

EXPLORING MENTAL MODELS OF AUTHENTICITY AND THIRD PARTY INFLUENCE  
IN ONLINE DATING INTERACTIONS

Alexandra L. Carey

A thesis submitted to the University of Michigan School of Information in fulfillment of the  
requirements for the degree of Master of Science in Information

April 2019

Committee Members:

Clifford Lampe, Ph.D.

Nicole Ellison, Ph.D.

### Abstract

This study assesses the mental models of online dating users surrounding the authenticity of one's interactions with other online dating users and one's self-presentation in profiles. We find that users understand authenticity as framework for constructing signals and cues online. To achieve what they perceive as an authentic self-image, users often consult close friends to pilot their signals and cues to aid in uncertainty reduction and attractive self-presentation. Our findings indicate a resounding approval of the third-party intervention when the advice does not involve blatant lies or deception. We also find online dating users are more likely to ask for advice in scenarios where they are seriously invested in developing a relationship with another individual.

*Keywords:* Online dating, computer-mediated communication, authenticity

## Introduction

Within the past few decades, online dating sites like Match.com or OkCupid, and more recently, mobile dating applications such as Tinder or Bumble, have become a dominant mechanism by which people seek romantic relationships (Whitty & Carr, 2006). Users of internet dating sites and applications have considerable control over the ways they express themselves in both how they construct their profiles and how they communicate with other members. User profiles in online dating platforms though, with template and layout constraints, limit the ways in which a person's characteristics are expressed (Gibbs, Ellison, & Heino, 2006). Messaging potential partners on dating applications thus becomes increasingly important for positively developing a relationship between two individuals (Ellison, Hancock, & Toma, 2011). When interacting with others online, like in face-to-face (FtF) scenarios, one will often convey him or herself in a certain way in order to be interpreted by others as socially desirable (Goffman, 1959). Online, this exchange of information and conversations in order to get to know each other better and reduce the amount of ambiguity in a situation, is a form of uncertainty reduction theory in action (Berger & Calabrese, 1975). With the added time and distance allotted in computer-mediated communication (CMC) interactions, these online exchanges may not always remain within a communication channel of only two people like it would in a FtF setting (Walther, 1996). This study will attempt to uncover the mental models of online dating users when users construct profiles or messages that aim to be both representative but also attractive and socially desirable to others. Furthermore, this study will assess opinions and mindsets surrounding the scenario in which interactions with an online match or potential partner move beyond the privacy of a one-on-one message.

Through qualitative, semi-structured interviews with 18 users of online dating sites and mobile applications, we address attitudes surrounding authenticity and self-representation online, as well as user perception of self after receiving third party help with profile creation or message editing in online dating settings. Our findings uncovered varying opinions about perceived authenticity of self online, corresponding viewpoints surrounding asking third party help, and a coinciding rejection of having a strict strategy in place when engaging with online dating sites or applications. Overall, our study concludes that online dating users prioritize intentionally crafting a profile that will not only signal to others who they are and their best qualities, but also what they are hoping to receive from others on the dating platform. Asking for honest and sincere advice from friends, especially when a user is seriously invested in a particular date, we found to be a crucial component to reaching a status of confidence about one's presented self image.

### **Literature Review**

Previous literature in the CMC and online dating landscapes addresses the challenges that communicators must overcome when interacting with one another in non-FtF settings, such as accommodating a reduced-cue environment (Walther, 1996) and adapting to whatever medium is being used to convey messages (Walther, 2015). Within the setting of online dating interactions, more factors are at play in a communication interaction, such as the user profiles (Ellison, Hancock, & Toma, 2011), anticipation of developing a real, in-person relationship (Gibbs, Ellison, & Heino, 2006) and using messages to get to know one another before deciding to date (Gibbs, Ellison, & Lai, 2011). Thus, online dating differs from traditional forms of CMC due to the importance of one's online profile, the anticipation of a FtF meeting, and the role of direct messaging in reducing interpersonal uncertainty.

**Online Dating use has become an increasingly prevalent way for individuals to meet long-term partners and develop relationships**

Online dating has its origins in 1995, when the first “self-selection” dating site, Match.com, was founded (Sharabi, 2015). This type of dating site allows a user to browse through potential partners and decide for his or herself whether he or she wants to connect with a potential match (Finkel et al., 2012). This user journey differs from that of a “matching” site, in which after analyzing a user’s answers to a series of preference and personality questions, a computer algorithm decides on potential matches for an individual. The first online dating site of this category to hit the market was eHarmony in 2000 (Sharabi, 2015), followed by OkCupid in 2004 (Rudder, 2014). After collecting user data from preference and personality questions, these sites employed pre-defined equations and algorithms to produce a compatibility score, match percentage, or something of the like, for any two users (TED-Ed, 2013). Those two users would then be connected once the algorithm analyzed and compared the two users against each other to various degrees.

As the online dating scene and technology continued to evolve, the online dating crowd moved into the mobile space and people started to connect based on other, user-controlled factors, rather than a computer equation. Tinder and Grindr, mobile applications that help users find matches and dates based on location, were early trendsetters for a third category of online dating: “smartphone apps” (Finkel et al., 2012) and have also been classified as “location-based, real-time dating apps” (Ranzini & Lutz, pp.80, 2017). Created in 2011 by a pair of university undergraduate students, Tinder uses one’s location and photographs to create an online dating experience much like a game, with its low stakes and quick-to-learn features that became known

as the application's iconic "swiping" trademark (Ansari, 2015, pp.111). Additionally, two people on Tinder can only communicate with each other if they have expressed mutual interest in one another, a novel concept for online dating experiences at the time. This quick, non-labor-intensive dating application revolutionized the online dating world, and continues to grow in use with platforms like Bumble, or OkCupid's new swiping feature.

As of December 2017, Tinder boasted an audience size of 8.2 million (Hwong, 2018). Tinder and a similar competitor, Bumble, were also considered to be addictive mobile applications after studying "user engagement by comparing daily users to monthly users" on each platform (Hwong, 2018). A second survey reported that 84% of dating site users are in fact using their platform of choice, such as Tinder, Bumble, or Match.com, as a means to find a romantic partner (*Reasons for using online dating sites & apps in U.S. 2017* | Statistic, 2017). Additionally, according to research by psychologist John Cacioppo at the University of Chicago, "one-third of couples who got married in the United States met through an online dating site" between 2005 and 2012 (Cacioppo et al., 2013). Additional findings from the 2014 deployment of the "Singles in America" study by biological anthropologist Helen Fisher at Match.com, reported that 36% of singles met their most recent date online and 37% of relationships started online (Fisher, 2016, pp.308). In summary, according to various data points, people *are* in fact using these online forms of connection to browse other singles, go on dates, and possibly even develop long-term relationships.

### **Computer-Mediated Communication is a crucial component to online dating interactions and overall relationship growth**

Once users on a dating site are connected, they must communicate to drive a relationship forward, get to know more about each other, or arrange an in-person meet up. A crucial component to relationship development is communication, and when that relationship begins online, that communication often takes place through some form of online messaging system, thus enabling computer-mediated communication to occur.

Extensive research exists surrounding human communication via a computer interface or mobile device, also known as computer-mediated communication (CMC). CMC is defined by communication studies scholar, Joseph Walther, as “synchronous [simultaneous] or asynchronous [delayed] electronic mail and computer conferencing, by which senders encode in text messages that are relayed from senders' computers to receivers” (Walther & Burgoon, 1992, pp. 52). In simpler terms, due to the lack of nonverbal cues in a CMC environment, two or more individuals engaging in CMC must rely on the mechanisms they do have at their disposal instead, such as fonts, italics, quotes, symbols, and nowadays, emojis, in order to attempt at getting their intended messages across to others. This lack of nonverbal cues creates an emotional distance between two CMC communicators. When two people are conversing face to face (FtF), communication happens instantly and many facial expressions and gestures are used. In online settings, messages are exchanged at a lagged rate, giving communicators more time to craft intentional, deliberate messages that may differ from what one would have instantly said in a FtF setting. “Because less information traverses communicators per unit of time, CMC requires more time in order for individuals to accrue sufficient information with which to make

interpersonal inferences” (Walther, 2015, pp.4). This extra time can have its advantages, such as allowing for extra time to edit a response or craft a message that is thoughtful and meaningful before sending it to the receiver. As stated by Walther’s hyperpersonal model, this asynchronicity and added cognitive resources allows for increased selective self presentation online (Ellison, Hancock, & Toma, 2011). This added space, however, also leaves room for a sender’s message to be misinterpreted. Due to CMC’s lack of “predetermined temporal sequencing and lots of room for ambiguity,” (Ansari, 2015, pp. 57) if the sender of a message makes a mistake in their message, or says something potentially interpreted as rude, he or she is not so easily forgiven.

Social information processing theory (SIP) states that, rather than being hindered by the lack of cues online, users instead adapt using whatever cues are available in a given medium to present or acquire information (Walther, 2015). Examples of these may include response time, spelling, and style of writing. It is also important to note that different media facilitate different levels of understanding, stated by Daft and Lengel (1987) as media richness theory. Media richness theory defines a hierarchy of media capabilities or “richness,” with FtF communication being the richest in its high ability to facilitate shared meaning because of the ability to express quick feedback (Daft & Lengel, 1987). On the other end of the spectrum are unaddressed documents, being the poorest in ability because their information is meant for a broad audience rather than focused towards one individual (Daft & Lengel, 1987). Medium that fall in between these two extremes on the hierarchy include telephone, email, and text, each with its own degree of richness based on the affordances it has to offer a communication interaction. In other words, the more cues that a media has, the more evocative it will be. According to SIP, a key difference



between FtF interactions and CMC is the active versus passive nature of self-disclosure and how much one expresses key qualities about his or herself (Walther, 2015). Although self-disclosure *can* happen actively through CMC messaging, often online in the context of social media and dating profiles, users read the profiles of other users to gather information about others, rather than actively asking questions like they would need to in a FtF setting (Walther, 2015).

Furthermore, when viewing CMC interactions in the context of relationships and intimacy, existing research demonstrates a positive relationship between instant messages (IM) and social intimacy and that “IM promotes rather than hinders intimacy” – this is believed to be the case due to the privacy that one feels when exchanging messages over a screen, versus FtF or over the phone (Hu, Wood, Smith, & Westbrook, 2006). Even the act of interacting with touch screens (Vetere et al., 2005) and engaging with the interface of mobile dating applications like Tinder have been found to have some sort of intimate quality and feel for users (David & Cambre, 2016). CMC is thus an inevitable component to the online dating experience due to its ubiquitous presence in profile creation and direct messaging that can lead to users developing relationships with one another.

### **Warranting Theory plays a key role in one’s interpretation of others on online dating sites and applications**

On one side of any given online dating connection is a user broadcasting their profile, and on the other is any number of people interpreting it. For this study, it is also important to understand a key theory that encapsulates the notion that “who we are and who we claim to be on the internet is by no means obvious” according to researchers Walther and Parks (2002, pp.551). Walther and Parks explain warranting theory as a means for individuals to connect virtual

identities and a corporeal self, deciding to what degree an attribute *warrants* a conclusion (Walther & Parks, 2002). Warranting theory states that perceivers of information place greater value in personal information and behaviors surrounding an individual when such information is difficult to manipulate (Walther & Parks, 2002). Online, where offline truths are not so easily traced, a sense of trust has potential to decrease. Warrants or warranting cues, then, “legitimize information online because they provide insight about the information’s warranting value—a psychological construct that reflects perceptions about the extent to which information is immune to manipulation by the source it describes” (DeAndrea, 2014, pp.187). Applied to the context of online dating, when a user is browsing profiles of potential dates, he or she must infer certain conclusions about a potential match or date based on the information provided in the profile, which may or may not be accurate. Researchers Wotipka and High (2016), found that when a profile owner added external links or third-party references to triangulate content from the dating platform to other sources, that profile was seen as more trustworthy by viewers. They found that the more transparent someone appeared to be online, the more trusting they were interpreted as and thus more likely to be contacted by other online dating users (Wotipka & High, 2016). Other recent applications of warranting theory in the context of social media (Walther, Van Der Heide, Hamel, & Shulman, 2009), demonstrate that in situations of perceiving contrasting statements in one’s self-description versus friends’ Facebook wall posts, the comments overrode one’s self description, thus supporting warranting theory. Online, when impressions and cues given off by profiles are often ambiguous, dating application users rely on warranting techniques, such as using third party sources to triangulate information, to infer conclusions about other users (Wotipka & High, 2016) and reduce concerns about the legitimacy

of other profiles (Walther & Parks, 2002).

### **Online dating users engage in direct messaging as a means to reduce interpersonal uncertainty**

Using given information to warrant conclusions about a particular individual is one way to initially gain an understanding of who a person is, however a more common method in CMC, especially online dating settings, is asking questions to one another so each party can get to know each other. By asking questions and slowly discovering more about each other, both parties are engaging with an active employment of uncertainty reduction theory (Berger & Calabrese, 1975). Uncertainty reduction theory states that individuals will try to reduce uncertainty and increase predictability about a particular situation by gaining information about the interaction in either passive, active, or interactive ways (Berger & Calabrese, 1975). Online, these strategies embody themselves in the act of users browsing profiles (passive) or exchanging messages with one another (interactive). Uncertainty reduction may motivate online dating users to exchange a number of messages online, before meeting in person, in attempt to gain more information and thus reduce a growing relationship's ambiguous qualities. Research conducted by Gibbs, Ellison, and Lai (2011) concluded that online dating users will employ uncertainty reduction strategies for reasons such as personal security and self-efficacy. Thus, uncertainty reduction when messaging is a crucial component to CMC specific to online dating settings.

### **Deliberate self-presentation online serves as a way to demonstrate cues**

Not only does communication experience the effects of associated with online environments, such as asynchronicity and lack of interpersonal cues, but so too does one's presentation of self. For eminent social psychologist, Erving Goffman, self presentation is a key

component to social interactions, and often involves consciously disclosing or hiding certain information about oneself in order to come across to others as socially desirable (Goffman, 1959). In FtF interactions, one may choose to say or do certain things in order to cast what Goffman's calls one's "front stage" self, in the best light. This self is said to be an active performance of a persona that an individual wants others to interpret them as (Goffman, 1959). Online, this deliberative curation of one's favorable qualities is only made easier, as many essential characteristics of FtF communication, such as physical cues that would communicate qualities of identity, are absent in computer-mediated situations (Ellison, Hancock & Toma, 2011). Goffman also argues that individuals not only attempt to *give* qualities of themselves to others, but that they also *give off* certain qualities, those of which up to the audience's interpretation (Goffman, 1959). Researchers Bullingham and Vasconcelos (2013) found that, when studying persona adoption online, users gravitated towards a persona that both appeared socially desirable but still "highlights aspects of their personality" (pp. 107) or otherwise represented values that mattered to them in an online space. Whether creating a profile or choosing an online character, favorable self-presentation online is an eminent priority to most internet users.

Additionally, in online profile creation, an individual must *tell* rather than show physical qualities such as age or gender, which may leave room to misrepresent oneself in order to ensure a socially desirable interpretation by others. Instead of making a first impression face to face, their "first impression" is a stagnant, template-based profile that lives online. As a result, much weight is placed on an individual's profile or messages when he or she is first interacting with a potential date, and the pressure to appear as socially desirable increases. Bullingham and

Vasconcelos (2013) also uncovered a pressure to “fit in” and select personas that were representative of themselves, but slightly idealized in appearance. Research specific to the online dating space has discovered similar evidence. For example, Ellison, Heino, and Gibbs (2006) discovered that users of dating applications are likely to exaggerate on some details such as height or weight in a socially desirable way, because they assume other users are doing the same. Furthermore, Ellison, Hancock, and Toma (2011) discovered that users of dating apps will often portray a “potential self” online in order to justify discrepancies in a dating profile, for example, hiding a smoking habit in with the intent to quit when meeting the right person. Profiles, then, as concluded by Ellison, Hancock, and Toma (2011), are treated as a “promise made by profile-creators to their audience, rather than an exact representation of one’s offline presence” (pp.56). Online profiles, then, are not expected to *replicate* one’s offline self, but are instead expected to serve as a mostly-true framework from which others can build from upon when meeting FtF (Ellison, Hancock, & Toma, 2011).

Though online dating users cannot control how their profiles are interpreted by other users, they can control what content they add and how they make themselves appear online. When choosing photographs or adding text to a profile description, a user makes a number of key decisions in order to give off certain *signals* to other users. Signals, defined by CMC researcher Judith Donath as “perceivable features and actions that indicate the presence of hidden qualities” (Donath, 2007, pp.233), are important for creating a comprehensive online image of oneself that is intended to be understood in a certain way by other users. These signals have varying degrees of reliability, on one side of the spectrum being “assessment signals” that are more reliable and thus difficult to fake, such as physical qualities like appearance and age

(Donath, 2007). On the other side of the spectrum are “conventional signals” that include more abstract characteristics that are easier to disguise, such as self-reported attributes, interests, and other profile details (Donath, 2007). By crafting deliberate profile content and choosing to present or omit certain details, one has control over the signals they give off to others about their personality or intention.

Furthermore, the signals and specific wording in a profile can be seen as conforming to a society-expected view of a person. In an analysis of OkCupid’s user-submitted profile essays conducted by one of the site’s founders, Christian Rudder, it was found that certain words and phrases were used more often by white men, black women, latinos, etc. Rudder relates these most common words (“my blue eyes” being the most common for white men), as well as user-submitted survey answers, to the social desirability bias, demonstrating that users on OkCupid tend to put their best foot forward and “agree on things that are most important” (Rudder, 2014, pp.164). This builds on what Goffman (1959) has identified as social desirability, and the desire to be liked by others. When creating an online profile, one has significantly more control over the general image they broadcast to the internet in online environments than they would in a FtF interaction or first impression. In this sense, one has more ability to present his or herself in a socially desirable fashion. According to self-presentation in online dating research, “internet personals allow for more deliberate self-presentation because participants have the opportunity to carefully construct and manage the image they communicate to others through profile authoring, photograph selection, and asynchronous interactions” (Gibbs, Ellison, & Heino, 2006, pp.158). The result in many cases is an edited, curated version of oneself that fits into a social or dating profile template. As consequence, instead of getting to know someone

before deciding if a user is interested in pursuing the relationship, one must make a quick judgement about a stranger based only on their profile photos or biography. Furthermore, a “temporal gap” exists when interacting with these profiles: though one user may be browsing another’s profile with a fresh perspective, that profile with its text and photos may have been created months ago, thus increasing a state of ambiguity surrounding the profile owner’s current identity (Ellison, Hancock, & Toma, 2011). This browsing, commenting, and messaging makes for a new reality of self-presentation and intimate communication in online dating settings.

In this context of online dating interactions, our study will attempt to build on existing work and assess, given the extra time afforded in CMC settings, how often online dating users interpret the genuineness and authenticity of their interactions. Furthermore, this study will evaluate user opinions surrounding receiving advice or consultation from an outside source when communicating with potential dates, and how this relates to presentation of self after having sent a message or added text to a profile that was not entirely their own. In Ellison, Hancock, and Toma’s research, one participant recalled telling his female friend not to use the word “curvy” in her profile since he felt that word encapsulated certain assumptions that were not accurate towards the friend (Ellison, Hancock, & Toma, 2011). This study aims to assess users’ opinions on presentation of self and authenticity after edits like this occur. Furthermore, to provide another example, OkCupid messaging data collected by Rudder (2014) demonstrates that keystrokes when typing a message and number of characters in a final message do not always match up. An extreme example from this research is when it took someone “387 keystrokes to get to ‘Hey’” (Rudder, 2014, pp. 68). What was happening behind those keystrokes that made this individual change his or her message so many times before sending? If this user was

working with others on potential options of replies, what was going on behind the scenes?

Online dating is becoming increasingly common not only in its widespread use but also in its social and group contexts of use (Ansari, 2015). Our study will address the unique application of CMC in an online dating settings, user attempt to present themselves in accurate yet attractive ways online, as well as the need to reduce uncertainty about a potential partner before meeting FtF, when the CMC channel between two individuals, or the online profile representation of an individual, is influenced by a third party. This study will also attempt to uncover user attitudes towards other users or potential dates that have received third party help in some way. In summary, this study aims to answer the following research questions:

**RQ1:** How do online dating users perceive the authenticity of their profiles and messages?

**RQ2:** What are the perceptions of third party help on the creation of profiles and user interactions on online dating applications and sites?

### **Method**

To better understand users of dating sites and applications, it was first essential to gather more information from users about how they use dating applications, create their profiles, and interact with potential dates. This need for rich explanation influenced the core method for this study: qualitative, semi-structured interviews.

### **Procedure**

To recruit participants for interviews, we built an eight-question survey (see Appendix A) using in Qualtrics and deployed it via University of Michigan listervs and later Facebook posts as more respondents were needed. The survey gathered a respondent's age, gender, relationship status, how often they use dating sites, if a friend helps them when messaging potential dates,



what kinds of advice they give (if applicable), and if they think that affects how they express themselves on the site (if applicable). If survey respondents left their email address in the last, optional survey question, they were contacted to be interviewed. Respondents that answered “All the time,” “Very often,” or “Somewhat often” to the question regarding frequency of third-party help were preferred as interview participants, however when we experienced a small number of responses to emails for interview scheduling, we broadened the criteria. Those who answered “Sometimes” or “Rarely” then, were also contacted. As a result, these participants who claimed they did not to ask for advice with messaging received interview questions that were focused on their opinions about advice in other situations, rather than their first-hand experiences with getting advice from friends. The interviews, 18 total, were semi-structured and were recorded and transcribed using Otter.ai, an artificial intelligence-powered voice recording and transcription service. The primary goal for each was to understand a participant’s actions on dating applications, mental models around asking for advice, and how authentic he or she feels communicating to others within the site or mobile application. We asked each participant a series of questions that aimed to provide more details towards these topics, such as “How authentic would you say your interactions are between yourself and others on a dating site?” and “When you send a message edited by someone else, do you feel the potential date is understanding your true self?” The remaining interview questions can be found in Appendix B.

### **Participants**

18 participants were interviewed for this study (9 female, 9 male; age range from 21-30). 15 of the 18 were current users of dating sites, but all had used at least two dating applications at some point in their lives. Among the dating applications that participants reported using currently

or in the past were, in order of most prevalent, Bumble, Tinder, Hinge, Coffee Meets Bagel, OkCupid, The League, Match.com, Grindr, Friendsy, and Craigslist. A majority of the participants were graduate students at the University of Michigan across various disciplines.

Table of Participants

P#	Age	M/F	Dating Sites Used	P#	Age	M/F	Dating Sites Used
1	25	F	1, 2, 6	10	30	F	1, 2, 6, 9, 10
2	23	M	1, 2, 6, 9, 10	11	25	M	1, 2, 6, 10
3	27	M	5, 7, 10	12	29	F	1, 9, 10
4	24	M	1	13	29	M	1, 6
5	24	M	1, 10	14	22	F	1, 6
6	29	M	1, 6, 9, 10	15	23	M	11
7	26	F	6, 10	16	24	F	1, 2, 6, 7, 8, 10
8	21	F	1, 6, 10	17	21	M	1, 4, 10
9	25	F	3, 8, 9	18	23	F	1, 2, 10

**Table 1: Participants and their Past or Present Frequently Used Dating Sites or Applications**

*1=Bumble, 2=Coffee Meets Bagel, 3=Craigslist, 4=Friendsy, 5=Grindr, 6=Hinge, 7=The League, 8=Match.com, 9=OkCupid, 10=Tinder*

### Analysis

We used affinity mapping, a thematic analysis technique in which researchers cluster and group similar information in categories in order to develop high-level themes derived from the information at large, to qualitatively code our interview data (Plain, 2007). Our affinity diagram was constructed in tabular format using Google Sheets, and represented the themes that emerged from the interview recordings and transcriptions, backed by evidence in the form of participant

quotations. The finished spreadsheet visualized the participants' opinions and values surrounding each major theme from the affinity mapping analysis.

### **Findings**

Data from this study yields findings in three main areas: varying opinions about authenticity online, converging viewpoints regarding third party help, and a coinciding rejection of having a strict messaging strategy in place.

#### **Authenticity**

##### **F1: Participants hold different views about authenticity online**

When asked about how authentic their interactions feel on dating applications, participants differed dramatically in how they view and perceived authenticity in two main ways. Exactly one half of participants saw their online actions as a reflection of their in-person actions, claiming they are the same person both on and offline: *I'm 100% authentic, they're gonna get exactly the same thing when they meet me in person (P13). I say things and behave exactly the same to any other person I interact with. There's no change in attitude change in behavior or anything (P4).* The other 50%, however, saw online interactions as inherently inauthentic, and thus expressed that no matter how accurate their profile or how honest their messages, a potential partner can never truly know them until they meet in person or otherwise move their interactions offline. *You're not going to know me until you meet me (P1). I feel like the only way to really, truly know someone is through interaction and I don't feel like that interaction or that kind of understanding can take place within a [dating] app. Everything is very surface-level (P6).*

This contrast in perceptions of authenticity we can relate to Walther and Park's (2002) cues filtered-out versus cues filtered-in approaches to CMC. For example, the cues filtered-out

approach claims that there exists a correlation between the number of functions and cues available online, and thus, with CMC's lack of nonverbal and spatial cues, CMC interactions do not lead to relationship growth or development and are inherently less personal and potentially more hostile (Slouka, 1995). The participants who reported their online interactions feel inauthentic or "surface-level" in the context of online dating support the cues filtered-out approach because of their lack of belief in truly getting to know someone over online dating messages or text conversations. *I personally have a problem with portraying yourself on the internet because it's always how you want to be portrayed... it's always hard to tell who someone actually is until you just meet them (P7).*

Contrastingly, the participants who reported their online interactions feel just as authentic as their in-person interactions, support the cues filtered-in approach, which states that "individuals engage in strategic, qualitative deliberation and communicative behavior to compensate for media limitations and lack of information" (Rayner, 2017). This approach relies on the assumptions of SIP, in that communicators will use whatever a given medium allows in order to substitute for lack of interpersonal cues, motivated by reducing uncertainty in a situation to foster relationship growth in an online interaction (Walther & Parks, 2002). *Which picture should go first? Which picture should go second? What should I have in my pictures? I don't want to include a picture of me at a party with a bunch of alcohol [because] I don't want to come across as an alcoholic, [but I will have] a picture with me, and my dog, outdoors, or with my friends (P11).*

### **Third Party Help**

#### **F2: Advice given by close friends is crucial to acceptance**

A core research question of this study aimed to explore opinions regarding asking for third party or advice help when communicating with a potential partner over a dating application or text message. Participant data from interviews demonstrated a resounding reliance on close friendship when asking for advice. According to participants, close friends are able to match a message sender's tone when helping to edit or type a message. *Your friends are a makeup of you. I'm consulting people who know me know me, not random strangers* (P16). Furthermore, participants reported their close friends are aware of their intentions on the dating application, whether that be to find a long-term relationship or casual hookup. When a friend is seriously offering advice to a message sender, they keep this in mind. *My buddies, they know what I'm looking for* (P13). Thus, participants view asking for advice like this as non-deceptive, since their friends were able to help them in such a way that it still reflected their intentions.

Understanding the reliance on friendship here, is important. When a participant asks for advice, they are in a sense, "test-driving" their profile or messages that they will eventually present to others. Goffman (1959) refers to this act of self-presentation as performing one's front-stage self to an audience. Friends, because of their intimate relationship with the participant, act as a safe outlet of perspective and feedback before a participant hits "send" or "post." After testing one's presentation of self to a trusted individual, he or she may feel more confident about communicating with an ambiguous match or potential date online.

### **F3: Small message edits are fine, lying is not**

When asked about message editing, participants largely agreed that minor edits to a single message is not a deceptive act. *I think line editing a text is different than changing the whole thing - as long as the content comes through, rephrasing is fine* (P17). While participants

were willing to accept small edits to messages, if a message overall did not reflect a participant's voice or intent, he or she did not accept the edits or send the message. *If I don't feel like it's something I would say, then I'll change it* (P1). Furthermore, many participants noted that blatantly lying in a message or on a dating profile is unacceptable. *Me trying to tell a funny quip is qualitatively different than me misrepresenting my values as a human being. If I'm actively straying into not just showing my best self, but misrepresenting fundamentally who I am as a human being, then that's not okay* (P9). Accompanying statements like this, many participants additionally noted the context and purpose of online dating makes lying ineffective anyways, since the goal is to eventually meet someone in person and potentially find a long-term partner. *I don't really see the point of lying on these [apps] because eventually if a meetup does happen, you're going to get found out* (P6). These findings mimic those of previous online dating research, such as Toma, Hancock, and Ellison (2008) who found that because the goal of online dating sites is to find a potential partner, users avoid blatant deception, and research by Ellison, Hancock, and Toma (2011) who found that users tolerated *minor* enhancements to self image, and expected some degree of misrepresentation online. For example, one participant from the latter study expressed zero qualms with someone claiming to be 35 years of age when in fact they are 39 because it was not a substantial age difference whereas if someone had claimed to be 29 but in reality was 19, that would be a fundamental problem (Ellison, Hancock, & Toma, 2011, pp.55). Our study, too, found that minor adjustments to messages or profiles in order to present oneself favorably is fine, but radically misrepresenting oneself is not. This relates to research by Donath (2007) claiming that self-reported age is a conventional signal and thus easy to camouflage online, however it is kept honest by the intervention of laws and societal norms,

which in this case, are an anticipated FtF meeting. Thus due to the expectation of meeting FtF in the near future (Gibbs, Ellison, & Heino, 2006), online dating users reject fundamentally misrepresenting themselves in online profiles or direct messages.

#### **F4: Investment in relationship growth determines advice seeking**

Our findings demonstrate that the situation surrounding asking for advice matters. For example, participants reported that they were much more likely to seek advice when communicating with a potential date or partner that they were seriously interested in or attracted to. *When I've been texting someone that I actually care about or if I'm really interested to the point that I'm nervous about how they might respond, then I will ask [for advice] (P3). If I'm interested in a girl and I get excited about messaging her, then I don't want to screw it up [then I'll ask for advice]. (P13).* Participants reported that in these important situations, where a dating app user is seriously invested in pursuing a relationship, what is said over text matters much more, compared to a casual, low-stakes interaction, because the emotional consequence is much greater if something were to go wrong. Thus, affirming advice on a profile or a second set of eyes on how a message may be interpreted is crucial to positively driving a relationship forward with a potential partner. Approaching this type of interaction with uncertainty reduction theory in mind, we remember that in the initial stages of communication, messages serve as a means of reducing uncertainty, and getting to know more about one another (Walther & Parks, 2002). Thus, participants sought advice to ensure they were “on the right track” to reduce the risk of giving off unintended signals to the other person resulting in a potential budding relationship going awry. We can also relate this to Goffman’s social desirability principle, stating that we want our front stage selves to “look good” and come across as likeable to others (Goffman,

1959).

Just as situations exist in which dating application users rely on third party advice, so too do situations where advice is simply not needed, reported by participants as *low stakes* (P9, P16) interactions. Many participants, for example, reported the act of swiping through profiles together, or making light of messaging one's matches is a fun, almost social activity for them (P8, P10, P11, P16, P17). The most "extreme" example from our study being a situation in which P8 reported that her and a large group of people got together to make a single profile for one person. *We passed the phone around from wrote like, one word that we like, that described her well, and it was actually like, the best bio ever seen because it actually represented her* (P8). Other participants reported group matching or swiping for fun, but only when the message sender was not heavily invested in whoever they were messaging. *My friend has typed messages for me while drunk, just for giggles, when I am not as invested [in the guy]* (P10). *[My friends will] match and then it'll be like a group thing. You're kind of deciding what to ride and just having a fun time... if they're really interested in going on a date with someone, they won't do that as a group* (P15). As discussed in F2, when an online dating user is emotionally invested in developing a relationship, what is said early on to reduce uncertainty and provide a positive impression for the potential partner, matters. In these situations where dating applications are used as a means of laughter and joking around, the user is not emotionally invested in whoever they may be messaging. Furthermore, while other participants from our study did not explicitly mention swiping as a group activity, there was a presence of sharing messages for amusement: *I might show [friends] examples of witty banter laugh about the people that I'm messaging* (P5). *We will screenshot funny things and send it to each other. That's the thing we do. But that's not*



*to get help, that's more to commiserate (P12).*

Research conducted by Ansari and Klinenberg (2015) uncovered similar social attitudes towards modern dating applications, especially swiping platforms like Tinder. Their focus group participants reported making profiles as a joke with friends, and finding the swiping feature to be “gamelike” in nature (Ansari, 2015). They noted the non-serious nature of Tinder interactions, and how common it is to do with friends, which one of our study participants also touched on: *I don't think it's an expectation that these sorts of messages stay for one person's eyes only... they will be shared with friends (P9)*. These activities of group swiping or laughing over a message can serve as a means of building and strengthening their relationships with friends, which psychologist Robin Dunbar (1996), calls “social grooming.” To coin this term, Dunbar applied the act of primates grooming one another — removing bugs, dirt, and the like — to humans. Instead of physically grooming one another, humans groom by language, building rapport in the form of exchanging stories, telling jokes, or asking for advice (Dunbar, 1996). When participants share a laugh about a funny message or profile when browsing through dating applications with a friend, or ask for advice on how to proceed, they are bolstering their friendship with that individual they shared the message with and thus engaging in social grooming practices.

#### **F5: Men and women give different kinds of advice**

When describing situations in which participants asked a friend for help with a profile or message, they were also asked to describe who they asked, and what types of advice that person gave. A follow up question aimed to uncover if female friends versus male friends gave different types of advice. On the whole, a trend across various participants appeared to be that women are better at giving relationship-oriented advice, whereas men are more likely to give more

“aggressive” or direct advice. *Guy friends would definitely give more aggressive advice but the girl would be more carefully- more aware (P8). Girls just tell me be myself. Guys want me to be more aggressive, more direct (P13).* Interestingly, these opinions were largely expressed by male participants. On the contrary, female participants largely didn’t report any difference in advice from men or women, since they would mostly consult “close girlfriends” if they were to ask for advice. *Girls care more, so they give more feedback or input versus most of my guy friends are just kind of like, “okay, cool.” They are kind of useless (P14).* Male participants, however, also tended to *prefer* seeking advice from female friends, not only because women were more likely to offer serious advice, as noted above, but also because male participants were seeking a female’s perspective on the online dating experience. *Asking advice from the opposite gender I think is quite helpful for someone who's seeking to meet people of the opposite gender; I asked a girl friend for advice because of her inside experience with dating apps (P4).* Finally, two participants noted a difference in advice from person to person, however rather than this being tied to gender, they noted it was due to personality. P5, for example, had one male and one female friend who would give advice on *how to pursue a more meaningful, longer term relationship* whereas another male and female pair would give *advice on how do I get this person back to my place soon as possible.* P14 also made note that she would *usually cater [a question] towards a person, who I think would be more helpful in giving advice.*

## **Strategies**

### **F6: Participants have routines, even if they do not admit it**

Participants were also asked if they have a strategy or set of rules they follow when messaging a potential date or interacting with others on dating sites. Many participants seemed to

veer away from the term “strategy” yet they still expressed things they frequently do, such as *referencing a match’s bio or profile in an opening message* (P2, P5, P6, P8, P11, P13) or *always being respectful* (P4, P13, P17). Other participants admitted to routinely exercising certain methods when interacting with potential dates such as *looking them up on LinkedIn* (P1), *Google searching them* (P10), and *purposely canceling plans to see how they react* (P7). These participants, however, still expressed not having a definite strategy in place or strict rules that they follow when communicating online. Furthermore, some participants made note of things they never do when asked about having a routine or set of rules. Some examples include *using pickup lines* (P5, P6) *posting a shirtless picture* (P5), or *saying the same thing to every person* (P13). Comparable to the participants that admitted to having some tactics they employ from time to time, these participants also rejected having a strict strategy.

We might assume that participants did not confess to having any sort of strategy due to the social desirability bias, which is defined as the “tendency of research subjects to choose responses they believe are more socially desirable or acceptable, rather than choosing responses that are reflective of their true thoughts or feelings” (Grimm, pp.1, 2010). It is important for researchers to be aware of this limitation when asking participants questions in a formal setting like the one in this study. We experienced this, as participants skewed their answer to appear more “in the norm” and not having a strict strategy or rules, and wanting to seem more relaxed and comfortable with online dating, or being able to go with the flow. This again, relates to Goffman’s claim that humans have a desire to be liked or to appear before others as socially acceptable (Goffman, 1959). If participants thought it was not socially acceptable to have rules when engaging on dating applications, it is less likely they will immediately admit to having a

strategy in an interview setting like ours.

### **F7: Approaches to dating applications differ with participant intentions**

Participants also converged on opinions regarding intent for dating applications or sites. Data from our interviews show that participants generally view the mobile application, Tinder, as a place to find more casual relationships or hookups, whereas dating applications like Bumble or Hinge serve as a means to find more serious, long-term relationships. *A lot of people on Bumble seem to be looking for relationships and that's not really what I'm looking for right now. Whereas on Tinder, I think there's a better distribution of people that are are looking for relationships or hookups or friends or any kind of combination of those (P5). I want to meet somebody. The next person I seriously date, I hope that's the last person I seriously date - so I don't need to be on Tinder where girls aren't going to be serious (P13).* Participants reported that as a result of this difference in tone and expectation across online dating platforms, they may present themselves differently depending on what their intentions are. *It depends what you're trying to achieve. If you're just trying to like go on casual dates, then you might want to present yourself as less of like a sweet guy, whereas if you're like trying to get into a long term relationship, then you might want to put more personal stuff in your bio (P3).* This finding is reflective of previous online dating research from Ranzini and Lutz (2017) where it was found that individuals using online dating “for relationship-seeking might be more authentic in their self-presentation because of their long-term perspective and the likelihood that deceptive self-presentation could backfire on them” (Ranzini & Lutz, 2017, pp.88). Ansari and Klinenberg (2015) also discovered different perceptions of different dating applications that can lead to a difference in self-presentation: “One woman said she’d be embarrassed to tell people she’d met

someone on Tinder, whereas another site, like JDate, would have been fine” (Ansari, pp.115, 2015).

Not only are participants aware of the differences between dating applications and sites, but also the difference in how they present themselves on each. *I don't know that I'm necessarily consistent in how I portray myself to different people. Sometimes the idea is to be more sweet, sensitive. Other times, it might just be like, I'm here to hook up and that's it - there's not much more to me* (P5). We can relate this to Altman's (1975) boundary regulation framework, which addresses the challenges in disclosure and management of the self. Modern applications of boundary regulation by Stutzman and Hartzog (2012) discovered that identity management is a strong motive for users to engage in multiple profile management (MPM), for example, representing oneself as professional on one social network, but using a pseudonym on another to express more personal, non-work related posts. Our users noted a similar phenomena when representing themselves in online dating profiles. For example, on Hinge or Bumble, where finding a long-term relationship was the main goal, participants were more likely to disclose interesting personal things about their personality, such as a fun fact or additional information about what they are studying. On applications like Tinder, however, where participants' goals were less relationship-focused and more hookup-centered, participants reported not disclosing as much information about themselves, because it didn't matter to them if a potential date is interested in that aspect of themselves. *If I'm looking for a hookup, it probably doesn't help me out a whole lot to talk extensively about hiking or what my PhD project is on* (P5). We also found that sincere representation of self did not matter when a participant was trying to break off a relationship with someone, because going forward from the “break-up message,” participants

did not care how the other party interpreted them (P7, P10). This scenario can also be viewed as multiple identity management, because of the different goals involved from setting to setting.

### **Discussion**

#### **CMC in online dating settings differs from traditional forms of CMC**

Messages between two users of online dating is a form of CMC, but differs from the traditional definition in three main ways. First, considerable weight is placed on one's profile, a template-based, written version of a person that FtF scenarios lack (Ellison, Hancock, & Toma, 2011). Our findings, specifically F6, indicate that individuals rely heavily on a profile when communicating with other dating application users, especially in the beginning of a relationship, to show investment and start an interesting conversation. Furthermore, as discussed in F7, we found that online dating users will publish or not publish certain information about themselves depending on what their desired outcome is from using a dating application.

CMC in online dating also contends with the traditional applications due to the anticipation of future FtF meeting (Gibbs, Ellison, & Heino, 2006). In F3, we found online dating users are comfortable with minor edits to their profiles or messages, but fundamentally misrepresenting their appearance or values is not acceptable because of their intentions to find someone who accepts their true self. With online dating, users are more likely to have intentions of finding a long-term partner compared to other applications of CMC, due to the expectation of eventually meeting FtF (Toma, Hancock, & Ellison, 2008).

Lastly, CMC in online dating is set apart because of the role of direct messaging in reducing interpersonal uncertainty about a potential partner (Gibbs, Ellison, & Lai, 2011). In F4, we found online dating users are more likely to seek advice from others about what to say or post

when they are seriously interested in developing a serious relationship with another individual. In this period of active uncertainty reduction by way of messaging an online dating match to get to know them better, what is said holds much more weight compared to a casual conversation with a friend. Thus, asking for advice in this stage is important for dating application users to validate that they are appearing socially desirable to others and giving off the cues and signals online that they intend to.

### **Online dating users treat authenticity as folk theory for expressing cues and signals online**

Our findings demonstrate that although users recognize that they engage in certain practices to ensure they are coming across to others in socially attractive ways, they do not outwardly recognize that this act of deliberate self-presentation is a way of managing the cues and signals they put forward online. This concept can be described as “folk-conceptual theory,” defined by Bazarova and Hancock (2010) as “how people come to understand behavior causes and express them in conversation” (pp.66). Folk theory, then, describes in layman’s terms interpretations of complex theories or principles that make sense to non-experts. Our findings reveal that the term “authenticity” is used as folk theory to describe the execution of intentional cues and signals that an online dating user wants to ensure others pick up from either browsing their profile or interpreting a direct message. Signaling theory, as demonstrated by Donath (2007), “seeks to explain what keeps communication honest” (pp.233) in ambiguous spaces such as the internet. Signals, then, are a user’s way of showing who they are online, and can be expressed through self-constructed profiles and photographs (Donath, 2007) as well as verified through triangulation with other sources, such as online search engines or other social networking sites (Berger & Calabrese, 1975, Gibbs, Ellison, & Lai, 2011). Following the

principles of SIP, online dating users adapt to the reduced-cue environment of online spaces and use the affordances provided by an online dating application such as descriptive profile text and photographs to portray to others interesting things about themselves (Walther, 2015). We found that careful management of these signals are essential to online dating user experience, especially when seeking a serious, long-term relationship, as demonstrated in F4. Thus, as a way of testing their presentation of self online and self-generated, positive assessment signals (Donath, 2007), users will often ask for help or advice from a trusted friend.

We also discovered that online dating users hold different views about how authentic their self image can be online. F1 demonstrates that while some users believe their profile encompasses their personality accurately, others doubt that a platform like an online dating profile has the potential to present one's authentic self. This difference in mental models surrounding representation of self online has the potential to affect one's curation of cues and signaling whilst creating a profile or crafting a message to another user. Similar to conclusions from F7 that demonstrate users will present themselves differently depending on their personal intentions or the platform's overall tone, we found online dating users hold different mindsets surrounding the concept of presenting oneself "authentically" depending on their beliefs and mental models surrounding the ideas as whole.

### **Sincere, third party advice from close friends is a large component to achieving self-perceived authenticity online**

Constructing a favorable self-image online is important to online dating users, and can be executed through profile details or direct message verbiage. Our findings indicate that close, trusted friends act as a safe pilot of those profile or direct messages. As discussed in F2, online



dating users are not only more comfortable asking close friends because of the safe environment for honest feedback on their “front-stage” self (Goffman, 1959) but also because their friend is more likely to respect the user’s intentions and tone on the dating application. As discussed in F3, online dating users do not want to outright deceive others, and thus they trust their close friends to help them with messages or choosing photographs that do not misrepresent who they are. We also uncovered options surrounding the ask for advice in online dating interactions, with interview results indicating the expectation that messages will be shared with others, along with a resounding approval of third party intervention when the advice is still mostly representative of the user.

### **Designers of online dating products need to be aware of user views towards authenticity**

Designers of online dating applications and websites need to be aware of users’ varying approaches to authenticity online. F1 demonstrates that not every single user believes they can be their “authentic” self online -- the platform is not built for such connections and thus if a relationship is to continue moving forward, most of that process will happen FtF and not via CMC. The mobile dating application, Hinge, does a nice job at recognizing this “surface-level” reputation that swipe-style dating applications often acquire (Baxter & Cashmore, 2013) and tries to break that stereotype by providing more in-depth profiles for users and more ways to connect, getting rid of the swiping activity all together. On the homepage of Hinge’s website their slogan is clearly displayed: “designed to be deleted” (“Hinge”), once again acknowledging the context of online dating that is meant to be experienced offline. Understanding how communication occurs between two potential partners both online and offline is important to consider when designing dating sites and mobile applications.

### Limitations

This study's first limitation is the range of participants. All of the participants were affiliated with the University of Michigan in some way (3 undergraduate students, 13 graduate students, 2 working professionals at the university) ranging from age 21 to 30. Given the majority of the participants were graduate students at the University of Michigan, we can assume this impacts their experience and history with dating applications and online dating in general, given their relocation for graduate school and generally busy lives as students. Examples include using the online dating sites or applications for many years to a point where most interactions seem banal, to using an online dating platform simply to meet new people in a new city, rather than to seriously date.

The next, and larger limitation to the study is the perspective from which the research and interview questions were asked. Due to time constraints and recruiting difficulties, research questions were directed towards users of dating applications or sites about their experiences and how they perceived and reflected on *their own* experiences whilst creating their profiles or interacting with others. When asked questions about presentation of self, they recalled on their own opinions and interpretations of a situation or series of messages while answering the researcher's questions. Though participants were able to convey whether or not they thought they were presenting themselves correctly, we are unsure if the receiver of the message understood the participant in how they initially intended. For future studies, it is recommended that researchers look at both how a sender of a message is perceiving themselves, as well as how the receiver of the message is interpreting it. In other words, to truly gain an understanding of if one is accurately and authentically representing themselves through online dating, it is also important

to understand the profile viewer's and message receiver's point of views.

### **Conclusion**

Our study assesses online dating users' mental models surrounding authenticity of self-presentation in profiles and messages to other users. We find that users value the concept of authenticity, and use it as a framework for constructing signals online. To achieve what they perceive as an authentic self-image, users often consult close friends to pilot their signals and cues. Our interview results indicate a resounding approval of the third-party intervention when the advice does not involve blatant lies or deception. Finally, we found users are more likely to ask for advice in scenarios where one is seriously invested in developing a relationship with another individual, to both aid in uncertainty reduction and appear as socially desirable to the potential partner.

## References

- Altman, I. (1975). *The Environment and Social Behavior*. Monterey: Brooks/Cole.
- Ansari, A. (2015). *Modern Romance*. New York: Penguin Random House.
- Baxter, H., & Cashmore, P. (2013, November 23). Tinder: The shallowest dating app ever?  
Retrieved March 20, 2019, from  
<https://www.theguardian.com/lifeandstyle/2013/nov/23/tinder-shallowest-dating-app-ever>
- Bazarova, N. N., & Hancock, J. T. (2010). From Dispositional Attributions to Behavior Motives  
The Folk-Conceptual Theory and Implications for Communication. *Annals of the  
International Communication Association*, 34(1), 63–91.  
<https://doi.org/10.1080/23808985.2010.11679096>
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond:  
Toward a developmental theory of interpersonal communication. *Human Communication  
Research*, 1(2), 99–112. <https://doi.org/10.1111/j.1468-2958.1975.tb00258.x>
- Bullingham, L., & Vasconcelos, A. C. (2013). ‘The presentation of self in the online world’:  
Goffman and the study of online identities. *Anniversary Journal of Information Science*,  
39(1), 101–112. <https://doi.org/10.1177/0165551512470051>
- Cacioppo, J. T., Cacioppo, S., Gonzaga, G. C., Ogburn, E. L., & VanderWeele, T. J. (2013).  
Marital satisfaction and break-ups differ across on-line and off-line meeting venues.  
*Proceedings of the National Academy of Sciences*, 110(25), 10135 LP-10140.  
<https://doi.org/10.1073/pnas.1222447110>

- Daft, R.L., Lengel, R.H., & Trevino, L.K. (1987). Message equivocality, media selection, and manager performance: Implications for information systems. *MIS Quarterly*, September, 355-366.
- David, G., & Cambre, C. (2016). Screened Intimacies: Tinder and the Swipe Logic. *Social Media + Society*, 2(2), 205630511664197. <https://doi.org/10.1177/2056305116641976>
- DeAndrea, D. C. (2014). Advancing warranting theory. *Communication Theory*, 24, 186–204. doi:10.1111/comt.12033
- Donath, J. (2007). Signals in Social Supernets. *Journal of Computer-Mediated Communication*, 13(1), 231–251. <https://doi.org/10.1111/j.1083-6101.2007.00394.x>
- Dunbar, R. I. M. (1996). *Grooming, Gossip, and the Evolution of Language*. Cambridge, MA: Harvard University Press.
- Ellison, N. B., Hancock, J. T., & Toma, C. L. (2011). Profile as promise: A framework for conceptualizing veracity in online dating self-presentations. *SAGE Journals*, 14(1), 45–62. <https://doi.org/10.1177/1461444811410395>
- Ellison, N., Heino, R., & Gibbs, J. (2006). Managing Impressions Online: Self-Presentation Processes in the Online Dating Environment. *Journal of Computer-Mediated Communication*, 11(2), 415–441. <https://doi.org/10.1111/j.1083-6101.2006.00020.x>
- Finkel, E. J., Eastwick, P. W., Karney, B. R., Reis, H. T., & Sprecher, S. (2012). Online dating: A critical analysis from the perspective of psychological science. *Psychological Science in the Public Interest*, 13, 3-66. doi: 10.1177/1529100612436552
- Fisher, H. (2016). *Anatomy of Love: A Natural History of Mating, Marriage, and Why We Stray*. New York: W.W. Norton & Company, Inc,

- Gibbs, J. L., Ellison, N. B., & Heino, R. D. (2006). Self Presentation in Online Personals : The Role of Anticipated Future Interaction, Self-Disclosure, and Perceived Success in Internet Dating. *Communication Research*, 33(2), 152–177.  
<https://doi.org/10.1177/0093650205285368>
- Gibbs, J. L., Ellison, N. B., & Lai, C.-H. (2011). First Comes Love, Then Comes Google: An Investigation of Uncertainty Reduction Strategies and Self-Disclosure in Online Dating. *Communication Research*, 38(1), 70–100. <https://doi.org/10.1177/0093650210377091>
- Goffman, E. (1959) *The Presentation of Self in Everyday Life*. New York : Anchor.
- Grimm, P. (2010). Social Desirability Bias. In *Wiley International Encyclopedia of Marketing*. Chichester, UK: John Wiley & Sons, Ltd.  
<https://doi.org/10.1002/9781444316568.wiem02057>
- Hinge. (n.d.). Retrieved March 20, 2019, from <https://hinge.co/>
- Hu, Y., Wood, J. F., Smith, V., & Westbrook, N. (2006). Friendships through IM: Examining the Relationship between Instant Messaging and Intimacy. *Journal of Computer-Mediated Communication*, 10(1), 00–00. <https://doi.org/10.1111/j.1083-6101.2004.tb00231.x>
- Hwong, C. (2018, February 07). Chart of the Week: What are the most addictive dating apps? Retrieved December 9, 2018, from [www.vertoanalytics.com/chart-week-addictive-dating-apps/](http://www.vertoanalytics.com/chart-week-addictive-dating-apps/)
- Plain, C. (2007). Build an affinity for K-J method. *Quality Progress*, 40(3), 88. Retrieved from <http://proxy.lib.umich.edu/login?url=https://search-proquest-com.proxy.lib.umich.edu/docview/214763444?accountid=14667>

- Ranzini, G., & Lutz, C. (2017). Love at first swipe? Explaining Tinder self-presentation and motives. *Mobile Media and Communication*, 5(1).  
<https://doi.org/10.1177/2050157916664559>
- Rayner, D. (2017, April 23). Cyberpsychology Presentation Group 5. Retrieved March 7, 2019, from <https://www.youtube.com/watch?v=5ChSkxxh-ss>
- Reasons for using online dating sites & apps in U.S. 2017 | Statistic.* (2017). Retrieved from [www.statista.com/statistics/705347/reasons-for-using-online-dating-site-and-app-in-us/](http://www.statista.com/statistics/705347/reasons-for-using-online-dating-site-and-app-in-us/)
- Rudder, C. (2014) *Dataclysm: Who We Are (When We Think No One's Looking)*. New York : Crown.
- Sharabi, L. L. (2015). *Modality switching in online dating: Identifying the communicative factors that make the transition from an online to an offline relationship more or less successful*. Urbana, IL. Retrieved from <https://search-proquest-com.proxy.lib.umich.edu/docview/1753117002>
- Slouka, M. (1995). *War of the worlds: Cyberspace and the high-tech assault on reality*. New York : Basic Books.
- Stutzman, F. & Hartzog, W. (2012). *Boundary Regulation in Social Media*. Retrieved from [http://fredstutzman.com/papers/CSCW2012\\_Stutzman.pdf](http://fredstutzman.com/papers/CSCW2012_Stutzman.pdf)
- TED-Ed. (2013, February 13). Inside OkCupid: The math of online dating – Christian Rudder. Retrieved from <https://www.youtube.com/watch?v=m9PiPIRuy6E>
- Toma, C. L., Hancock, J. T., & Ellison, N. R. (2008). Separating fact from fiction: An examination of deceptive self-presentation in online dating profiles. *Personality and Social Psychology Bulletin*, 34, 1023–1036. doi:10.1177/0146167208318067

- Vetere, F., Gibbs, M. R., Kjeldskov, J., Howard, S., Mueller, F., Pedell, S., ... Bunyan, M. (2005, April). *Mediating Intimacy: Designing Technologies to Support Strong-Tie Relationships*. Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, CHI 2005, USA (pp. 471–480). Retrieved from <https://dl.acm.org/citation.cfm?id=1055038%20>
- Walther, J. B. (1996). Computer-Mediated Communication. *Communication Research*, 23(1), 3–43. <https://doi.org/10.1177/009365096023001001>
- Walther, J. B. (2015). Social Information Processing Theory (CMC). In *The International Encyclopedia of Interpersonal Communication* (pp. 1–13). Hoboken, NJ, USA: John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118540190.wbeic192>
- Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer-mediated interaction. *Human Communication Research*, 19, 50–88.
- Walther, J. B., & Parks, M. R. (2002). Cues Filtered Out, Cues Filtered In: Computer-Mediated Communication and Relationships. In Mark L. Knapp & John A. Daly (Eds.), *Handbook of Interpersonal Communication* (pp. 529–563). Thousand Oaks, CA: Sage Publications, Inc. Retrieved from <https://www.researchgate.net/publication/239489124>
- Walther, J. B., Van Der Heide, B., Hamel, L. M., & Shulman, H. C. (2009). Self-Generated Versus Other-Generated Statements and Impressions in Computer-Mediated Communication A Test of Warranting Theory Using Facebook. *Communication Research*, 36(2), 229–253. <https://doi.org/10.1177/0093650208330251>
- Whitty, M., & Carr, A. (2006). *Cyberspace romance: The psychology of online relationships*. Basingstoke, England: Palgrave Macmillan.



Wotipka, C. D., & High, A. C. (2016). An idealized self or the real me? Predicting attraction to online dating profiles using selective self-presentation and warranting. *Communication Monographs*, 83(3), 281–302. <https://doi.org/10.1080/03637751.2016.1198041>

## Appendix A

### Screening Survey

1. What is your current age?
2. To which gender do you most identify?
  - Male
  - Female
  - Nonbinary
  - Prefer not to answer
3. What is your relationship status?
  - Single
  - In a casual relationship with one person
  - In a casual relationship with more than one person
  - In a committed relationship
4. When was the last time you used a dating application (for example, Tinder, Bumble, OkCupid...)?
  - Never
  - more than 6 months ago
  - between 3 and 6 months ago
  - between 1 week ago and 3 months ago
  - within the last week
5. How often does a friend help you construct messages when communicating on a dating application/site?
  - All the time
  - Very often
  - Somewhat often
  - Sometimes
  - Rarely
  - Never
6. [Logic] What types of help have you received from a friend in communicating on dating applications/sites ? Select all that apply
  - Other person suggests things I should say
  - Other person suggests exact sentences or phrases I should say
  - Other person types a message for me on my device
7. [Logic] How much does receiving help from a friend in communicating with matches on dating apps change how you present yourself?
  - Completely changes how I present myself
  - Somewhat changes how I present myself

- Minimally changes how I present myself
  - Does not at all change how I present myself
8. Please provide your email address if you are located in Ann Arbor and are willing to be interviewed for this study:

## Appendix B

### Interview Script and Questions

#### Opening

Hello. Thank you again for volunteering to participate in this study. Today we will be talking about your use of dating apps such as Tinder, Bumble, Hinge.

First, I will be asking you a few questions about your use of dating sites/apps, then I may ask you to look at some of your interactions on the dating site. Participation is entirely voluntary on your part, so if you ever do not want to answer a question or if you want to stop or need to leave, just let me know.

Additionally, I will be recording our session today, however anything you say won't be associated with your name to protect your privacy. I may also be taking a few notes as you talk. Do you have any questions before we begin?

#### General Use Questions

- ❖ Can you tell me a bit more about which dating app(s) you have used in the past 6 months?
  - Why did you choose that site or app?

[*For each dating app participant listed...*]

- ❖ On [*dating app*] do you message other users?
  - How often do you do this?
  - Are you usually the one to start a conversation or reply to someone?
  - Does this in-app messaging ever lead to off-app messaging such as text messages?
  - What's your objective when messaging?
- ❖ Do you have a routine or set of rules you follow when messaging a potential date?
  - [*if applicable*] How did you decide on/develop this strategy?
  - [or] Is there a reason that you do not have a messaging strategy? Tell me about it.
- ❖ How long does it typically take you to compose a message before sending?
- ❖ How would you describe your tone when messaging?
- ❖ How confident do you feel when messaging others on a dating application?
- ❖ How authentic would you say your interactions are between yourself and others on a dating app or over text?
- ❖ When you are messaging or interacting with others, are you usually by yourself or in the presence of others (friends, roommates, etc)?

### Third-Party Help [A] Questions

For my next set of questions, I will be asking you about your messages and profile on [*dating app*]. If you would like to reference the app or your messages as I ask you questions, feel free. I may ask you to elaborate on certain situation, but you never need to share a message with me if you feel it is too private or you would feel uncomfortable discussing it. I also do not need to know the names or details of anyone you are messaging at any point. Any questions before we move on?

- ❖ When you are messaging someone on a dating app, do you ever seek advice from others about what to say to a potential date?
- ❖ Do you have an example of this? Tell me about a time you asked a friend for advice and why.
  - For what reasons do you seek advice? What did you hope to gain from asking for help?
  - What kind of advice was given?
  - Who do you ask for advice?
    - Is this an in-person or over text/instant message interaction?
  - Do you ever ask guys vs girls for help?
    - Do they give different types of advice? Explain.
  - Do you usually ask for advice with a message already in written? Or a blank slate?
    - Has a friend ever taken your phone or computer and typed a message for you?
- ❖ When you send a message that was written or edited by someone else, do you feel the potential date is understanding your true self? Why or why not?
- ❖ Do you ever feel that you may be deceiving the other person when sending a message that is not written by you? There is no right or wrong answer.
- ❖ Earlier you described your voice/tone as \_\_\_\_\_, after seeking advice, does your voice or tone change in any way after a friend helps you with a message?
- ❖ Do you feel the other person understands your true self?
- ❖ Do you think the people you are messaging may also have help with their messages? Why or why not?

Now let's shift gears just a bit and talk about when you made your profile or when you update your profile.

- ❖ When creating or editing a profile on a dating site or app, do you ever seek advice from others about what to say about yourself? What photos to choose?
  - Why do you ask for advice here?
  - Who do you typically ask?
  - What kinds of advice does that person give?

Today we discussed scenarios in which you would receive advice from a friend or someone nearby. Do you ever receive advice from another source such as an article or forum?

- ❖ What source?
- ❖ What kinds of advice?

Lastly, do you ever play this role for your friends? Do you ever help someone message a potential date or edit their profile?

### **Third-Party Help [B] Questions**

For my next set of questions, I will be asking you about your interactions with potential dates on [dating app]. If you would like to reference the app or your messages as I ask you questions, feel free. I may ask you to elaborate on certain situation, but you never need to share messages or details with me if you feel it is too private or you would feel uncomfortable discussing it. I also do not need to know the names or details of anyone you are messaging at any point. Any questions before we move on?

Our research shows that users of dating apps may receive third-party help when making a profile or constructing a message. This advice may come from a friend or online article of sorts.

- ❖ Why do you think someone would ask for advice in this scenario?
- ❖ Have you ever suspected that someone you interacted with on a dating site received third-party help?
- ❖ If you knew that someone had received third-party help, such as edits to a profile or message, how would that affect your wanting to meet them in person or future interactions?
  - Again, if you knew someone had received third-party help, do you feel that you are understanding their true self? Why or why not?
  - Have you ever felt deceived by a potential date? Why?
- ❖ Do you feel the other person understands your true self?
- ❖ Do you ever ask for advice about your messages?

Now let's shift gears just a bit and talk about potential dates' profiles.

- ❖ Do you ever suspect someone has had help editing their profile on a dating site?
  - Why do you think he or she asked for advice?
  - Do you feel like you are understanding someone through their profile?
  - Do you ever suspect information on a profile might be false? When and what kinds of information?

We know that other people may *ask* for advice when messaging online. Are you ever one to play this role for a friend? Do you ever help someone message a potential date or edit their profile?

That is all the questions I have. Is there anything else you would like to share about your experiencing messaging others on dating apps? Thank you so much for your time.