariely said, attempting to sum up the myriad aspects of a person in an online dating profile can be like “describing a dish in a restaurant by its chemical composition.” It's accurate, but it doesn't provide useful information when deciding what to order. Another modern dating innovation may provide a better solution: speed dating.

In the late 1990s, a rabbi in Los Angeles created a new way for Jewish singles in his community to meet each other — they would go on many “dates” lasting just a few minutes in one night, report to the event organizers if they wanted to see any of their “dates” in the future, and, if two people said yes to each other, they would be given contact information to continue corresponding. Since then, speed dating has spread around the world, giving millions of singles a chance at love. It also gives savvy researchers an unprecedented chance to study attraction *in situ*.

In the winter of 2004, Eli Finkel and Paul Eastwick, both at Northwestern University at the time, thought that speed dating would be “a terrific way to catch initial attraction in action,” as Eastwick, now at Texas A&M, reported. This hunch was confirmed by a speed dating outing with several other

Northwestern colleagues, and the researchers embarked a new track of speed dating work. (No word on whether the outing was a success from other standpoints.)

As Finkel and Eastwick point out in a 2008 study published in *Current Directions in Psychological Science*, the popularity of speed dating allows the collection of large, real world samples across cultures, ethnicities, and socioeconomic levels. The speed dating design also lets researchers to study both sides of a dyadic process. A speed dating event with 20 participants would yield 400 separate interactions, allowing researchers to create very detailed accounts of people's attractions. For example, they would be able to tell that a certain woman liked a certain man because (a) she likes all the men (she has fewer dealbreaker standards), (b) all the women liked that man (he was an irresistible dish), or (c) they had a unique experience that made her like him more than other men at the event and him like her more than other women at the event (Finkel & Eastwick, 2008). Also, speed dating allows for exploring reciprocity effects. A 2007 *Psychological Science* article (Eastwick et al., 2007) found that liking can be reciprocal — if a woman likes a certain man more than others, he is more likely to like her — but isn't always reciprocal — if a woman likes all the men more than other women did, the men will generally like her less. As Finkel says, "romantic likers tend to be disliked."

Speed dating empowers researchers to study interactions as they happen, rather than post-hoc reports. It also allows for testing actual versus stated preferences. One speed dating study showed that stated preferences do not match actual preferences and called into question the gender biases in attraction that have been well-documented elsewhere (i.e., that men see physical features as more important and women see earning prospects or security as more important), raising the specter of a disconnect between what we say we're attracted to and what we're actually attracted to (Eastwick & Finkel, 2008).

Speed dating studies also allow researchers to study the implications of simple changes in dating paradigms. For example, even in light of the emerging sexual equality of the last several decades, many women (and men) expect the man to play the pursuer at the beginning of romantic heterosexual relationships (Finkel & Eastwick, 2009). This idea holds true at speed dating events, where women generally stay seated while the men rotate. This set-up stems from vague notions of chivalry, but also from more mundane purposes — according to one speed dating company executive, women tend to have more stuff with them, like purses, and are therefore less efficient movers. Could this set-up in itself affect attraction? Turns out that it can. In most speed dating scenarios (as in most attraction scenarios in general) women are more selective. But, when women rotated, this effect disappeared and they became less selective than the men. The researchers purport that, consistent with an embodied-approach explanation, the physical act of being the one to approach could increase self-confidence leading to being more open to approaching romantic partners and, therefore, less selective (Finkel & Eastwick, 2009). (For more information on embodied cognition, see "The Body of Knowledge" in the January 2010 *Observer*.)

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he search for love is never easy and attraction is never simple. Research into online matchmaking and speed dating is providing valuable insight into the human quest for romance, and this is only the beginning. Most of the research in this area to-date focuses on dating behavior of heterosexuals in the United States. More work is necessary to determine if the findings so far also apply to international daters and to understand the dynamics of homosexual pairings. Emerging methods may also bring new

insight into dating dynamics. Finkel and Eastwick have begun using a coding scheme to study exactly what participants are saying during their dates, allowing them to potentially code what exactly makes a date great or awkward. As they say, “Is it better to be warm or a little cool and aloof? Is it better to communicate independence from or interdependence with your partner?” The duo has also begun to collect saliva samples from speed daters which they hope will allow them to explore “the biochemistry of romantic desire.” In the future, the search for love may be as simple as submitting saliva and waiting for a match, but for now those looking for love can at least take this new research to heart.

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