

The Coaches Said...What?: Analysis of Online Dating Strategies Recommended by Dating Coaches

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ABSTRACT

Despite the popularity of online dating systems, prior work indicates that online daters struggle to present and evaluate traits germane to attraction. However, the research community is largely unaware of successful online dating system-use strategies and how the knowledge of these strategies could inform system design. In this paper we begin to address this gap in knowledge with an interview study of online dating coaches who consider their advocated system-use strategies successful based on personal use and feedback from clients who implemented their strategies. Their advocated strategies entail keeping online evaluation intentionally minimal and persuading users to meet in-person as quickly as possible because current system designs stifle reliable evaluation of attraction-relevant traits online, notably personality. We discuss the implications of insights gathered from these strategies for online dating system design using theories relevant to romantic attraction.

Keywords

Online dating, impressions; signaling theory; attraction

1. INTRODUCTION

Use of online dating systems is widespread, with more than 38% of single Americans having used them [38]. What do online dating systems actually do? They enable users to discover other people who may potentially help them meet their romantic goals such as long-term relationships or casual sexual encounters. For many users, their relationship goals necessitate vetting potential partners through face-to-face interaction. Unfortunately, one cannot meet face-to-face with every potential partner discovered in an online dating system because in-person meetings are costly in terms of time, money, and risks to physical and emotional wellbeing. Thus it is often the user's responsibility to filter the pool of potential partners discovered in an online dating system to determine who is worthy of a face-to-face meeting. This filtering is done through a cost-benefit analysis by daters based on qualities germane to romantic attraction, such as physical attractiveness [3], demographic [6] and lifestyle [45] traits, personality traits [23], and the relationship goals of the potential partner [3]. We call the decision making process of whether to meet in-person with

another user based on qualities germane to romantic attraction as *online dater evaluation*. On the flip side, users are equally concerned with presenting information about themselves in online dating systems to positively influence potential partners' desires to meet them in-person. We call this process *online dater self-presentation*.

The ways in which users of online dating systems evaluate and self-present to each other has been a research interest of the HCI community since the early 2000s [12]. Previous research has produced a wealth of knowledge about user struggles with respect to online dater evaluation and self-presentation, such as user concerns of deception [28], doubts about abilities to clearly self-present subjective characteristics [48], and users spending too much time trying to evaluate potential partners online relative to time spent on in-person dates [17]. However, we have relatively little knowledge of strategies used by daters online to help them be successful. What does it mean for users to successfully use online dating systems? Prior research regarding online dater evaluation and self-presentation lacks clear definitions of success. Success has been tacitly understood to mean achieving a relationship goal, be it a long-term relationship or casual sexual encounter. However, hinging online dating success on relationship goal achievement is fundamentally flawed because users can have transient and simultaneous relationship goals [49], they may define the "achievement" of a relationship goal in different ways and with different milestones (e.g. buying a house together) [33], and there is the possibility that a user simply never discovers someone in a given online dating system that would be an appropriate relationship partner. Here, we define successful use of an online dating system to mean 1) being able to procure face-to-face dates with potential partners that one considers attractive online and 2) confirming impressions formed online of those potential partners to be accurate during the first face-to-face meeting. We limit the scope of this definition to the first in-person meeting with a potential partner because some relationship goals do not necessitate more than one meeting (e.g. casual sexual encounters).

The limited understanding of successful use of online dating systems can perhaps be explained by the sampling and research methods previously used. Several prior studies amassed samples of active users of online dating systems that responded to participation requests with no stipulations for amount of experience using online dating systems, number of users met in-person, or relationship goal achievement [8, 9, 17, 34, 48]. One limitation of recruiting active online daters in this manner is that the sample may be biased towards users that knowingly struggle with online dating especially for long-term relationship goals; an assertion supported in one study in which some users

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acknowledged that their incentive for participation was to seek online dating advice from the researcher [48].

Some previous studies showcase online dating system-use strategies with unknown outcomes, meaning they may lead to success [8, 9, 13, 20, 29, 30]. However, the sampled users did not necessarily state that their strategies are successful and the research did not investigate the potential success of their strategies. This is an inherent limitation of many prior studies that researched data logs of users' private messages [30] or studies that explored isolated facets of online dater evaluation and self-presentation—most notably the extensive catalog of work investigating deception in profile page fields [8, 26, 27, 28].

Given the challenges of sampling appropriate users to understand how online dating systems can be successfully used, we consider alternative approaches that can provide a reasonable starting point for researching successful online dating system-use. One approach would be to investigate the system-use strategies of former users who are currently in a relationship with someone they met through an online dating system. However, such studies would invariably suffer from recall bias, and such former users may not necessarily have had multiple opportunities to validate the success of their strategies with in-person meetings and their relationship goal achievement may have been a matter of happenstance. Another reasonable approach would be to investigate online dating coaches whose professional focus is to help users successfully use dating systems towards achieving their relationship goals. Given this focus, one can assume that online dating coaches have a wealth of data and experience from coaching multiple users, which provides them multiple instances to gauge the success of the online dating system-use strategies that they advocate. This type of experience contrasts with typical online daters who can leverage only their own experiences and who may not have had several opportunities to validate the success of their strategies with in-person meetings.

In this paper we present an interview study of online dating coaches to meet the following three research objectives: 1) examine the system-use strategies that the coaches advocate for their clients to be successful, 2) understand why the coaches believe these strategies will help clients be successful, and 3) understand if and how these strategies are influenced by system design. The rest of the paper is organized as follows. We review relevant literature about online dating and theories integral to romantic attraction and then present an interview study of 34 online dating coaches about their advocated strategies for online dater evaluation and self-presentation. We conclude with a discussion of these strategies and implications for online dating system design in light of theories germane to romantic attraction.

2. BACKGROUND

We begin the background section with a review of online dating system design. This is followed by a discussion of categories of traits germane to romantic attraction and the prior research regarding online dater evaluation and self-presentation of these traits. We then discuss interpersonal theories used to interpret online dater evaluation and self-presentation, and propose additional theories germane to romantic attraction that would be particularly relevant to understanding online dater self-presentation and evaluation. The background concludes with an introduction of online dating coaches.

2.1 Online Dating Systems and Design

Online dating systems are a type of social matching system [40] used by individuals seeking long-term and short-term romantic

relationships and platonic friendships [2, 4, 48]. Today's online dating system designs provide several user interface components to help users find their mates and we classify them into three categories: 1) user discovery mechanisms, 2) user profile pages, and 3) private messaging interfaces.

User discovery is often facilitated by algorithms that recommend users to each other, search functions that let users proactively find others, or “swiping” mechanisms that show users who are geographically nearby. Users have two objectives upon discovering potential partners: to self-present information about themselves and to evaluate potential partners for in-person meetings. These two objectives—*online dater evaluation* and *self-presentation*—are facilitated with profile pages and private messaging. *Profile pages* curate and convey mostly self-provided information about them in commonly in the form of profile pictures, dedicated trait fields (e.g. height, age), and free-text. *Private messaging* interfaces enable users to engage in dyadic interaction, serving as an opportunity to further self-present and gather information for evaluation, as well as organize meetings off of the online dating system.

These prototypical interface components are exemplified in a variety of mainstream online dating systems today such as *OkCupid*, *Tinder*, *match.com*, and *eHarmony*. There are some notable exceptions however—newer mobile dating apps such as *Grouper* and *Whim* do not have a private messaging interface, instead schedule dates on behalf of users.

2.2 Evaluation and Self-presentation in Online Dating Systems

What traits do online daters self-present and evaluate? To answer this we must first understand what traits influence attraction. The scope of this paper is romantic attraction, which we define as interest in a person for the purpose of a long-term romantic relationship (e.g. boyfriend, girlfriend, life partner) or a short-term romantic relationship (e.g. casual sexual encounter). Work in evolutionary biology and psychology originally proposed three categories of traits that influence romantic attraction based on an understanding of the human mating strategies of our ancestors: physical health, social status & resources, and capacity for commitment [31]. Research has since expanded on these basic categories to demonstrate how other attributes like interests, perceived relationship goals, and personality traits are associated with attraction and relationship initiation. Based on a review of attraction literature, we consider traits that influence a person's attractiveness to fall into five general trait categories:

- *Physical attractiveness*: physical or visual appearance [3]
- *Demographic traits*: e.g. height, weight, race, ethnicity, age, religion affiliation, income, education, marital status [6, 45]
- *Lifestyle traits*: attitudes, values, and interests. These include lifestyle choices associated with demographic traits (e.g. how often one goes to church), attitudes about life (e.g. should women stay at home while men work), and other interests and activities (e.g. smoking habits, going kayaking) [18, 45]
- *Personality traits*: the five factor model (FFM) of personality (openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism) [23], intelligence, and sense of humor (humor production and appreciation) [25]
- *Relationship goal*: perception of the person's preference for a long-term relationship or short-term casual encounter [3]

2.2.1 Physical attractiveness and Demographics

Most research regarding evaluation and self-presentation in online dating systems has focused on profile pages, specifically profile pictures and dedicated fields that have multiple choice answers for demographic and lifestyle traits. Physical attractiveness from profile pictures is integral to evaluation and self-presentation [14, 30, 46]: users receive more messages as their physical attractiveness increases, and deception in profile pictures is a common strategy to increase attractiveness [8, 27, 41, 46]. Users also mildly exaggerate answers in dedicated profile fields for the demographic traits of age, marital status, height, weight, and income [8, 26, 41]. When evaluating these demographic traits, income is universally desired (users receive more messages as their income increases [30]), but online daters prefer to message users with similar answers for race, marital status, age, education, height, and religion [13, 30]. Users also prefer to message others with similar answers in dedicated fields for lifestyle traits like smoking habits and desire for children [13].

2.2.2 Relationship Goals

Prior online dating research typically has not differentiated or specified the relationship goals of the users studied. Most of the research in which relationship goals were of explicit interest documented the casual sex pursuits of users on *Grindr*, a popular dating app for men-seeking-men [2].

2.2.3 Personality

While there is sporadic mention of “personality” in prior work [9, 47], the term was not operationalized or defined. There is a noticeable lack of insight into online dater evaluation and self-presentation of personality traits relative to other trait categories, perhaps because of the customary focus on profile pages, which do not have dedicated fields for personality trait expression.

Other online dating research has studied evaluation and self-presentation through two broad categories of traits: objective qualities called “searchable attributes” (e.g. height, religion) which are commonly present in profile pages, and subjective qualities called “experiential attributes” (e.g. sense of humor and rapport) [17] that research argues cannot be reliably evaluated in online dating systems because they must be “experienced” [17, 48]. Personality may fall into the experiential category, but this categorization of traits is vague and debatable (e.g., Is physical attractiveness a searchable or experiential attribute? Would lifestyle choices concerning religion be searchable attributes? Is the experiential attribute example of “rapport” [17] a trait of a person?). Hence when research rooted in this two-category distinction reports that online daters struggle to evaluate experiential attributes through both profile pages and private messaging [48], it is unclear which traits are actually being discussed. Ultimately, prior research leaves us with an incomplete understanding of user evaluation and self-presentation across a comprehensive series of attraction-related trait categories, most notably personality.

2.3 Theories of Evaluation and Self-Presentation in Romantic Attraction

Findings regarding online dater evaluation and self-presentation have traditionally been interpreted through the lens of Goffman’s foundational work regarding impression management and Walther’s theories about interpersonal relationship development. While Goffman’s work emphasizes both intentional and unintentional cues that influence how a person is perceived, his writings on self-presentation [22] has traditionally been used in

this line of research to frame online daters’ desires to engineer how other users perceive them through profile pages, sometimes using deception [9]. Walther’s theories, particularly the hyperpersonal model [43] and warranting theory [44], have been used to explain how the reduced-cue environments of online dating systems are conducive to impression management and thus deception because users have more control over the information conveyed about them [19, 27, 28, 46].

Online dating is a unique social context predicated on romantic attraction. As such, online dater evaluation decisions have also been interpreted through theories historically applied to dating and romantic attraction research, notably: evolutionary theory [15, 26, 41], homophily [13], and social exchange theory [48]. Evolutionary theory discusses mating differences between males and females, positing that males have an overarching preference for physical attractiveness because it is an indicator of fertility, while females will have an overarching preference for social status and income because they require resources to raise children [3]. These sex-differentiated preferences have been observed in data logs about which users male and female online daters choose to send messages to [30]. The concept of homophily posits that we are attracted to people with traits similar to our own [16], which has also been supported in work showing that online daters send more messages to those with similar demographic traits [13, 30]. Under the lens of social exchange theory, romantic relationship initiation and maintenance are the result of a cost-benefit analysis [10, 31]. If the perceived costs of the relationship outweigh the rewards then pursuit or maintenance of the relationship is discontinued. This theory has been applied to online daters’ decisions to send private messages—since women typically receive many more messages than men, they will evaluate the expected rewards of sending or responding to a private message more stringently than men [48].

Beyond the above theories there are two other theories previously applied to romantic attraction research that are particularly relevant to online dater evaluation and self-presentation strategies: signaling theory [47] and Asch’s theory of person perception [1]. Signaling theory, which originated in evolutionary biology to explain the mating strategies of animals [47], seeks to clarify the extent to which a piece of information is a reliable indicator (“signal”) of an otherwise unobservable trait. Signaling theory has relevance to computer-mediated communication (CMC) because most traits are not directly observable due to its mediated nature [5]. There are two main signal types: conventional signals and assessment signals [5]. *Conventional signals* are rather unreliable by nature because possession of a trait is merely stated or implied [5] (e.g. wearing a tracksuit may imply physical fitness). *Assessment signals*, on the other hand, are more reliable because they require the possession of the trait for the signal to exist [5]. These signals sometimes stem from observations of the trait in action, e.g. observing the wearer of a tracksuit run several miles would be an assessment signal of physical fitness.

Signaling theory has previously been leveraged to explain how users assess the reliability of identity claims in *Facebook* [32]. The need to assess reliability of signals in online dating systems is similarly important because users depend on signals about other users’ traits to decide whom to meet in-person.

Signal reliability stands to be particularly complex for personality evaluation. Asch showed in 1946 that interpretations of personality-related traits change in the context of information about other personality traits [1]. Attraction literature has leveraged this theory to explain why seemingly unfavorable

personality traits of a potential partner are perceived more favorably after an in-person meeting [7], and recent work in the HCI community has also leveraged the theory to improve the design of non-player characters in video games [42]. Considering that signals of personality may be gleaned from a variety of interface components in online dating systems—such as a picture, a comment in a profile page’s “about me” section, or a private message—Asch’s theory could be useful in interpreting strategies for contextualizing personality signals detected in online dating systems.

2.4 Online Dating Coaches

Online dating system users sometimes hire online dating coaches to help them remedy struggles with the online dating process—e.g. concerns of deception [19], uncertainty over how to evaluate subjective traits [17], and a lack of clarity over how to maximize one’s attractiveness to potential partners [48]. Online dating coaches claim to have knowledge of successful system-use strategies that are generalizable to a broad user base, and they train users to adopt such strategies (e.g. <http://theheartographer.com/>). There is considerable awareness of online dating coaches in popular media, with multiple features on TV, radio, and print media (<http://www.cyberdatingexpert.com/in-the-news/>), and dating site companies such as *eHarmony* hiring online dating coaches as “resident experts” (<http://melanieschilling.com>). Online dating coaches often specialize in helping clients achieve long-term relationships (<http://www.carmeliaray.com>), with some catering to specific markets like developmentally disabled users (<http://hitchcraftdating.com>). There are also coaches who specialize in online dating system-use strategies for casual sexual encounters, called “pickup artists” [39]. These coaches are usually male and use their personal experience in seducing women for sex as the basis of their strategies (<http://3girlsaday.com>, <http://executetheprogram.com>).

Services and products offered by online dating coaches range in terms of personalization. Generalized online dating system-use strategies are often sold in e-books, physical books, and video tutorials (<http://www.vanae.com>). As products and services become more personalized, coaches require access to the client’s online dating accounts, such as for writing the client’s profile page (<http://profilepolish.com>). The most personalized coaching service is commonly called “concierge” wherein the coach impersonates the client online, maintaining their profile page, exchanging messages with other users, and arranging dates for the client (<http://www.eflirtexpert.com>). One-on-one *Skype* and phone coaching sessions are also typical for providing online dating system-use strategies (<http://www.alittlenudge.com>).

3. RESEARCH QUESTIONS

Our research questions revolve around identifying and understanding the strategies to successfully use online dating systems as advocated by dating coaches and how these strategies are shaped by system design. Specifically:

RQ1. What are the online dating system-use strategies that online dating coaches advocate?

RQ2. Why do online dating coaches consider the online dating system-use strategies that they advocate to be successful?

RQ3. Are the strategies advocated by online dating coaches influenced by system design? If so, how?

4. METHOD

We conducted semi-structured interviews with 34 online dating coaches about the online dating system-use strategies that they consider successful.

4.1 Participants

In recruiting our participants, we considered someone an online dating coach if they 1) self-identified as one and explained the source of their expertise on their website, and 2) sold coaching products/services specific to online dating. As there is no official registry of online dating coaches from which we could extract a representative sample, we used a comprehensive online search strategy to identify our participants. We conducted *Google* and *Youtube* searches for 10 different terms including “online dating expert” and “online dating coach.” *Google* was chosen to find the personal websites of and articles written about online dating coaches, while *Youtube* was chosen to find videos of coaches being interviewed for TV or discussing their advice. The first 20 pages of results for each search were reviewed (3000 links total), yielding a list of 132 unique online dating coaches (Table 1). Searches were conducted from a computer at New Jersey Institute of Technology, and the computer’s IP address may have influenced the search results.

Table 1. Demographic breakdown of 132 coaches found

Coaches	Male	Female	Team	Total
Casual sex advice	20	0	0	20 (15%)
Long-term relationship advice	23	79	3	105 (80%)
Advice for both goals	2	5	0	7 (5%)
Total	45 (34%)	84 (64%)	3 (2%)	132

All 132 coaches were sent an interview request through e-mail. Thirty-nine coaches (29.5%) responded, but 5 failed to culminate into an interview because of scheduling conflicts, resulting in 34 total interviews (Table 2). We include Tables 1 and 2 in this paper so readers can compare the sample of online dating coaches discovered to the sample subsequently interviewed.

Table 2. Demographic breakdown of 34 coaches interviewed

Coaches	Male	Female	Total
Casual sex advice	7	0	7 (21%)
Long-term relationship advice	8	18	26 (76%)
Advice for both goals	1	0	1 (3%)
Total	16 (47%)	18 (53%)	34

The interviewed coaches were predominantly based in the United States, followed by Australia (2) and the United Kingdom (2). The interviewed coaches for casual sex pursuits provided online dater evaluation and self-presentation strategies only for male clients, while three of the coaches for long-term relationship pursuits provided strategies only for female clients. All of the interviewed coaches considered their online dating system-use strategies most applicable to heterosexual online daters. Most of the interviewed coaches disseminated some or all of their online dating system-use strategies through one-on-one advice sessions and impersonation of clients in online dating systems (e.g. making the profile page, evaluating potential partners online, and writing messages on behalf of the client). Generalized products such as videos, audio files, and e-books were also common, especially for coaches that specialized in casual sex pursuits. Most of the

coaches' online dating system-use strategies were intended for the online dating systems *Okcupid*, *Tinder*, *Plenty of Fish*, and/or *Match.com*.

4.2 Data Collection and Analysis

Thirty-three of the 34 interviews were conducted over *Skype* video or voice chat, while one was done in-person at a coffee shop. All interviews were voice recorded and fully transcribed. Interviews ranged from 28-81 minutes. The semi-structured interview guide had two primary sections: online dater evaluation strategies and self-presentation strategies. The questions probed five categories of traits germane to romantic attraction: physical attractiveness, demographic traits, lifestyle traits, personality traits, and relationship goal. The interview protocol also probed about why the coaches' system-use strategies were considered successful and how that success was determined. An open coding scheme was used to derive preliminary themes and theoretical constructs [21] about the coaches' advocated strategies. The first round of interviews was conducted mostly with coaches for casual sex pursuits, and the initial coding scheme revolved mostly around self-presentation practices. The second round of interviews included more coaches with advice for long-term relationship pursuits, and the updated coding scheme reflected themes around user evaluation, conceptualizations of online dating success, and reinforcement of self-presentation themes from earlier interviews. The third round of interviews probed more deeply into how system design influenced the advocated strategies for evaluation and self-presentation. This resulted in a re-coding of interview transcripts around system interface components and elements within those components (e.g. sections of profile pages).

5. FINDINGS

5.1 Validation of Online Dating System-Use Strategy Success

Most of the coaches validated success of their online dating system-use strategies through "track records" of previous clients who kept them informed about the outcomes of their in-person dates and accomplishments of their relationship goals. Some coaches also validated the success of their strategies through personal experience with using online dating systems for their own relationship pursuits, although not all of the coaches used online dating systems to pursue their own goals. In addition to the outcome of in-person dates, it was common for coaches to document online dating statistics like profile views and message responses in spreadsheets to inform modifications to their advocated system-use strategies. These statistics pertained to their personal online dating system use and clients who granted the coaches access to their online dating accounts.

Coach 22: *"I come at it with a more analytical approach than most people do. I do track a lot in spreadsheets. I track my clients' response rates, my own response rates."*

5.2 Defining System-Use Success

Several coaches considered their online dating system-use strategies successful because they procured in-person dates quickly and consistently for themselves and/or their clients with minimal effort, regardless of which particular user a date was planned with (the tactics that facilitate this success are described in the next finding).

Coach 21: *"Success to me is are you getting more attention online and are you going on more dates."*

Coach 18: *"I define success for [my clients] as how many dates they get [...] versus how many they were getting before."*

Several coaches went on to explain that the likelihood of mutual attraction on the first in-person date through their strategies is low, and they did not figure the outcomes of in-person dates into their definitions of success for online dating system use. First dates that lead to a second date or end in casual sex were not guaranteed by the coaches, and were even considered uncommon by some. As such, a few coaches advocated short, non-committal dates (e.g. one hour at a café) to minimize time wasted on partners ultimately deemed unattractive in-person.

Coach 11: *"[I teach] how to set up that first date so it's not a waste of time and money. I call it a date zero. The sole purpose of it is to have a very brief, cheap interaction that you sandwich in on the way to the gym, you know. You lower your expectations so it's realistic."*

5.3 Online Dating System-Use Strategies

The main online dating system-use strategy advocated by most coaches entailed 1) intentionally minimizing online evaluation of most traits germane to romantic attraction and 2) using online self-presentation tactics to persuade potential partners who satisfied minimum attraction criteria to meet in-person quickly where a more thorough evaluation could be conducted.

This strategy was typical for most coaches regardless of the relationship goal they catered to. Hence we opt below to present findings for all relationship goals jointly. We organize tactics that comprise this overarching strategy under the two prototypical system components for online dater evaluation and self-presentation: profile pages (which is further divided by profile pictures, demographic and lifestyle trait fields, and free-text fields), and private messaging. The following references to "the coaches" pertain to coaches for both casual and long-term relationship goals unless explicitly stated otherwise.

5.3.1 Profile Pictures

The coaches advocated that both men and women should use physical attractiveness based on profile pictures as the primary influence on online dater evaluations and decisions to meet in-person. While the coaches acknowledged that pictures might be deceptive, many stressed that the costs of deception are minimal if users meet in-person quickly and do not waste considerable time invested in online interaction.

Physical attractiveness through profile pictures was also considered a vital element of successful self-presentation, but more so for women than for men. Based on the perception that male users evaluate potential partners predominantly on physical features, some coaches suggested hiring a professional photographer to ensure that female clients maximize their physical attractiveness (coach 17: *"Our [highest level] clients, we'll set them up with a professional photographer"*).

Some coaches said that female users' attractive pictures should also be targeted towards men with a desired lifestyle as a way to encourage such men to message them. For example, coach 25 discussed a recent client: *"[My female client] wants an outdoorsy guy that will go hiking and will love her dog. I looked at all her [profile] photos and every one of them is geared towards an artsy Brooklyn hipster [...]. Is that attractive? Yeah those are great photos. Is it going to attract her outdoorsy guy that is going to chop wood at her cabin? No."*

For men, coaches often advised that profile pictures be used to advertise physical appearance in the context of exciting and social lifestyles. Many of the coaches advocated a lifestyle conveyance that showcased their interests as well as their social value—having caring friends and being the leader in social situations. A few coaches suggested staging photos to craft an appealing snapshot of one’s social life.

Coach 2: *“You can ask your friends to pose for the photo. Make it look like you’re saying something important and everyone is listening to you.”*

Some coaches explained that men’s lifestyle photos, which should showcase activities and social value, lead prospective female partners to imagine the possession of attractive personality traits that they assume men who engage in such lifestyles would have. They credited this as a reason potential partners would express more interest in their clients.

Coach 33: *“Especially if your [written profile content] is lacking, the photos can take the place of having that personality. Like okay, his [written content] is a little dull, but look at all the shit he does in real life. He’s got to have a great personality.”*

5.3.2 Demographic and Lifestyle Trait Fields

Users can usually corroborate their evaluations of physical attractiveness through dedicated fields in profile pages for height and weight. Yet several coaches discouraged strict requirements (“deal breakers”) for demographic trait fields during evaluation, for two reasons: 1) they tend to be exaggerated, and 2) they believed users have a tendency to (incorrectly) infer personality traits from these fields.

Coach 21: *“If they [clients] tell me well he has to be 6’2”, I’ll say why. [...] A lot of times what we’ll get to after ‘why why why’ is the real answer. [...] Sometimes the answer is well my last boyfriend was short and he was sort of uncomfortable with that and it was always a problem in our relationship.”* [reflecting the personality dimension of neuroticism]

The coaches generally advised having minimum requirements for other dedicated fields in profile pages, particularly location and smoking habits. However, they cautioned against “deal breakers” regarding other common fields in profile pages for demographic traits like income, religion, and political affiliation, which users answer with multiple choice lists. They explained that these trait fields give poor insight into lifestyle choices and values related to them, yet they said users still tend to extrapolate larger ideas of a person’s lifestyle from these multiple choice answers. Several coaches recounted stories of clients reacting negatively to profile pages with dissimilar answers largely because of imagined conflicts regarding their lifestyles and values. For example, coach 15 recounted how a female client disqualified any man who did not select “Jewish” in the religion field of his profile because she assumed the man would not want to raise his children as Jewish.

Coach 15: *“She said ‘well it’s really because I want to raise my kids Jewish.’ Then it’s like well as long as they agree to raise your kids Jewish, [their religion] is not actually a core requirement.”*

Interestingly, some of the coaches for casual sexual encounters gave the opposite advice regarding evaluation of multiple-choice fields in profiles. These coaches advised expediting the profile evaluation process by inferring openness to casual sex through answers provided in the dedicated fields for smoking and drinking habits—an inference they claimed to have validated in their personal experience using online dating systems (coach 5, on

OkCupid’s trait field for smoking habits: *“If she smokes, she pokes”).* They explained that such inferences are necessary for online dater evaluation because female users seldom explicate casual sex interest in their profile pages.

5.3.3 Open-Ended Text Fields in Profile Pages

Most profile page designs include open-ended text sections in which users can type at least 500 characters of free-text. In terms of online dater evaluation, several of the coaches advised scanning open-ended content for signals of incompatible relationship goals. Several coaches that helped women find long-term relationships referenced “red flags” in written content that signaled men’s casual sex motives. Some coaches also advised male clients with a long-term relationship interest to scan for red flags of “gold diggers,” or women desiring a relationship with a wealthy man for financial support.

Coach 13: *“I spend half my day creeping dudes’ [profiles for my clients]. Like one yesterday, he said something in the last paragraph [of his free-text content] about how ‘I’m a great snuggler.’ I’m like what the fuck. He’s already red flagged.”*

While some coaches said indications of personality could potentially be derived from anecdotes written in these open-ended text sections, they considered such signals to be inconsistently available and usually an inaccurate depiction of a person’s personality in the physical world. They commonly attributed this to expression of personality being unintuitive through the written word, thus making such expressions hard to interpret (coach 30: *“what does ‘work hard, play hard’ even mean?”*). This was compounded by a belief that most users are more interested in appearing attractive than conveying their real personalities. Ultimately most coaches considered it not worth the effort to deliberately try to evaluate personality in any part of profiles.

Despite beliefs that free-text content is a poor tool for evaluating personality, most of the coaches strongly advocated the use of free-text content for men to self-present personality. Several coaches for both relationship goals advised male clients to use free-text fields to convey attractive or “alpha male” (coach 3) personality traits through a tactic called “show, don’t tell”—a term also used in prior qualitative research regarding self-presentation in profile pages [9]. Like in this prior work, the coaches discussed writing stories in profile pages to showcase or exemplify personality traits. Yet while users in prior work used the “show, don’t tell” method to reinforce the reliability of truthful identity claims, some of the coaches promoted its use for the opposite reason—to tell fabricated stories that embody desired personality traits. Some of these coaches provided fabricated stories to clients, while a few suggested that clients coopt quotes from TV shows or movies that exemplify desired traits. Some of these coaches rationalized the use of fabricated stories by stating that potential partners should know that such content is “obviously” false and that understanding it to be a fabrication is part of the intended self-presentation.

Coach 32: *“Some of the things we have in our [clients’] profiles is ‘I’m a lion tamer.’ Things that are obviously not true. [It’s supposed to show that] he has a sense of humor.”*

Coaches that promoted honest portrayals of personality through the “show, don’t tell” method expressed frustration with conveying the complexities of personality through text because clients struggled to recall true stories that clearly exemplified particular traits, not to mention the writing skills required to convey such stories concisely. As such, the objective of the

“show, don’t tell” method promoted by these coaches was to write simplified, but true stories that advertise rudimentary versions of traits that are in line with one’s “personal brand” (coach 32)—the traits that clients believe they possess and that they want potential partners to know about.

Coach 25: *“I have read thousands of profiles and I know 99% of people write the same thing. So how does one differentiate oneself from the crowd? I don’t allow my clients to write adjectives. They’re not allowed to write that they’re smart or intelligent. They have to write a story, like a 4- or 5-line story, whose underlying message is the adjective they’re not allowed to say.”*

For female clients, the coaches advocated a different approach to self-presentation through free-text content. Several of the coaches perceived free-text content as an opportunity for women to “bait” prospective partners into messaging them by implying conversation topics that men can mention during their introductory messages. These coaches believed that male users typically struggle to think of content to include in their introductory messages, hence by incorporating potential messaging topics into the free-text portions of their profile pages women can increase the chances of a man sending them a message. It should be noted, however, that no coach thought free-text content could ever supersede physical attractiveness; messaging “bait” would be trivial to self-presentation if a potential partner was not first physically attracted to the woman’s pictures.

Coach 13, while describing the mindset of a potential suitor for his female clients: *“If I see ‘live, laugh, love’ [as free-text content] how am I going to start a conversation with that? [...] Give me more avenues to start a conversation. [For example,] ‘I can’t wait to go to [Martha’s] Vineyard and wear white pants and a pink shirt and dress up like a douche.’ There are so many avenues you can start a conversation with there.”*

5.3.4 Private Messaging

The one category of traits that coaches largely did not advise trying to evaluate in any component of profile pages was personality. Some of the online dating coaches believed that personality is not just subjective, but relative, meaning it can only be experienced through interaction with one’s own personality. This was sometimes referred to as “chemistry” (Coach 8).

However, the coaches almost unanimously advised minimizing online interaction through private messaging. This was due partly to suspicions concerning potential partners’ impression management motives, but mostly because coaches thought text-based messages could not convey personality to the extent that in-person interaction can. As such, coaches advised use of private messaging primarily as a tool for organizing and moving to an in-person date quickly where relative personality or “chemistry” could then be evaluated. Some coaches advised exchanging a maximum number of messages, usually 3-5, and disqualifying potential partners who were not receptive to meeting in-person within that span.

Coach 11: *“I tend to take the messaging not super seriously. Meaning you can’t evaluate a potential partner through the messaging. [...] Every two or three interchanges, you know three from each person—meet each other. You can’t create a relationship solely online. People email for too long.”*

The goal of self-presentation through private messaging according to most coaches was to persuade potential partners to meet in-person quickly without expending much time and effort.

Coaches for male users pursuing casual sex advised an approach to private messaging reminiscent of an assembly line: using fully copy-and-pasted message content that is conveyed through automated, mass-messaging techniques. The coaches for casual sexual encounters tested and refined the message content that they advocated to their clients by mass-messaging hundreds of women and documenting response rates for each message. For example, Coach 1 described paying a man in Africa \$3 an hour to conduct all of his messaging conversations with prewritten content, while Coach 5 developed software that automatically sends messages to female users and other similar software is sold to clients. These coaches also advised clients to develop their own methods for automating the messaging process

Coach 5: *“I simply repeat the same phrases and actions [in my messages to women] over and over again. I’ve created several [programming] scripts so I don’t even have to type these things. This is not copy-paste. This is one click.”*

Coach 14: *“You have prebuilt messages and then you rotate them and see what works best. Basically the key to it is, yeah, you come up with strong copy-and-paste material and you track it to see what’s working and what’s not.”*

Coaches for casual sexual encounters sold their generic message content to male clients so that they could copy-and-paste it into their own messages verbatim. The generic message content shown to the interviewer was usually devoid of factual information and in some ways conveyed seemingly undesirable personality traits like rudeness (reflecting the personality dimension of agreeableness) or insecurity (reflecting the personality dimension of neuroticism). Some examples:

Coach 4: *“You have no idea how many fat chicks I had to reject to get to you.”*

Coach 14: *“I know I’m not as experienced as most guys my age haha. I guess that makes me a dork.”*

As corroborated in previous studies [15, 48], these coaches explained that female users typically receive many messages from potential suitors, making them overly selective in which messages they respond to. As such, the objective of this copy-and-pasted message content was to stand out from competing male users and draw an emotional reaction from females of interest.

Most coaches for long-term relationship pursuits advocated a similar approach to private messaging in the form of message templates that combine copy-and-pasted and personalized content. The copy-and-pasted portions were intended to convey attractive personality traits, much in the same vein as the “show, don’t tell” stories in profile pages. Ironically, adding a personalized portion to the message was intended to assuage suspicions of copy-and-pasted content. These coaches said the personalized portions should mention perceived commonalities with the respective user, or reference interesting elements of their profile as proof that they read the profile.

Coach 12: *“We have a bunch of templates. We provide them with nine different templates – this is what we used, this is how you can modify them for your own use. We give them the tools and they decide.”*

Coach 16: *“If you have [copy-and-pasted message content] that works well, use it to get attention, then scan the profile for 30 seconds then come up with a simple question based on a commonality that we both have to show that I am reading the profile and I’m paying attention to her.”*

Coaches for both relationship goals noted that response rates for replicable message content were usually low. For example, Coach 5 discussed employing the mass-messaging strategy personally to pursue his casual sex desires and explained that his messages typically receive 7-20 responses per 100 messages, of which 2-3 may lead to an in-person meeting. Yet replicable message content was considered a time management strategy that allowed one to message more users and procure a response for *any* user, not a strategy to guarantee a response from a particular user of interest. Most coaches did not advise “holding out hope” (coach 19) for potential partners that one is particularly interested in, and they did not offer strategies for increasing the likelihood of a particular user responding.

Coach 32, on time management: *“There’s a way that you can present a quality message without spending a whole lot of time. That’s my way of writing a message, 3-4 sentences max. You introduce yourself, you find something in common that shows you read their profile, and you end with a question. That gives you time to write to many people.”*

Coach 34: *“It’s dangerous to get fixated on one [user of interest]. The chances of them liking you back are pretty low, and if they’re popular they won’t even notice you. You shouldn’t already be choosing a partner before you even move it offline. Expand your horizons.”*

Many of the coaches believed private messages were largely irrelevant to their female clients’ self-presentation strategies because they said male users usually make decisions to meet in-person based on the profile page alone. Yet most advised women to send the first message to men that they were interested in as a way to ensure that their profile page was discovered.

6. DISCUSSION

We interviewed 34 online dating coaches about the online dating system-use strategies that they consider will aid their clients in being successful. The system-use strategies that they considered successful aimed to intentionally minimize online evaluation and persuade potential partners to meet in-person with minimal effort. Their notion of successful online dating system-use entails a user being able to procure in-person dates quickly with any potential partners that pass minimal attraction criteria. This definition of online dating system-use success noticeably precludes the outcome of in-person dates, which many of the coaches expected not to consistently result in a second date or otherwise lead to relationship goal achievement. This section of the paper seeks to discuss why the coaches advocated deliberately minimal online dater evaluation, and what aspects of system design should be addressed to improve success of online dating system-use.

6.1 The Costs and Benefits of Online Dater Evaluation

In general, the online dating system-use strategies recommended by the coaches revolve around “lean” evaluation; i.e. intentionally limiting the intensity of online evaluation and using scalable messaging tactics to persuade potential partners to meet in-person quickly at which time a more extensive evaluation can be conducted. We explore the utility of these strategies through the lens of theories that have been traditionally applied to attraction research.

The one trait that coaches strongly advocated basing online dater evaluations on was physical attractiveness through profile pictures. This is in line with extensive research in evolutionary

theory that frames physical appearance as a prime influence on attraction because it was trusted by our ancestors as a reliable indicator of genetic quality [3]. The coaches advise minimal evaluation of demographic traits, lifestyle traits, and relationship goals, while largely advising against any evaluation of personality, despite acknowledging that these traits are important to romantic attraction. Through the lens of social exchange theory, this strategy of “lean” evaluation has merit. Social exchange theory has been applied to romantic attraction and relationship stability research to explain why people decide to pursue a potential romantic partner or maintain a relationship with an existing partner [31]. Under social exchange theory, these decisions are the result of a cost-benefit analysis. If the perceived costs outweigh the perceived benefits, pursuit or maintenance of a relationship is discontinued. From the coaches’ perspective, their “lean” online dater evaluation strategy engineers the benefits of pursuing a potential partner to almost always outweigh the costs.

To put their strategy in perspective, let us first conduct a cost-benefit analysis of pursuing a potential partner with a “typical” online dater evaluation strategy in which a user tries to derive as much information as they can from profile pages and conducts private messaging conversations with fully customized message content. The costs of pursuing a potential partner under this strategy would presumably be the time spent reading through profiles and conducting private messaging conversations with custom content, as well as the opportunity cost of the users one would not be able to discover or evaluate. In return for these costs, a user leveraging this strategy would be better informed about the perceived benefits of devoting additional time and resources for an in-person meeting with a potential partner.

The coaches believed the costs associated with a more intensive online dater evaluation strategy would not yield better-informed perceptions of the benefits of meeting a particular user in-person. The coaches considered online information about potential partners to be highly susceptible to deception and misinterpretation. As such, the coaches’ considered the chances of misevaluating the traits of a potential partner online—and thus the perceived benefits of meeting them in-person—to be high regardless of the effort put into online dater evaluation. By reducing the intensity of profile page reading and by utilizing mass-messaging tactics, the coaches’ strategy therefore reduced the costs of evaluation—less time is spent evaluating and more potential partners can be contacted.

Interestingly, most coaches seemed oblivious to the costs involved with in-person dates: getting dressed, traveling to the meeting location, devoting at least an hour to the date, spending money on a drink, and so on. The compounding cost of these in-person dates theoretically limits the number of users one can evaluate more extensively. Even if a user goes on a date every day, that is only seven users that they can evaluate in a week, which is a sobering number compared to how many users they can discover in an online dating system. Yet this is a best-case scenario; to assume that a user can procure a date every night of the week using the coaches’ strategy may be farfetched. However, if a user can procure one or two dates a week based on one or two hours of mass-messaging effort, the coaches’ strategy seems enticing.

But for how long would this strategy be effective? The coaches’ mass-messaging tactic is only effective if most users are not employing it. And as online dating continues to increase in popularity and acceptance, users may become more willing to meet each other in-person faster. Here lies a bottleneck: while users can expedite online evaluation by simply choosing to meet

users based on minimal information, it is less possible to expedite in-person meetings and reduce the costs surrounding those meetings. The high costs of in-person meetings would compound as users procure more dates using coaches' strategy. Thus the strategy minimizing user evaluation online to meet in-person quickly is ultimately not scalable. Instead one could consider designing online dating systems to better facilitate online dater evaluation so users can make more informed decisions about ultimately costly in-person meetings.

6.2 Role of System Design in the Coaches' Online Dater Evaluation Strategy

The online dating coaches advocated minimal or lean online dater evaluation because they considered system design to stifle users' abilities to reliably evaluate all five categories of studied traits. This perception of unreliability was most apparent for personality traits, which many coaches actively advised against trying to evaluate in online dating systems. Through the lens of signaling theory, we can understand how online dating system designs fail to promote reliable signals of personality traits. As described in the Background section, there are two signal types: 1) conventional signals, which are inherently unreliable because possession of a trait is merely stated or implied, and 2) assessment signals, which are more reliable because they typically require possession of the respective trait for the signal to exist.

Online dating systems consist predominantly of conventional signals about potential romantic partners. The source of unreliability for many of these signals is potential deception—a user could exaggerate their height, they could post an old photograph, they may lie about the activities and hobbies they regularly engage in, etc. Yet when it comes to personality signals, the coaches indicated that reliability is also affected by concerns of misinterpretation (e.g. does this signal mean what I think it means?).

Misinterpretation may be perpetuated by online dating system designs that simply do not facilitate a wealth of reliable personality signals. Let us explore why, first with profile pages. Profile pages poorly facilitate self-presentation of personality relative to other traits. Profile page designs usually consist of dedicated fields for a variety of traits that users tacitly know how to convey (e.g. physical appearance, height, age, income), but personality traits cannot be conveyed in this self-explanatory and deliberate manner. Users instead have to use free-text components in profile pages, profile pictures, and private messages to convey personality, which demand tremendous introspective awareness of one's own personality as well as skills to deliberately convey these traits through the written word or pictures.

But of course, personality signals do not have to stem from deliberate attempts to convey personality. One could interpret personality from a picture intended to convey physical features, or from a list of favorite books intended to convey interests and hobbies. However, signals of personality will not be consistently detectable in this manner. Users can expect that in a given online dating system they will amass signals of every user's appearance and some demographic traits like age, yet a signal of neuroticism or sense of humor or intelligence may be detected in one user's profile page or one user's message, but not the next user's.

The quantity (or lack thereof) of personality signals in profile pages severely hinders the interpretation of personality signals that are detected, according to Asch's theory of person perception [1]. According to Asch, evaluations of personality traits must be contextualized. This means that signals about one personality trait

will influence interpretation of signals about another personality trait. When personality trait signals are inconsistently available in profile pages, online daters have little opportunity to contextualize the traits that are detected. As such, their meaning is likely to change as more signals of personality are detected at later times, such as the first in-person meeting.

Yet even if more signals of personality were consistently available in profile pages, they would still be mere conventional signals of personality *compatibility*. As emphasized by the coaches, personality is both a relative and subjective category of traits. It can be difficult to understand someone's personality until it is compared to one's own. For example, a list of favorite books may signal intelligence, but it still forces a user to imagine how compatible the signaled intelligence is with their own.

Research related to attribution theory has long positioned interaction as a bastion of signals pertaining to relative personality and thus a key step in evaluation of potential romantic partners. As Reis and colleagues explain, "What makes live interaction special? [...] Several features stand out: [...] interpreting and responding in real-time to each other's behavior and verbalizations, [and] forming trait inferences from the other's statements and behaviors" [37].

This positions private messaging interfaces in online dating systems as vital to evaluation of personality compatibility, and recent online dating research indicates that messaging conversations do benefit in-person evaluations [36]. Yet the online dating coaches largely disregarded private messaging as an opportunity for evaluation because of suspicions that users are preoccupied with furthering an attractive self-presentation through messaging—a suspicion supported by prior work investigating online daters' private messaging strategies [48]. Perhaps ironically, the coaches' automated and copy-and-paste strategies for private messaging emphasize the same motive they suspect in other users. So while private messaging represents an opportunity to glean reliable signals of personality compatibility, self-presentation motives dissuade use of messaging in ways conducive to these benefits. The detrimental effect of these self-presentation motives on evaluation is likely exacerbated by the limited richness of messages and resultant hyperpersonal effect (the tendency to make overly favorable impressions during text-based communication as a result of missing or ambiguous information [43]).

6.3 Design Implications

The online dating coaches in this study advocating minimizing evaluation of potential partners online and escalating to an in-person meeting quickly, due to largely to the perception that personality compatibility cannot be reliably evaluated online. Yet this strategy is not scalable because of the compounding high costs of in-person meeting—time, money, safety, and emotional wellbeing. If online dating system users could detect more reliable assessment signals of personality compatibility online, they could better predict romantic attraction to potential partners in-person and thus better allocate their limited resources for in-person meetings.

System interface components for interaction seem the most viable candidates for facilitating reliable signals of personality compatibility according to attribution theory. Users could observe a partner's personality "in action" relative to their own personality through statements and reactions during interaction. Yet the online dating coaches' advocated strategies for interaction in online dating systems, along with prior work about users' interaction strategies [48], suggest that users are unlikely to

employ private messaging interfaces in ways conducive to natural personality expression and thus evaluation.

We pose a two-pronged solution to better facilitating personality compatibility evaluation through interaction. First, we argue that a richer interaction interface would better enable transmission of complex personality signals relative to text-based messaging. Yet an interface more capable of transmitting personality signals does not necessarily encourage or promote expression of personality.

Research into romantic relationship satisfaction suggests that the topic of the interaction may also be pertinent to personality expression [23, 31]. This research, predicated on behavioral theory, indicates that behavior exhibited during problem-solving interaction is a central indicator of relationship satisfaction [31], and some research posits that this behavior is a reflection of personality [23, 31]. Problem-solving interactions are those in which partners contend with differences of opinion to reach consensus on a particular topic, discuss difficulties in the relationship, or otherwise work together to accomplish a task [31]. A common example from prior work entails relationship partners reading vignettes of common relationship conflicts (e.g. “husband’s forgetfulness about throwing out the garbage”) and debating which partner in the vignette is most at fault for the conflict [35].

We consider the aforementioned research to suggest that there are some contexts of interaction more conducive to personality expression and evaluation than others. While a solution like video chat would increase the richness of interaction and thus allow better transmission of personality, unstructured conversations may not be the best context for promoting personality expression—not least because impression management motives would presumably still be dictating users’ behavior, especially with the emphasis that video chat would put on users’ physical appearance.

If problem-solving interaction may prompt behavior between existing relationship partners that is expressive of personality, could it do the same for potential romantic partners? If so, what “problems” would be appropriate for unacquainted potential romantic partners to engage in? Solving problems is actually a fairly popular context for CMC between newly acquainted individuals, namely with video games. Furthermore, multiplayer online games (e.g. *World of Warcraft*, *Second Life*) have been shown to be a common way that people discover their eventual marriage partners online [24]. Expansive, time-consuming games like *World of Warcraft* may not be practical for online daters. But simpler, less time-intensive tasks in which online daters interact through richer behavior to solve problems or contend with difference of opinion could serve as an interaction context more conducive to personality expression and evaluation than a richer, but unstructured interaction context. Some examples of richer, problem-oriented interaction environments for online dating systems are:

- A translation of the relationship conflict vignettes in prior research with romantic couples [35]. Specifically, online dating systems could implement voice chat interfaces in which two potential partners have to reach consensus regarding vignettes of common dating conflicts that they both indicated differing opinions on (e.g. “who should pay for dinner on the first date?”).
- Partners designing a virtual home or bedroom together under the constraint of a “budget.”
- Planning a vacation itinerary together for a location viewable on *Google Earth* that must satisfy the demands of restless

and demanding “virtual children” who express their (dis)approval to posed itineraries.

- Video chat in the context of a scavenger hunt (i.e. one user knows the location of a hidden item on a GPS map and must direct the other user to walk to the location to take a picture in a limited amount of time).

In conjunction with the tools of profile pages and private messaging, potential partners may be better able to experience compatibility of their personalities online through participation in such activities (e.g. “he doesn’t let me make any of the decisions,” or “she’s very creative and her ideas work really well with mine”). However, would the suggested tools be equally advantageous for pursuit of both relationship goals studied in this paper? We would argue yes. While readers may be inclined to think users with casual sex interests would derive little value from problem-oriented interaction, prior work has indicated that users with casual sex interests do consider personality during their evaluations [48]. Additionally, the system-use strategies of online dating coaches in this study raise the question of whether users would even be willing to actively engage in problem-oriented interactions online. While it may be impossible for systems to force “active involvement” from users, they could limit the number of users one can message at a time or they could provide unlock-able system features in order to encourage users to become more actively involved in interaction online.

These design implications should not be confused as a call for system design to facilitate *complete* evaluation. Partner evaluation is a never-ending process, particularly in relationships that last longer than one night. What we can envision by improved online dater evaluation is a reduction in first dates that a user would not have agreed to if they knew information that was discovered during that date (such as signals about personality compatibility).

7. LIMITATIONS AND FUTURE WORK

There are a variety of limitations regarding this study and its chosen methodology that should be noted. In terms of our sample, the title of “online dating coach” was a self-proclaimed one—there are no criteria for what qualifies one as a “coach” and their claimed expertise could not be validated. They also had a financial incentive to assert that online dating systems are ripe with issues, yet we suspect this incentive to have had minimal influence on the study considering that the coaches openly discussed their proprietary strategies and admitted to lacking a “magic bullet” for success. However, data collected from the online dating coaches may suffer from an indirect recall bias. While their recollections are likely not distorted by relationship or in-person meeting outcomes as would be the case with interviewing active or former users, their advocated strategies were reportedly validated through recollections from their clients, who may suffer from their own recall bias. We must also acknowledge a limitation in the type of user who hires an online dating coach and how these users are likely not representative of the average online dater. Coaching advice can be very expensive, which limits their potential clientele to users with significant disposable income (and who may be more capable of going on multiple, expensive in-person dates than the average user). In addition, users that hire coaches have likely already encountered struggles or hindrances with relationship goal achievement that they deem insurmountable on their own (hence their hiring a coach). These struggles may influence the types of strategies advocated by the coaches.

There are also limitations concerning our definition of success and our methodology for exploring successful online dating system-

use strategies. First, while our definition of online dating success is equally applicable to users with both casual sex and long-term relationship goals, it does not necessitate that a relationship goal actually be achieved. This is a notable limitation because online daters join these systems to achieve particular relationship goals [33], meaning our definition likely falls short of how users would define success themselves.

We defined success of online dating system-use at the beginning of this paper as an online dater procuring dates with potential partners that they deem attractive online, and subsequently deeming their online evaluations of the respective partners to be accurate after meeting in-person for the first time. In this regard, one limitation of this study's methodology, and any methodology that involves qualitative investigation of past outcomes of online dating system-use, is that success can only be confirmed through in-person dates that have actually happened. In other words, the accuracy of online impressions that a user deems unattractive can never be validated through this research method. Let us imagine the possible outcomes of online dater evaluation as a contingency table.

Table 3. Possible online dater evaluation outcomes

	Good candidate for a first in-person meeting	Poor candidate for a first in-person meeting
Decide to meet potential partner in-person	Online impression is attractive, and in-person impression is attractive <i>(True-Positive)</i>	Online impression is attractive, but in-person impression is unattractive <i>(False-Positive)</i>
Decide to discontinue evaluation of potential partner	Online impression is unattractive, but in-person impression would have been deemed attractive <i>(False-Negative)</i>	Online impression is unattractive, and in-person impression would have been deemed unattractive <i>(True-Negative)</i>

Studies of online dater evaluation outcomes in retrospect can only assess true positives and false positives (the top row of the table). True and false negatives cannot be validated because users would choose not to meet in-person with potential partners under these circumstances and thus would have no opportunity to learn if their online impressions were accurate. As such, users do not know if they are disqualifying potential partners that would have otherwise been found attractive in-person. While the likelihood of false negatives occurring with the coaches' strategy is low due to in-person meeting criteria being minimal, it still represents a limitation of this research approach when assessing the success of a particular online dating system-use strategy. While this study represents an initial step towards understanding successful online dating system-use, controlled experiments are a likely next step to assess the accuracy of online dater evaluations that are deemed negative and also to directly compare varying system-use strategies. For example, researchers could have potential partners self-present to and evaluate each other in an online dating system and then meet in-person regardless of the valence of their online impressions. A similar experimental design could also test the effect of novel system interfaces on online dater evaluation.

8. CONCLUSION

This paper presents one of the first attempts to understand online dating system-use strategies considered to be successful. We presented an interview study of online dating coaches about the online dating system-use strategies that they consider successful

based on personal use and feedback from clients. The study revealed that online dating coaches advise a minimization of online evaluation to avoid issues of deception and misinterpretation, which they consider insurmountable in current system designs. In accordance, they advocate self-presentation tactics aimed to convince any potential partner that satisfies minimum attraction criteria to meet in-person quickly where a more intensive evaluation can be conducted. This strategy incurs a bottleneck however: while adopters of the strategy may expedite online evaluation and procure more dates, they cannot expedite face-to-face meetings and the costs associated with these meetings. These findings provided design implications to help users avoid the high, compounding costs of in-person meetings, and facilitate more reliable and informed online dater evaluations.

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