JSPR

Relationshopping: Investigating the market metaphor in online dating

Rebecca D. Heino

Georgetown University, USA

Nicole B. Ellison

Michigan State University, USA

Jennifer L. Gibbs

Rutgers University, USA

ABSTRACT -

In this manuscript we explore the ways in which the marketplace metaphor resonates with online dating participants and how this conceptual framework influences how they assess themselves, assess others, and make decisions about whom to pursue. Taking a metaphor approach enables us to highlight the ways in which participants' language shapes their self-concept and interactions with potential partners. Qualitative analysis of in-depth interviews with 34 participants from a large online dating site revealed that the marketplace metaphor was salient for participants, who employed several strategies that reflected the assumptions underlying the marketplace perspective (including resisting the metaphor). We explore the implications of this metaphor for romantic relationship development, such as the objectification of potential partners.

This research was funded by Affirmative Action Grant 111579 from the Office of Research and Sponsored Programs at California State University, Stanislaus. An earlier version of this paper was presented at the International Communication Association, 2005. We would like to thank Jack Bratich, Art Ramirez, Lamar Reinsch, Jeanine Turner, and three anonymous reviewers for their helpful comments. All correspondence concerning this article should be addressed to Rebecca D. Heino, Georgetown University, McDonough School of Business, Washington D.C. 20057, USA [e-mail: rdh26@georgetown.edu]. Larry Erbert was the Action Editor on this article.

Journal of Social and Personal Relationships © The Author(s), 2010. Reprints and permissions: sagepub.co.uk/journalsPermissions.nay, Vol. 27(4): 427–447.

DOI: 10.1177/0265407510361614

KEY WORDS: commodification • computer-mediated communication • information and communication technologies • market metaphor • online dating • relationship formation • self-presentation

Online dating – the use of Internet services designed to facilitate interactions between potential romantic partners – has become common practice for many. The process by which individuals create a self-presentational profile, search for and assess others' profiles, and initiate interaction using these online tools diverges from traditional face-to-face relationship formation patterns in key ways, although the communication is guided by the same underlying motivation to connect romantically with another. Important differences between mediated and traditional matchmaking are due to these sites' technical affordances, such as database-driven search queries, which affect the process by which individuals present themselves and assess potential romantic partners. What conceptual frameworks do individuals draw upon in order to make sense of this communication environment? One possibility is that they draw upon familiar conceptual schema and communication scripts, such as economic metaphors that deal with the presentation and selection of goods. In other words, they shop.

Scholars in fields such as economics, sociology, marketing, and communication (among others) have utilized economic models to study relationship initiation as an analytic framework to explain overall mate-selection behavior (Becker, 1973; Roloff, 1981). They have also researched economic models as metaphors (e.g., *meat market*) that shape participants' perceptions and actions (Ahuvia & Adelman, 1993; Bailey, 1988). The term "marriage market" was coined by Gary Becker (1973) in his original work creating a model of the economics of marriage, although this term has been applied to the dating market as well. While Becker focused specifically on people seeking marriage, others have applied this model to attempts to search for romantic partners, whether they result in marriage or not (Ahuvia & Adelman, 1993; Hitsch, Hortacsu, & Ariely, 2006).

In their examination of online dating sites, Fiore and Donath (2004) propose that "online personals systems would seem to provide the ideal example of a marriage market" (p. 1396) because they offer increased information about a wider pool of potential partners than usually available in face-to-face encounters. Marketing for top online dating sites reinforces this assessment. For example, Match.com, one of the largest online dating providers in the US, marketed itself for many years as providing "[m]illions of possibilities to meet your match." Like many other online dating sites, Match.com presents itself as a service that offers individuals countless opportunities to meet a romantic partner: a virtual marketplace of potential dating partners. The design of online dating services can be a powerful tool for identifying people who share similarities in demographics, attitudes, and values (Fiore & Donath, 2004). The ability to specify search criteria allows individuals to concentrate on others who have desirable qualities,

potentially helping them create a match (Baker, 2008). The functionality of most online dating sites allows participants to look for partners using a search engine that filters out profiles that do not meet the stated criteria (such as age or location). Online dating also encourages economic-based self-presentation in the form of what Arvidsson (2006) calls "commodification of affect" as users engage in a branding process while constructing their profiles to attract others.

Metaphors are conceptual frameworks that allow individuals to make sense of new concepts by drawing upon familiar experiences and frameworks. This metaphor of the marketplace – a place where people go to "shop" for potential romantic partners and to "sell" themselves in hopes of creating a successful romantic relationship – is highlighted by the layout and functionality of online dating websites, which evoke e-commerce sites such as Amazon.com. The marketplace metaphor may also resonate with participants' conceptual orientation towards the process of finding a romantic partner. While this is not the only way to understand relationship initiation (Carl & Duck, 2004; Duck, 1973), and romantic decision making is not always rational (Zey, 1992), the marketplace perspective offers potential useful insight into how online dating participants view themselves, others, and the process of choosing partners. In our analysis, we examine whether this metaphor is embraced by participants and if so, how it affects their online dating behavior and interaction. We also explore the potentially problematic implications of this metaphor, such as an emphasis on commodification and efficiency rather than the communicative process of creating and sustaining relationships. To our knowledge, this study is the first to look at the language and metaphors employed by users of online dating sites to describe their experiences. While metaphors have been explored in other dating contexts (Ahuvia & Adelman, 1993; Baxter, 1992; Coupland, 1996), the affordances of online dating websites, as well as their growing popularity, make the market metaphor particularly salient and important in understanding romantic relationship initiation.

Romantic relationship formation in mediated environments

Although many forms of computer-mediated communication (CMC) can support the development of romantic relationships, online dating sites have the explicit goal of connecting individuals with potential romantic partners. According to a report on online dating from the Pew Internet and American Life Project (Madden & Lenhart, 2006) in 2004, "dating Web sites created more revenue than any other paid online content category, as they netted roughly US\$470 million in consumer spending, up from about US\$40 million in 2001" (p. 1). The report also found that of the total Internet population in the US, 11% – about 16 million people – have gone to an online dating website or a site where they can meet people online. The industry as a whole saw revenues of about US\$900 million in 2007 according to Jupiter Research (Business Wire, 2008).

We focus on ways in which online dating sites facilitate searching for and choosing potential romantic partners. Early research on mediated communication suggested the reduced cues of CMC limited its ability to convey socio-emotional content and support interpersonal relationship development (Culnan & Markus, 1987). However, later research developed a more positive assessment (for reviews, see Baym, 2002; Walther & Parks, 2002), noting for instance that impression formation in CMC groups could reach the same levels as face-to-face groups if given enough time, in order to compensate for CMC's slower rate of exchange (Walther, 1993). While other recent literature has investigated the use of Internet technologies for relational maintenance (e.g., Ramirez & Broneck, 2009), the online dating context calls attention to the ways in which such technologies may facilitate the initiation and formation of new relationships.

In online dating, this involves both self-presentation to attract others and assessment of others' profiles for potential matches. When forming relationships, individuals experience pressure to present themselves as attractive and desirable (Hirschman, 1987). Earlier research suggests that marketing and promoting oneself are an important part of mediated dating (Ahuvia & Adelman, 1993) and that in constructing personal profiles in print ads, users highlight characteristics they believe will be most sought after by potential partners (Hirschman, 1987). Self-presentation in CMC, and more specifically in online dating, allows for more controlled and selective self-presentation in which individuals highlight their most attractive resources and deemphasize negative attributes (Ellison, Heino, & Gibbs, 2006; Gibbs, Ellison, & Heino, 2006; Walther, 1996; Whitty, 2008). Positive first impressions are desired in traditional and online dating environments, but the technical affordances of online media may make this need more salient.

The market metaphor in dating

Research has explored the use of metaphors to understand relationship development (e.g., Baxter, 1992; Duck, 1984). The process of developing relationships is complex, and individuals often use metaphors to help make sense of their experience (Baxter, 1992). As Burke (1969) writes, "Metaphor is a device for seeing something *in terms of* something else. It brings out the thisness of a that, or the thatness of a this" (p. 503, emphasis in original). It is this misfit of the literal application that opens up "distinctive features" of the non-literal term (Searle, 1979). For example, in Marley's (2007) work on metaphors of identity in dating ads, she found that the use of the word "kitten" to describe a desirable female implied a younger woman with characteristics similar to a young cat, such as cuteness or dependence.

Not only are metaphors a form of vivid and expressive language, they "afford different ways of viewing the world" (Ortony, 1993, p. 5) that actually shape people's social construction of reality (Baxter, 1992). Lakoff and Johnson (2003) argue that our conceptual systems are created from metaphors and "our concepts structure what we perceive, how we get around in the world, and how we relate to other people" (p. 3). Therefore metaphors create the world "we live by." The accentuation of some features, while

suppressing others, affects how we think and act by focusing our attention on certain aspects and prioritizing them as more important than others. Thus, metaphors guide us to understand concepts in certain terms and through certain values. For example, the metaphorical concept "time is money" emphasizes that time is a limited resource and valuable commodity, and thus encourages consideration of how to budget or invest time.

Dating metaphors that have been studied include everything from "love as a journey" (Lakoff, 1986) to relationship development as an "uncontrollable force" (Baxter, 1992) to animal references in dating ads such as "seeks pussycat to pamper" (Marley, 2007). Such metaphors are important as they influence how relationships are conceptualized, as well as how people interact as they go about forming them. A small body of literature looks at how people use the language of economic models as metaphors to make sense of their dating and relationship formation experiences (Ahuvia & Adelman, 1993; Baxter, 1992; Coupland, 1996), but the existence and impact of such metaphors have not yet been studied in the online dating context.

Economy-based metaphors have "proved to have an immense explanatory power" to explicate the processes of exchange and negotiation (Bracker, 2005, p. 7) and tend to highlight efficiency, consumerism and competition (Napoli, 1999). Economic metaphors for romantic relationships existed long before online dating. When courtship behaviors changed from chaperoned visits to a home into dates, where couples left the home to go to restaurants or movie theaters, courtship became a commercial entity (Bailey, 1988). Ahuvia and Adelman (1993) found that market metaphors around consumption (potential partners as a "package") and selling ("sell yourself") were more common than romantic metaphors (such as creating "magic") when participants described their experience using a matchmaking service, but were later replaced by other metaphors (such as "chemistry") after participants formed relationships.

Ahuvia and Adelman (1993) attribute this to the way in which these services highlight the social exchange (bargaining) aspects of dating, so the metaphor's salience might be limited to relationship initiation. They also found that the characterization of individuals as products felt dehumanizing to some of the participants, and was therefore offensive. At the same time, the market metaphor allowed for an assessment of the long-term benefits of being in a relationship that went beyond the initial emotional advantages. Baxter (1992) found that the exchange metaphor in relationships implied that the success of the relationship was seen as the smooth coordination of each person's wants and needs. In looking at dating ads as a self-commodification process, Coupland (1996) found that individuals both adhered to norms of commodification principles (using established categories that would be attractive to others) and also resisted them by humanizing and personalizing their ads. These studies show that the economic or exchange metaphors, while easy to critique, also offered insights into identity and relationship development that were salient to the participants.

Building upon earlier literature, which considers the marketplace metaphor and its application to earlier forms of mediated relationship initiation, we explore the ways in which this conceptual framework is utilized by online dating participants. If metaphorical language influences and structures thoughts and behaviors, online dating is a relevant and important context to understand whether the market metaphor shapes participants' experience, as well as to explore possible theoretical and pragmatic implications. This leads to our research questions: Is the market metaphor salient for online dating participants? If so, how do market metaphors influence their communication strategies and behaviors?

Method

Research site

Our participants were members of one of the largest online dating services, referred to by the pseudonym "Connect.com," at the request of the company. We received permission to interview and survey participants of this online dating company and, in return, we gave them a market research report. Connect.com supported our gaining access to users but was not involved in shaping the research or analyzing the data. We received no funding from the company, except for their provision of an incentive of a free one-month subscription to interview participants. Similar to other online dating services, this service allows users to create profiles, search others' profiles, and communicate via a double-blind e-mail system. In profiles, participants have the option to include a photo and a written (open-ended) self-description and their desired mate. They also answer a battery of closed-ended questions about descriptors such as height, salary, religion, marital status, and alcohol use. Participants can search for potential partners by filtering through thousands of profiles, narrowing the field according to specific characteristics or demographic descriptors, and then e-mail these individuals through the provider's website. Connect.com allows participants to choose potential partners, as opposed to other services that rely on personality matching systems (e.g., eHarmony.com).

Data collection

This manuscript is part of a larger project investigating self-presentation and initial relationship formation in online dating, using both qualitative and quantitative methods. In order to capture the metaphors used in participants' natural language, we used qualitative interviews to explore the ways in which participants understood and made sense of their experience (Weick, 1995) through their own rich descriptions and explanations (Miles & Huberman, 1994). We took an inductive approach based on general research questions informed by literature on online self-presentation and relationship formation.

Approximately 800 members in the Los Angeles and San Francisco Bay areas were initially contacted by the Director of Market Research at Connect.com, invited to participate in an interview, and offered a free one-month subscription as an incentive. Reminder e-mails were sent within one

week. Out of 76 volunteers, 36 were selected and contacted by the authors to arrange an interview (although two were unable to participate due to scheduling issues). We chose participants to ensure a variation in demographics (e.g., gender, age, urban/rural, income, and ethnicity), focusing exclusively on heterosexuals.

Participants were 50% female and three-fourths (76%) resided in urban Los Angeles. The remaining participants (24%) resided in a more rural location outside of the San Francisco Bay area. Participants ranged in age from 25 to 70 years old (M = 42, SD = 9.35), with the majority between 30 and 49. Respondents were current Connect.com subscribers whose profiles were active within the previous week. Participants had been active in online dating sites from 1 month to 5 years (M = 28 months, SD = 17.96).

Interviews (N=34) were conducted in June and July 2003. Interviews were conducted by telephone and averaged 60 minutes in length (range = 30-90 minutes). Interviews were semi-structured to ensure that all participants were asked certain questions yet allowed the freedom to raise other relevant issues. The interview protocol included open-ended questions about participants' online dating history and experiences, profile construction, perceived differences between online and traditional dating, assessment of others online, ways in which online dating had changed their approaches to dating and perceptions of their own desirability, perceived effectiveness of online dating, and demographics. Although we analyzed the entire data set, three items specifically probed the marketplace concept: "Has the knowledge that there are thousands of profiles available online changed the way you go about dating? If yes, how?", "Has it changed the way you view those you might potentially date? If yes, how?", and "Have the responses you've received online changed how you view yourself? If yes, how?"

Data analysis

After the phone interviews were transcribed, they were checked for accuracy by the researcher who conducted the interview. Transcription generated 551 pages of single-spaced text. All audiotapes and interview transcripts were labeled with pseudonyms to ensure coordination among materials and to preserve confidentiality. Interview transcripts were analyzed using Atlas.ti, a software program used for qualitative content analysis. We used microanalysis of the text (Strauss & Corbin, 1998) to look for common themes among participants and to gain greater depth and insight into our research questions. Following evolved grounded theory (Charmaz, 1994; Mills, Bonner & Francis, 2006; Strauss & Corbin, 1998), categories emerged from the data through our interpretation, rather than being previously established and applied to the data a priori as in content analysis. We used an iterative process of coding, in which data from one informant were confirmed or contradicted by data from others in order to refine theoretical categories, propositions, and conclusions as they emerged from the data (Lincoln & Guba, 1985).

Analyses were conducted in four steps. First, using open coding, the first two authors collaborated by coding alternative transcript line-by-line.

During this process, to encourage consistency, they engaged in frequent discussions to compare and refine coding categories and schemes (Larson & Pepper, 2003). This process also created "analytic memos" (Lindlof & Taylor, 2002; Pepper & Larson, 2006; Strauss & Corbin, 1998) about the properties and dimensions of categories and the relationships between categories to help refine our understanding. Second, after the data were coded once and the emergent categories – such as "more picky online" and "efficiency" – were identified, each author coded the data again to ensure that categories were thorough and accurate. In the third step, codes indicating participant strategies that were influenced by the market metaphor were highlighted. For example, the "more picky online" category was found to reveal several strategies for calibrating one's selectivity in terms of choosing others of equal or greater desirability. After identifying participants' strategies, the fourth analytical step consisted of grouping strategies together into five broader themes or higher abstraction categories or codes (in the terms of Lindlof & Taylor, 2002) related to different aspects of the market metaphor, such as "assessing others' worth," "determining one's own market worth," and "calibrating selectivity." After these four coding steps, the larger thematic structure, which will be discussed in the follow section, emerged. (A table with sample codes and quotes is available on request from the authors.)

Findings: The online dating market

Data analysis revealed that the market metaphor was indeed salient for online dating participants, as over half of them used such metaphors without being prompted. During interviews, they compared online dating to an economic transaction, referring to their list of potential partners as a "sales pipeline," or describing the site as like a "supermarket" or "catalog." When talking about online dating, participants of both genders evoked the market-place metaphorical framework to explain their experiences, with both positive and negative connotations.

This marketplace lens – and its language of shopping, marketing, and purchasing – surfaced as participants described various facets of relationship initiation. We coded these descriptions into five themes: assessing others' market worth, determining one's own market worth, shopping for perfect parts, maximizing inventory, and calibrating selectivity. Participants employed key strategies in each of these areas, while also, at times, resisting the metaphor and its implications.

Assessing others' market worth: Seeing beyond self-marketing

In the online dating marketplace, participants assessed potential partners' desirability in order to determine whether the two were an appropriate match. Our data suggest that participants developed various strategies to assess others online. This assessment of others fits squarely with the marketplace conceptual framework of relationship development in that the initial

step of a transaction is typically an assessment of the goods under consideration. When assessing others, participants accounted for the natural tendency for others to idealize themselves in the profile.

Participants evoked consumerist metaphors of selling and marketing when they discussed the personal profile and how to interpret it. Some compared the profile to a "résumé," a promotional tool that markets one's "best self" rather than a complete or accurate representation. The profile was perceived to be a means by which people marketed themselves, presenting themselves strategically by emphasizing positive characteristics and deemphasizing negative characteristics. "This is like a résumé you are sending to someone – someone could lie on their résumé. But I think that if a person interviewing is a decent interviewer they pick that up on the phone or the first meeting" (Sally, Los Angeles). Just as products are marketed to appeal to certain demographics, participants broadcast qualities they thought would appeal to the specific kind of individual they wanted to meet.

Participants developed strategies to account for the tendency for others to over-emphasize positive characteristics, acknowledging that the profile was a selling tool or promotional device designed to make others sound "wonderful" and was to be approached with skepticism. As explained by one participant, "Everyone is so wonderful over the Internet. What the Internet doesn't tell you is that, 'I'm defensive, I talk about my problems all the time, I can't manage my money" (Sam, Los Angeles). To counter this tendency to present an ideal version of one's self (Ellison et al., 2006), many would mentally account for likely exaggerations in profiles. For example, participants reported that men tended to exaggerate height while women would underestimate weight. This tendency towards minor deception in height and weight (as well as age) has been documented in prior empirical research on online dating (Toma, Hancock & Ellison, 2008). Participants developed the strategy of making mental calculations in interpreting physical descriptions to account for this "margin of exaggeration": one woman mentioned that if a profile said a man was 5'11" she would assume he was probably 5'9"; another man said that if a woman said she was "average" body type, he would assume she was slightly heavy.

Another strategy involved triangulation to verify the information presented. Participants adopted strategies such as avoiding profiles without a photo, without multiple photos, or with only one blurry photo. In one case, a participant arranged a face-to-face meeting with a woman who turned out to be ten years older than her picture. After the meeting, he vowed never to go out with someone who only had one picture again. Another participant saved her e-mails from early in an exchange in order to compare them to later e-mails and look for conflicting information. These strategies of translating the profile and triangulating among various information sources were ways of assessing the "market worth" of others, similar to the way in which savvy consumers learn to treat marketing and advertising campaigns with skepticism.

Determining one's own market worth

Online dating participants developed strategies not just to assess others, but also to determine, and advertise, their own desirability. This market worth was based not only on their self-perception of desirability, but also market demands for their attributes and the supply of other competing partners with those same attributes. In online dating, the structure of the site, along with the large pool of participants, supports the market metaphor because it allows for tangible and explicit assessment of one's own perceived desirability in ways less likely to occur with traditional face-to-face communication.

The marketplace metaphor was evoked through accounts of participants' assessments of their "value." If their perceived value was too low, then participants changed self-presentation behaviors in hopes of being seen as more desirable. Market worth also could be assessed according to explicit, immediate feedback, such as the number of hits on one's profile (e.g., one man changed his picture and found that the number of hits to his profile went from 11 to 70 in one day). It also could be assessed by comparing the ratio of people replying to e-mails compared to the number sent out (e.g., participants mentioned that they were 10% effective, or 1 in 10 initial e-mails sent to potential partners garnered a response) or the number of e-mails received in relation to the number of profile views (e.g., "I have to go in and revise my profile. They are looking but it's not catching them" [Danny. Los Angeles]). In the extreme, this quantifiable assessment led to a "realtime" estimation of market worth based on checking e-mail inboxes (which some users did several times a day), similar to the way day-traders check online stock market indices.

These explicit feedback mechanisms generally seemed to increase, rather than decrease, participants' perception of their own "worth" in the market-place. When asked explicitly about whether the responses they had received online changed how they viewed themselves, only two participants out of 34 felt their self-image had been negatively affected. Many answered that it was unchanged, but those with a positive self-assessment reported that it was reaffirmed by the responses they received: "I don't know if it's changed the way I view myself. I've been told that I'm an initially attractive person and I think it's driven home the message ... [Online dating] is good for my self-esteem" (Travis, Los Angeles). Some participants, especially women, considered online dating an "ego boost" based on the types of responses they received. One woman said that after she posted her profile and received a number of e-mails in response, she realized, "I'm much more attractive than I had thought, you know, so that was good. That boosts your morale and punches it up. That's a positive" (Patricia, Los Angeles).

Also, their positive self-image was reinforced through the communicative process of selling themselves:

I'm more aware of my qualities in terms of what I have to offer. And there's something almost like a positive affirmation, too, because if you repeat things enough times you begin to realize it. It's like I'm describing my job and my career with every person I meet. That makes me more conscious of what I do and how I feel about it ... it reminds me that I have a good life and a good career. (Max, Los Angeles)

Max's observation reveals the role of communication in affirming or reaffirming one's self-worth; through the act of marketing oneself repeatedly with potential suitors, he was not only selling himself to others but to himself as well. Together, the larger pool of potential dating partners and the ongoing communicative process of reaffirming one's positive characteristics worked to convince participants of their own worth and contributed to increased perceptions of their own desirability.

Shopping for the perfect parts

The functionality of online dating sites, specifically the ability to filter through thousands of profiles, supports the market mentality of online dating in that participants had to make decisions based on an increased "supply" of potential matches. This encouraged a shopping mentality, in which participants searched for the perfect match based on discrete characteristics and reduced potential partners to the sum of their parts. Decision making based on these qualities was quite different from offline dating situations in which individuals often get a more holistic impression of the individual, usually taking into account unquantifiable aspects of personality (such as energy level) and interaction (such as chemistry). For some participants, online dating encouraged an environment in which partner selection became sterile and calculating as opposed to a spontaneous, "magical" crossing of paths. As one participant explained,

In terms of introductions, [online dating is] a great start, but it also starts to become a little impersonal and sometimes it's hard. You don't have that same magic of when two people meet. It becomes much more clinical and you're already looking at quantitative aspects – age, occupation and everything else. You're constantly evaluating as opposed to meeting someone and not knowing anything about them but knowing there's already a spark. (Max, Los Angeles)

The consequences of this type of filtering, enabled by the search functionality of the website, included the tendency to shop for people with the perfect qualifications. As Max continued to explain, the online dating environment fostered "a sort of shopping cart mentality in terms of 'this one yes, this one no.' You know, 'I'll take her, her, her' – like out of a catalog." Many participants appreciated being able to "screen" potential partners by specifying the qualities they wanted in a partner:

To me, [online dating is] like picking out the perfect parts for my machine where I can get exactly what I want and nothing I don't want, and I can read all about it before I buy ... I think, "What do I want? Well, I'm looking for this, and I want this but not this." And you can weed through a lot of stuff right away. (Frank, Bay Area)

This metaphorical language, comparing dating to picking out the perfect parts for a machine, illustrated the market mentality: the ability to shop and choose exactly what the participants wanted and did not want.

Many participants also saw this type of partner shopping as a good way to increase the odds of a long-term relationship because it allowed them to target individuals with certain characteristics and to avoid those with qualities that were "deal-breakers." For instance, a man who hated smoking could easily filter out smokers, or a woman who did not want children could search for men who felt the same way. For one participant, the fact that chemistry or physical attraction did not enter into the equation until other types of information were revealed was positive, because it allowed her to focus on meeting someone with shared interests as opposed to just physical compatibility:

This way helped me get to know somebody first. That's why I got divorced in the first place, for no reason other than we were mismatched. We had no similar interests ... and that's why I'm looking for someone with similar interests, that likes to do things together ... That's why I really want to get to know somebody and who they really are first, before I meet them. (Courtney, Bay Area)

Her use of online dating was a strategic choice to reprioritize the factors that she used to select potential romantic partners. In her case, removing the "magic," or physical connection, from the equation allowed her to prescreen the pool for those individuals with a better chance of a successful long-term relationship.

Maximizing "inventory": Playing the numbers game

The availability of a large pool of people, which one participant referred to as greater "inventory," as well as the ability to search for specific characteristics, made online dating feel like an effective and efficient option for many because it seemed to increase their chances of meeting a potential partner simply because they were exposed to so many individuals. As one male participant rhetorically asked, "Where else can you go in a matter of 20 minutes, look at 200 women who are single and want to go on dates?" Marcia, another participant, emphasized efficiency: "You can do it any time, night or day. It helps you filter people without spending a lot of time, which we don't have." This increased "inventory" may have encouraged the perception that online dating was a "numbers game" in which one just had to meet enough people in order to find the perfect romantic partner. For example, one woman used an assessment tool on the site and discovered that only 6% of the male members had the qualities she was seeking. Because her search was so specific, she appreciated that online dating allowed her to quickly identify those particular users. So, this increased supply of available prospects may have encouraged the belief that success was purely a result of applying sufficient effort and meeting enough people – adopting a type of sales approach. One woman recounted advice a computer salesperson gave to another online dater:

The example he used was, out of 100 phone calls there might be 20 potential prospects, and meeting with them there might be three or four sales out of that 20. It's a trial and error thing, it's a numbers game. He said to her, "You've got to meet 100 guys! Out of 100 guys, there's bound to be a few" ... And she met them and went on a lot of first dates and finally met somebody. So maybe it is a numbers game. (Jennifer, Los Angeles)

Jennifer's quote exemplifies this strategy of viewing online dating as a numbers game and attempting to go out on as many dates as possible in order to maximize one's inventory and thus one's chances of finding the right dating partner. This strategy also invokes the language of financial markets, in that dating a number of people was perceived as a way of "hedging one's bets" to avert risk and secure a good future, in case one date (or investment) did not work out.

Calibrating selectivity

We explored whether the characteristics of online dating that highlight the marketplace metaphor – namely, the increased supply of potential partners and the heightened sense of one's own desirability – changed the way in which online daters made decisions compared to the decision-making process employed in traditional dating. In other words, were participants more or less selective online? A few individuals described the ways in which increased exposure to a variety of people (some of whom they would not have considered initially) led them to be more open-minded. However, for the majority, the increased supply encouraged them to try to process many profiles in as short a time as possible, causing them to discard those who did not match their criteria after only a cursory assessment of a few factors; in other words, to look for reasons to filter people out, rather than in.

According to participants, there did seem to be a relationship between the assessment of one's desirability and the degree to which they could be discerning in their assessment of others. One of the two participants who said that online dating experiences had lowered their self-esteem said she became less "picky" over time. She said "I don't pick the models because I know that they won't pick me. So I pick the Joe averages." Another man mentioned that as he aged and his online response rate suffered, he broadened his age and weight criteria for potential dates.

Similarly, in the online dating setting, participants made assessments of their own level of desirability and that of others, and then performed mental calculations as to whether the match was equitable or not:

I like a guy who can express himself in writing, but at the same time it kind of intimidates me. So if it's really good and I'm blown away by how they write, I probably get intimidated and don't respond. If it's kind of good, but doesn't necessarily blow me away, I'm more likely to be interested and contact them ... Just like if I were at a bar and I saw a really handsome guy, it would probably be the same. (Marisa, Los Angeles)

While Marisa's quote reveals a focus on finding someone of equitable desirability, others (often women) who were inundated with e-mails could afford to be discerning and only respond to those they were interested in. The system's rapid feedback gave users the opportunity to precisely calibrate their level of selectivity, based on the supply of potential partners and their own perceived desirability. In this market, participants came to understand their own desirability in regards to various considerations made more explicit by the number and types of responses received.

Resisting the market metaphor

A final set of strategies focused on resisting the market metaphor. While many viewed the metaphor of the marketplace as a benefit, others evoked the metaphor in a way that resisted its implications or focused on its negative consequences. These included eliminating potentially good matches, losing the "magic" of meeting someone face-to-face, creating an expectation of more results with less effort, and encouraging quick decision making on surface-level characteristics. First, filtering on demographics meant that some individuals would be eliminated based on arbitrary criteria. When potential dating partners first meet one another in a traditional setting such as a bar, specific attributes such as exact age are not readily apparent. However, in the online dating environment, individuals chose somewhat arbitrary cut-offs as their search criteria and acknowledged that this might preclude opportunities to meet potential good matches.

Another perceived disadvantage of the exchange nature of online dating was the loss of excitement or magic of the face-to-face meeting. Filtering through thousands of profiles seemed more calculated and clinical:

You go through ... who they are and what they're looking for and it's ... "the 20 things you've got to be even before I can be sort of interested in you." And hey, we all want to meet somebody extraordinary but you know you've got to discover what's extraordinary about people and it's usually not on a list ... And then you try to figure out "how do I possibly bring some magic back into this?" (Jose, Los Angeles)

Jose's metaphor invokes the notion that relationship compatibility involves magic rather than quantifiable lists of attributes. This suggests that something critical may be missing from the market metaphor, which emphasizes the transactional nature of relationship formation while obscuring the more ineffable elements of romance and shared chemistry. Third, the market perspective might also breed the expectation of getting more with less effort:

I think, again, with the exposure to a greater number of people it's very effective. But the downside of it is, I think, that the expectations are very much of a consumer – that sort of instant karma expectation, expecting a connection with less effort. (David, Los Angeles)

David acknowledged this consumer aspect of online dating may have encouraged the belief that a great relationship could be had just by discovering the right profile, rather than cultivated through hard work and effort.

A fourth perceived disadvantage of the shopping mentality was that it encouraged participants to make judgments more quickly when reviewing profiles than in traditional settings. Quantitative elements of the profile (e.g., age) and closed-ended responses (which are more easily searchable) offered more efficiency in filtering and searching, thus encouraging users to privilege these fields as opposed to the open-ended descriptions. A female participant said she refused to practice what she called "meat market shopping," a term that highlighted the crassness of the marketplace approach to online dating. This process of quickly assessing others based on these

quantifiable elements of the profile contrasts with the traditional dating context where individuals are able to take a more holistic approach to assessing others, although obviously decision making based on superficial characteristics occurs in offline settings as well. Given the increased supply or pool of people available to date, participants found quick ways to eliminate people, or as one member said, it encouraged a "find my flaw" mentality. Another participant explained:

[Online dating and traditional dating are] very similar in a lot of ways, but where it's different, I think, is the supermarket mentality from what I've seen – that people make instant decisions based on that one thing. They click through profiles very quickly, I think. There's probably too much choice. They don't take the time to consider the sort of detailed profiles, perhaps. (David, Los Angeles)

These were all ways in which participants resisted the market metaphor by critiquing it or mentioning its potential negative consequences.

Discussion

This manuscript explores the ways in which the marketplace metaphor resonated with online dating participants in initial relationship formation. Taking a metaphor approach contributes to the online dating research by highlighting the ways in which the language used by participants shapes their experiences and interactions with potential partners as well as their own self-worth. While this metaphor has also been explored in offline contexts (Huston & Burgess, 1979; Roloff, 1981; Sprecher & Regan, 2002), our data suggest that the functionality and design of online dating sites encouraged participants to adopt a marketplace orientation towards the online dating experience. The marketplace metaphor influenced their communication strategies and behavior: they described accounting for others' exaggerated résumé-like profiles, assessing their own value based on explicit feedback, adopting a shopping mentality and choosing features as if out of a catalog, and referred to the process of finding a partner as a "numbers game." In addition, participants adjusted their level of selectivity based on their own perceived desirability and the increased supply of available others. Although there was a tendency to view dating through this market lens, some actively resisted the metaphor and its implications. These strategies, whether conscious or unconscious, aimed to attract the best possible match.

Exploring the marketplace metaphor in the online dating context offers insight into relationship formation and assessment because it highlights acceptance of, or resistance to, the social exchange nature of relationship decision making. Considerable research has investigated the exchange nature of relationships described in theories of interpersonal behavior and decision making (Becker, 1992; Roloff, 1981; Sprecher, 2001). For example, interpersonal theories, such as the Social Exchange approach, rely on an economic framework (e.g., cost/reward) to focus on individual-level decision

making about choice of relational partners (Blau, 1964; Huston & Burgess, 1979; Roloff, 1981). These theories presume that individuals will choose to enter a relationship with others who can, and are willing to, provide resources they need in exchange for their own resources. One of the Social Exchange theories, equity theory (Roloff, 1981; Walster, Walster, & Berscheid, 1978) assumes that "people exchange their own assets for desirable attributes in a partner and end up matched with someone of about equal social desirability" (Sprecher & Regan, 2002, p. 467). Research shows that perceptions of equity in a relationship lead to greater contentment and satisfaction, while perceptions of inequity contribute to distress and dissatisfaction (Hatfield, Utne, & Traupmann, 1979; Sprecher, 2001). Yet, these theories have been heavily critiqued because of their focus on rational choice (Heath, 1976), their tendency to reduce relationships to economic exchange (Zafirovski, 2005), and the weaker than expected connection between equity and long-term relationship satisfaction (Sprecher, 2001).

While the above approaches have been critiqued as too reductionistic, our analysis suggests that adopting a metaphorical marketplace orientation towards online dating activities serves to highlight how participants view the exchange nature of relationship initiation and development. This perspective influenced both their overall orientation towards the online dating process and the strategies they claim to use within it. Participants' orientation towards online dating as a metaphorical marketplace may reflect the structure of the online dating site, which includes long lists of demographic and other characteristics and sophisticated search functionality. The filtering process emphasizes discrete aspects of individuals, rather than (as typically occurs in a face-to-face setting) a more holistic assessment. This affects decision making, because individuals are focusing on self-reported demographics and descriptions (such as age, height, or income) rather than social interaction or chemistry. Because these sites make personal characteristics more explicit, they may facilitate reductionist and one-dimensional decision making.

Some of our participants felt that the online dating setting encouraged a more calculated and consumerist perspective towards mate selection by enabling individuals to systematically select and deselect checkboxes regarding their preferences. In online dating, these preferences are more explicit, privileging those characteristics that are discrete and quantifiable. Online dating researchers point out that the design of online dating services may influence the beliefs of their users as to what is important; as Fiore and Donath (2004) argue, "the features of a person that Match.com presents as salient to romance will begin to have some psychological and cultural influence if 40 million Americans view them every month" (p. 1395).

Finally, the process of marketing themselves through the online dating site affected how individuals viewed their own desirability. The functionality of these sites typically provides individuals with a quantifiable assessment of the demand for their product via the number of hits on their profile and e-mails received. Interestingly, when participants assessed their own desirability, most felt their positive self-concept was either reinforced or

improved through online dating. This highlights the role of communication in constructing self-image and worth. Participants reported feeling better about themselves as a result of their ongoing efforts to market and sell themselves to potential dating partners and the level of response to such efforts.

A powerful market metaphor pervades both the design of online dating sites and the conceptual metaphorical framework that participants adopt when they consider these sites and their role in them. The analysis reveals the explanatory power of the market metaphor and suggests several implications for theory and practice. First, it may encourage an attitude in which both oneself, and others, are commodified as products to be sold, assessed, purchased, or discarded. This cavalier attitude towards discarding others once a flaw is discovered may carry over to relationship behaviors even after the initial phases. For instance, other research has noted that online dating participants may not see themselves as accountable to others because there is not an "integrated social environment" (e.g., they "disappear" rather than work towards mutual closure in ending relationships) (Donath & boyd, 2004, p.76). Such a view regards relationships as transactions based on matching discrete pre-existing traits and characteristics, while downplaying the less-tangible emotional and chemistry-based aspects that go into making a romantic connection and the subsequent interaction required to build a relationship.

Second, an important implication of the notion that online dating is a numbers game, with its emphasis on locating the perfect product as opposed to the relationship-building process, is that it encourages "relationshopping" (looking for a perfect mate), rather than Duck's (1991) notion of "relationshipping" (building a successful relationship through communicative interaction). This may result in an emphasis on discovering the perfect relationship, by emphasizing the act of finding, or shopping for, the right person/product, as opposed to developing one through time and effort by building an emotional connection or establishing successful communication patterns. Online dating sites present a portal or market for people to meet, but for the most part leave the rest of the relationship development to be worked out in subsequent (face-to-face) communication. This can privilege certain qualities over others and perhaps encourage a naïve sense that finding the right match will result in a successful relationship with little effort. The market metaphor, as well as the structure of the online dating site itself, may focus attention on determining the best formula (i.e., level of selectivity) for finding the right person for a successful relationship, rather than on the work and communication skills involved in developing a satisfying relationship. Perhaps in light of this, some online dating sites now offer personality tests, academic research, and expert advice to help match people (Gottlieb, 2006).

Online dating participants tread a fine line between embracing the marketplace metaphor and denying it. They seek to benefit from the positive aspects of this mode of meeting others, such as the choice it entails and the ability to proactively specify a combination of traits while shopping. However, our participants also mentioned negative connotations to the

marketplace metaphor. These negative aspects include the commodification of relationships and people, which devalues the uniqueness of individual actors and encourages a more clinical approach to finding a mate. In addition, participants spoke about the lack of magic in getting to know one another and experiencing a kind of buyer's remorse when they discovered people who were not what they appeared to be. In one study of mediated dating, the prevalence of market metaphors was met with resistance. Ahuvia and Adelman (1993) found that the perceived "sacredness" or uniqueness of a love relationship was challenged by the idea of people as exchangeable, and therefore less unique, commodities. As they write, "This commoditization of love and dehumanization of people accounts for much of the discomfort that many people feel with this consumerist imagery" (p. 69). Although some resistance to the metaphor was voiced, the salience and predominant acceptance of this market metaphor in our study has implications for interpersonal relationship initiation as it calls into question what types of relationships are being privileged by online dating. The market model depends on a certain faith in rational actors, ones who can assess their worth, their offerings, and their partner's desirable qualities. Yet, it is difficult to see how such a view is sustainable in the context of desire and dating, in which compatibility may be less a rational equation and more an unpredictable elixir of non-rational factors, such as chemistry and emotion. Given this, it is possible that the market values are an attempt to rationally control desire in ways that are likely to set users up for frustration when these expectations do not lead to success as easily as expected. Although we did not examine success rates in this study, this would be an interesting topic for future research.

Our findings have practical implications as well. Given the negative implications of the market metaphor for relationship formation, designers of online dating sites may want to reconsider site designs that privilege demographic criteria in favor of more holistic descriptions. Sites may also expand on their services to help users succeed in online dating by counseling them not just about how to write profiles and initiate relationships, but how to develop relationships as well. Online dating users may also want to consider the implications of various online dating models (Match.com versus eHarmony, for example) and factor them into their choice of which site(s) to use.

Future research on metaphors in online dating should explore potential gender differences between the use of language, and therefore conception, of relationship formation. For example, do males feel more comfortable with this market metaphor language and evoke it more often? Another area of research to explore is differences in language use between those who are "window shopping," or just browsing, versus those that are actually looking for offline relationships. Also, further research could explore the difference between traits or qualities participants feel they can judge through CMC and those that they need to assess face-to-face. This could help individuals understand the benefits of online dating without underestimating the effort of building a successful relationship once they meet a

potential partner. Finally, research should explore if metaphors change as a relationship moves from initiation to development in online dating. Alternate metaphors could affect behavior in the later stages of relationship development.

This study has several limitations. Our findings are confined to the initial relationship formation stage; we do not know whether market metaphors will continue to be salient or whether, as suggested by Ahuvia and Adelman (1993), they will be replaced by new metaphors as participants form relationships. A second limitation is that qualitative data are not generalizable to other populations or contexts; our goal is not statistical generalizing but "analytic generalizing," in which theoretical propositions and insights can then be applied to other research settings and situations (Yin, 1994). A final limitation is that these findings are restricted to online dating models in which individuals create their own profiles and make their own decisions about whom to pursue (such as Jdate.com, Match.com, or Yahoo Personals). Other online dating models (such as eHarmony.com or Chemistry.com), in which participants take personality tests and are then matched by the provider, might offer different insights.

Overall, the marketplace metaphor provides insight into the ways in which participants make assessments and decisions about relationship initiation within a specific CMC environment. The technical affordances of the online dating context – filtering functionality, access to an increased supply of potential mates, and detailed demographic information about others – influence how individuals use language, specifically market metaphors, to describe the process. This use of a market metaphor may influence how individuals perceive relationship initiation online, resulting in specific strategies for assessing and interacting with others and assessing one's own desirability in this relationship marketplace. The marketplace metaphor resonated strongly with our participants, offering hope for more opportunities to find a relationship match, yet posing potentially problematic implications for relationship development through a focus on the "numbers game" of efficiency rather than communication skills for relationship development.

REFERENCES

- Ahuvia, A. C., & Adelman, M. B. (1993). Market metaphors for meeting mates. *Research in Consumer Behavior*, 6, 55–83.
- Arvidsson, A. (2006). 'Quality singles': Internet dating and the work of fantasy. *New Media & Society*, 8, 671–690.
- Bailey, B. (1988). From front porch to back seat: Courtship in twentieth-century America. Baltimore, MD: John Hopkins University Press.
- Baker, A. J. (2008). Down the rabbit hole: The role of place in the initiation and development of online relationships. In A. Barak (Ed.), *Psychological aspects of cyberspace: Theory, research, applications* (pp. 163–184). Cambridge, UK: Cambridge University Press.
- Baxter, L. (1992). Root metaphors in accounts of developing romantic relationships. *Journal of Social and Personal Relationships*, 9, 253–275.
- Baym, N. (2002). Interpersonal life online. In L. Lievrouw & S. Livingstone (Eds.), *The handbook of new media* (pp. 62–76). Thousand Oaks, CA: Sage Publications.

- Becker, G. (1973). A theory of marriage: Part I. *The Journal of Political Economy*, 81, 813–846. Becker, G. (1992). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Blau, P. (1964). Exchange and power in social life. New York: John Wiley.
- Bracker, N. (2005). Accounting for the economy of metaphors and metaphors of economy. In N. Bracker & S. Herbrechter (Eds.), *Critical studies: Metaphors of economy*, (pp. 7–8). New York: Radopi.
- Burke, K. (1969). A grammar of motives. Berkeley, CA: University of California Press.
- Business Wire. (2008). Jupiter research sees steady growth for online personals, despite explosion of social networking. Retrieved June 2, 2008, from http://www.businesswire.com/portal/site/home/permalink/?ndmViewId=news_view&newsId=20080211005037&newsLang=en
- Carl, W. J. & Duck, S. W. (2004). How to do things with relationships ... and how relationships do things with us. In P. Kalbfleisch (Ed.), *Communication yearbook 28* (pp. 1–34). Mahwah, NJ: Lawrence Erlbaum Associates.
- Charmaz, K. (1994). Grounded theory in the 21st century: Applications for advancing social justice studies. In N. Denzin & Y.S. Lincold (Eds.), *Handbook of qualitative research* (1st ed., pp. 507–535). Thousand Oaks, CA: Sage Publications.
- Coupland, J. (1996). Dating advertisements: Discourses of the commodified self. Discourse & Society, 7 (20), 187–207.
- Culnan, M. J., & Markus, M. L. (1987). Information technologies. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.), *Handbook of organizational communication: An inter-disciplinary perspective* (pp. 420–443). Thousand Oaks, CA: Sage Publications.
- Donath, J. & boyd, d. (2004). Public displays of connection. *BT Technology Journal*, 22, 71–82. Duck, C. (1984). A rose is a rose (is a tadpole is a freeway is a film) is a rose. *Journal of Social and Personal Relationships*, 1, 507–510.
- Duck, S. (1973). Personality similarity and friendship choice: Similarity of what, when? *Journal of Personality*, 41, 525–558.
- Duck, S. (1991). Understanding relationships. New York: Guillford Press.
- 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), article 2.
- Fiore, A. T., & Donath, J. S. (2004). Online personals: An overview. CHI2004, 1395-1398.
- Gibbs, J., Ellison, N., & Heino, R. (2006). Self-presentation in online personals: The role of Anticipated future interaction, self-disclosure, and success in Internet dating. *Communication Research*, 33, 152–177.
- Gottlieb, L. (2006, March). How do I love thee? The Atlantic, 297 (2), 58-70.
- Hatfield, E., Utne, M. K., & Traupmann, J. (1979). Equity theory and intimate relationships. In T. Huston & R. Burgess (Eds.), Social exchange in developing relationships (pp. 99–133). New York: Academic Press.
- Heath, A. (1976). *Rational choice & social exchange: A critique of exchange theory*. Cambridge, England: Cambridge University Press.
- Hirschman, E. C. (1987). People as products: Analysis of a complex marketing exchange. *Journal of Marketing*, 51, 98–108.
- Hitsch, G. J., Hortacsu, A., & Ariely, D. (2006). What makes you click: Mate preferences and matching outcomes in online dating. MIT Sloan Research Paper No. 4603–06. Retrieved April 15, 2006, from http://ssrn.com/abstract=895442
- Huston, T. L., & Burgess, R. L. (1979). Social exchange in developing relationships: An overview. In T. Huston & R. Burgess (Eds.), *Social exchange in developing relationships* (pp. 3–28). New York: Academic Press.
- Lakoff, G. (1986). A figure of thought. Metaphor and Symbolic Activity, 1, 215–225.
- Lakoff, G., & Johnson, M. (2003). Metaphors we live by. Chicago, IL: The University of Chicago Press.
- Larson, G., & Pepper, G. (2003). Strategies for managing multiple organizational identifications: A case of competing identities. *Management Communication Quarterly*, 16, 528–557.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.

- Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative communication research methods*. Thousand Oaks, CA: Sage.
- Madden, M., & Lenhart, A. (2006). Online dating. *Pew Internet & American Life Project*. Retrieved June 2, 2008 from http://www.pewinternet.org/~/media//Files/Reports/2006/PIP_Online_Dating.pdf
- Marley, C. (2007). Metaphors of identity in dating ads and newspaper articles. *Text & Talk*, 27 (1), 55–78.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd edn). Thousand Oaks, CA: Sage.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5, 1–10.
- Napoli, P. M. (1999). The marketplace of ideas metaphor in communications regulation. *Journal of Communication*, 49, 151–169.
- Ortony, A. (1993). Metaphor and thought (2nd edn). New York: Cambridge University Press. Pepper, G. L., & Larson, G. S. (2006). Cultural identity tensions in a post-acquisition organization. *Journal of Applied Communication Research*, *34*, pp. 49–71.
- Ramirez, A., & Broneck, K. (2009). 'IM me': Instant messaging as relational maintenance and everyday communication. *Journal of Social and Personal Relationships*, 26, 291–314.
- Roloff, M. E. (1981). *Interpersonal communication: The social exchange approach*. Thousand Oaks, CA: Sage Publications.
- Searle, J. (1979). Metaphor. In A. Ortony (Ed.), *Metaphor and thought* (pp. 92–123). Cambridge, England: Cambridge University Press.
- Sprecher, S. (2001). A comparison of emotional consequences of and changes in equity over time using global and domain-specific measures of equity. *Journal of Social and Personal Relationships*, 18, 477–501.
- Sprecher, S., & Regan, P. (2002). Liking some things (in some people) more than others: Partner preferences in romantic relationships and friends. *Journal of Social and Personal Relationships*, 19, 463–481.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.
- Toma, C., Hancock, J., & Ellison, N. (2008). Separating fact from fiction: An examination of deceptive self-presentation in online dating profiles. *Personality and Social Psychology Bulletin*, 34, 1023–1036.
- Walster, E., Walster, G., & Berscheid, E. (1978). *Equity: Theory and research*. Boston: Allyn and Bacon.
- Walther, J. B. (1993). Impression development in computer-mediated interaction. *Western Journal of Communication*, 57, 381–398.
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23, 3–44.
- Walther, J. B., & Parks, M. R. (2002). Cues filtered out, cues filtered in: Computer-mediated communication and relationships. In M. L. Knapp & J. A. Daly (Eds.), *Handbook of interpersonal communication* (3rd edn, pp. 529–563). Thousand Oaks, CA: Sage Publications.
- Weick, K. E. (1995). Sensemaking in organizations. Thousand Oaks, CA: Sage Publications.
- Whitty, M. (2008). Revealing the 'real' me, searching for the 'actual' you: Presentations of self on an internet dating site. *Computers in Human Behavior*, 24, 1707–1723.
- Yin, R. K. (1994). Case study research: Design and methods. Thousand Oaks: Sage Publications. Zafirovski, M. (2005). Social exchange theory under scrutiny: A positive critique of its economic-behaviorist formulations. *Electronic Journal of Sociology*, 7, 1–40.
- Zey, M. (1992). *Decision making: Alternatives to rational choice models*. Newbury Park, CA: Sage Publications.