Can You See the Real Me? Activation and Expression of the "True Self" on the Internet

John A. Bargh,* Katelyn Y. A. McKenna, and Grainne M. Fitzsimons
New York University

Those who feel better able to express their "true selves" in Internet rather than face-to-face interaction settings are more likely to form close relationships with people met on the Internet (McKenna, Green, & Gleason, this issue). Building on these correlational findings from survey data, we conducted three laboratory experiments to directly test the hypothesized causal role of differential self-expression in Internet relationship formation. Experiments 1 and 2, using a reaction time task, found that for university undergraduates, the true-self concept is more accessible in memory during Internet interactions, and the actual self more accessible during face-to-face interactions. Experiment 3 confirmed that people randomly assigned to interact over the Internet (vs. face to face) were better able to express their true-self qualities to their partners.

Can you see the real me? Can you? Can you?

—The Who, "The Real Me" (Quadrophenia, 1973)

In *Life on the Screen: Identity in the Age of the Internet*, Sherry Turkle (1995) noted how the Internet, with its relative anonymity and multiple venues for social interaction, afforded individuals a kind of virtual laboratory for exploring and experimenting with different versions of self. Just as games and other forms of play afford children a relatively safe and benign way to develop social skills critically

^{*}Correspondence concerning this article should be addressed to John A. Bargh, Department of Psychology, New York University, 6 Washington Place, Seventh Floor, New York, NY 10003 [e-mail: john.bargh@nyu.edu]. This research was supported in part by National Institute of Mental Health grant R01-MH60767 to Bargh, a New York University Research Challenge Fund grant to McKenna, and a predoctoral fellowship from the Social Sciences and Humanities Research Council of Canada to Fitzsimons. We thank Lily Hung for her assistance as experimenter and Niall Bolger for his advice concerning the data analyses.

useful for later life as an adult but without the costs and potential dangers of making mistakes, the anonymity of the Internet enables people the opportunity to take on various personas, even a different gender, and to express facets of themselves without fear of disapproval and sanctions by those in their real-life social circle.

The idea that people possess multiple senses of self, or personas, is not a new one in psychology and sociology. Both Goffman (1959) and Jung (1953) distinguished between the public self, or persona, and the individual's inner self; for Jung (1953) one's real individuality resided in the unconscious self as opposed to the conscious ego. Markus and Nurius (1986) introduced the idea of "possible selves," the potentials in terms of life growth and optional lifestyles an individual feels he or she would be able to attain if so desired. Higgins (1987) distinguished between *ideal*, *ought*, and *actual* self-concepts: the ideal self contains those qualities one strives someday to possess, the ought self those qualities one feels obligated to possess, and the actual self those one actually expresses to others at present.

Other than the actual self, these variations on the theme of the self-concept are all concerned with *future*, *potential* versions of self that do not yet exist in present time. In contrast, Turkle's (1995) vision of the Internet as a kind of social laboratory emphasized its potential for the exploration of currently possessed, alternative inner conceptions of self. This is neither a potential self nor an ideal self—it is most similar to what Carl Rogers (1951) called the *true self*.

Rogers' (1951) notion of the true self was informed by Jung's (1953) distinction between the unconscious self and its public mask, the persona. Rogers theorized that much of what happens in therapy has to do with the client feeling that "he was not being his real self, often he did not know what his real self was, and felt satisfaction when he had become more truly himself" (p. 136). For Rogers, an important feature of the process of therapy was the work towards *discovery* of the true self, so that the person could express it more freely in his or her interactions with others. The true self is thus conceptually distinct from both the ideal self or possible selves on the one hand and the actual self on the other, because Rogers (1951) viewed the true self of his clients as actually existing psychologically (i.e., a present, not a future version of self), but not fully expressed in social life (i.e., not the actual self).

If, as Turkle (1995) argued, the Internet constitutes a unique opportunity for self-expression, then we would expect a person to use it first and foremost to express those aspects of self that he or she has the strongest need to express—namely, the 'true self': those identity-important and phenomenally real aspects of self not often or easily expressed to others.

"Strangers on the Internet"

Why would the Internet be a place where the true self might be more easily expressed than in traditional, face-to-face communication venues? We suggest

that one important difference between the typical Internet and typical face-to-face interaction is the Internet's ability to facilitate self-expression. There are two unique features of the Internet that are responsible for its facilitative ability in this area. First and foremost is the ability to be relatively *anonymous* in one's individual-or group-level interactions. This enables one to express oneself and behave in ways not available in one's usual social sphere, both because one is free of the expectations and constraints placed on us by those who know us, and because the costs and risks of social sanctions for what we say or do are greatly reduced. If one does not conform to one's usual repertoire in that situational or relational context, one faces disapproval from one's social group (e.g., Cooley, 1902; Goffman, 1959; Rogers, 1951). Secondly, as Pennebaker (1990) and Derlega, Metts, Petronio, and Margulis (1993) have noted, in traditional face-to-face interactions there are real costs to disclosing negative or taboo aspects of oneself, even (or perhaps especially) to close friends and family. These barriers are not present outside of one's usual social sphere (Derlega & Chaikin, 1977).

In this regard Internet interactions are analogous to those one sometimes has with "strangers on a train" (Rubin, 1975) in which one opens up and self-discloses intimate details to the stranger sitting in the next seat, details that one might never have told one's colleagues at the office or even one's family and friends back home. Such self-disclosure, if (as on the Internet as opposed to the train) one has further such interactions with the same person, can lead quickly to the development of friendship. Several theorists and researchers in the area of close relationships have noted how the development of friendship is related to an increase in self-disclosure (e.g., Altman & Taylor, 1973; Derlega et al., 1993).

Moreover, disclosing the qualities and aspects of one's inner or true self has been argued to create bonds of empathy and understanding between the relationship partners. According to Derlega and Chaikin (1977), for example, "a major function of friendships and love relationships may be to validate one's self-concept by obtaining the support and understanding of the other person" (p. 110). Being able to express the true self over the Internet would thus be expected to create empathic bonds and facilitate the establishment of close relationships. Consistent with this reasoning, McKenna, Green, and Gleason (this issue) found that people who believe that they are better able to express their true self (as measured by the researchers' Real Me scale) were more likely than others to form close relationships with people met over the Internet.

Given that the special qualities of Internet interaction afford people the opportunity to express the true self, the remaining question is whether people will be

¹ Anonymity is defined as "the condition of not being identifiable to the other person" (Derlega & Chaikin, 1977, p. 109). Note that by this definition, one can be relatively anonymous in certain face-to-face interactions as well, as in the "strangers on a train" phenomenon (Rubin, 1975; see below), and also relatively "nonymous" or identifiable over the Internet (as in e-mail exchanges using one's real name; e.g., John.Smith@ivy.edu).

motivated to so express it. And there are reasons to expect that people will be. For one thing, we have a real need to have others see us as we see ourselves. Swann (e.g., 1990) has shown that having a new acquaintance come to the same opinion of you that you hold yourself is a strong interpersonal motivation, often stronger than the need to have others have a positive opinion of you. Secondly, the true self, according to Rogers (1951), is composed of important aspects of one's identity that one does not often have validated as real by the significant others in one's life. Research on the motivational aspects of the self has found that people are highly motivated to make such important aspects of identity a "social reality," to have these attributes acknowledged by others so that they become authentic features of the self-concept (Baumeister, 1998; Gollwitzer, 1986). For both of these motivational reasons, if the Internet provides interaction domains that enable and facilitate expression of the true self, we should expect people to take advantage of it.

We conducted three laboratory experiments to test these predictions. First, because of the special qualities of Internet communication outlined above, an individual's true-self concept should be cognitively more accessible during an Internet interaction with a new acquaintance than in a traditional, face-to-face interaction. In the latter venue, the individual's actual-self concept will be cognitively more accessible. We test this prediction in Experiments 1 and 2 using a speeded self-judgment, reaction time methodology. Second, for the same reasons, a person should be better able to express the qualities of his or her true self to an Internet versus a face-to-face interaction partner, causing the partner to form an impression of the person that more resembles his or her true than actual self. We test this prediction in Experiment 3.

Experiment 1

We predicted that an individual's true-self concept would be more activated and accessible than his or her actual-self concept during an Internet interaction with a new acquaintance, whereas the reverse would be true during face-to-face interactions. The classic measure of the accessibility of self-concepts is the "Me/Not-Me" response task of Markus (1977). In this task, participants respond as quickly as possible as to whether each of a series of adjectives is self-descriptive, by pressing either a button labeled "Me" or another labeled "Not Me." The speed with which these responses are made is an indication of the relative accessibility, or readiness to be used, of the various concepts (see Bargh & Chartrand, 2000).

Method

Participants. Forty-six students (18 male and 28 female) enrolled in an introductory psychology course at New York University (NYU) participated in pairs

for partial fulfillment of a course requirement. There were both same-sex (16) and cross-sex (7) participant pairs.

Apparatus and materials. The stimuli for the computerized reaction time task consisted of trait words presented in random order. Each word appeared in the center of the screen until the participant responded; an asterisk would then immediately appear for 1 s, followed by the next word. There were 8 practice trials and then 45 experimental trials. Thirty-five of the words were stimuli chosen from the normative likability ratings of Anderson (1968). These words were frequently encountered trait terms such as "wise" and "bossy"; half were positive and half were negative in normative valence. The remaining 10 word stimuli were the "actual-self" and "true-self" words earlier generated by the participant him- or herself. These stimuli were entered into the program by the experimenter during the experimental session; they were embedded in the longer word list so as to reduce the likelihood that the participant would notice the connection to the earlier part of the experiment.

Procedure. All sessions were conducted by the same female experimenter. Participants were greeted individually and completed the first task alone in one of two identical lab rooms. On this task, they listed the traits or other characteristics (maximum of 10 on each measure) that they believe they actually possess and express to others in social settings (the actual self measure) and that they possess and would like to but are not usually able to express (the true self measure). After a filler task, each participant then interacted with another participant, either in an Internet chat room or face to face in a lab room, for either 5 or 15 min. The purpose of varying the interaction length factor was to enable us to assess the possibility that quantitative differences in amount of information communicated between the Internet and face-to-face conditions, not qualitative differences in the communication experience, might be responsible for any obtained differences (see Walther, 1996).

In the Internet condition, the experimenter then briefly explained how to use an Internet chat room and turned on a computer monitor in the lab room, which had been set up for chat room use prior to the participant's arrival. The experimenter then left the participant alone in the room to begin interacting with the other student over the Internet. In the face-to-face condition, participants moved to a new lab room after completion of the initial measures. They were seated at a table together and were left alone in the room to interact. While participants were interacting, the experimenter entered the actual-self and true-self words generated in the self-description measure into the computers that would be used for the reaction time task.

At the end of the allotted time period (5 or 15 min), the experimenter interrupted the students' interaction and brought each into one of two soundproof

computer booths, where they individually completed the reaction time self-description task. In this task, they were told that words would appear on the computer screen every few seconds; participants were instructed to press, as quickly as possible after they knew their response, the key labeled "yes" if the word described them and that labeled "no" if the word did not describe them. Upon completion of this final task, participants were individually debriefed and thanked for their participation.

Results

Preliminary analyses. The data were analyzed using a 2 (interaction mode: online or face-to-face) \times 2 (interaction length: 5 or 15 min) \times 2 (self-concept: actual vs. true) \times 2 (participant within pair) repeated measures analysis of variance (ANOVA), with the first two factors as between-participants variables and the latter two as within-participants variables. There was no main effect of participant within pair, and it did not interact with any other variables except for an uninterpretable and theoretically uninteresting four-way interaction. Gender did not participate in any significant effects and so was excluded from further analyses.

Main analyses. Overall, participants were faster to respond to their actual-self descriptive traits than their true-self descriptions, F(1, 19) = 16.12, p = .001. As predicted, this main effect was qualified by a significant interaction between self-concept and interaction mode, F(1, 19) = 8.65, p = .008. As can be seen in Figure 1, whereas the actual self was more accessible (i.e., faster response times)

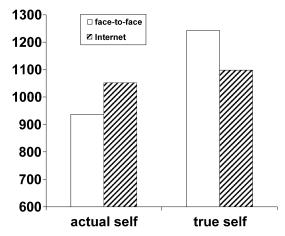


Fig. 1. Reaction times (in ms) to actual-self and true-self characteristics, by interaction venue, Experiment 1.

after face-to-face than after Internet interactions, the true self was more accessible following an initial interaction over the Internet. This effect was not moderated by interaction length (p>.25), so the differential activation of the true versus actual self-occurred very early in the course of the interaction; moreover, the differential self-concept accessibility is attributable to qualities of the communication mode and not to the amount of information communicated during the interaction. A subsidiary analysis to assess whether the crossover interaction of self-concept activation shown in Figure 1 held equally for same-sex versus cross-sex interaction pairs revealed that whether the partners were of the same versus opposite sex made no difference in the obtained effects (all ps>.25).

Experiment 2

It is possible that the differential self-concept activation found in Experiment 1 was due to the anticipation of interacting either in a face-to-face or an Internet setting after being informed of this by the experimenter, rather than qualities of the interaction experience itself. For instance, knowing that one is going to interact face to face might cause one to strategically inhibit the expression of one's true self. Because such tuning or communication set effects are a real possibility (see Higgins, 1981; Zajonc, 1960), it is important to rule out this alternative if we wish to conclude that it is the Internet communication setting and interaction experience that causes the true self to become relatively more accessible. Experiment 2 was thus identical to Experiment 1 with the exceptions that (1) we did not vary the length of time participants believed they would be interacting, (2) no interaction actually took place, and (3) a control group was added, consisting of participants who were not told about any subsequent interaction.

Method

Participants. Thirty-six students (18 male and 18 female) enrolled in the NYU introductory psychology course participated in partial fulfillment of a course requirement.

Apparatus and materials. All apparatus and materials were identical to those in Experiment 1.

Procedure. The procedure was identical to that of Experiment 1, except for changes to the cover story necessary to explain why the interaction with another student was postponed until after the reaction time task. (Participants in the "no expected interaction" condition were told nothing about another student or pending interaction and completed the Me/Not-Me task after the same delay as all other participants.) Therefore, after completing the actual-self and true-self measures as

described in Experiment 1, participants were told they would be interacting with another student, and those in the Internet condition were given instructions and demonstrations of how to use the chat room, exactly as in Experiment 1.

After several minutes had passed, the experimenter returned and told the participant that the other student was still working on the first task. She suggested that to save time, he or she could complete the third task before the interaction with the other student (all participants desired to do so). After completing the Me/Not-Me task, participants were fully debriefed as to the nature of the study. Three (male) participants indicated they had experienced suspicion about the existence of the partner participant, and so their data were excluded from the analyses.

Results and Discussion

A preliminary analysis revealed no reliable effects or interactions involving participant gender, and so this factor was excluded from further analyses. The data were analyzed using a 3 (type of anticipated interaction: online, face-to-face, or control) × 2 (actual-self vs. true-self content words) repeated measures ANOVA, with the first factor as a between-participants variable and the latter as a withinparticipants variable. The only significant effect was that participants in all conditions responded faster overall to actual-self (M = 965 ms) than true-self (M = 965 ms) 1146 ms) content stimuli, F(1, 30) = 6.52, p = .016. As expected, there was no interaction between self-concept type and anticipated communication mode, F < 1. Thus, when participants did not actually interact with another person over the Internet versus face to face, there was no change in activation level of their true-self versus actual-self concepts, pointing to the importance of the actual Internet interaction experience for the activation of the true-self concept. Furthermore, because the main effect held for the additional "no interaction expected" condition as well, the default case appears to be that the actual self is more accessible, typically, than the true self.

Experiment 3

Research on close relationships has identified two key ingredients necessary for their development: reciprocal *self-disclosure* of intimate personal information (e.g., Collins & Miller, 1994; Derlega et al., 1993), and the ability to present one's *desired self* and have it perceived and accepted as valid by the partner (Laurenceau, Barrett, & Pietromonaco, 1998; Murray, Holmes, & Griffin, 1996). As we have argued, the special qualities of Internet communication foster both self-disclosure and the presentation of alternative, desired versions of self. Experiment 3 tested the hypothesis that individuals would be better able to express their true selves over the Internet and have them accepted by their new interaction partner as valid, compared to those interacting face to face.

We further hypothesized that participants in the Internet interaction condition would like each other more than would those who met each other face to face, replicating the findings of McKenna et al. (this issue, Study 3). This greater degree of liking is expected for two reasons: the hypothesized greater ease of expression of the true self over the Internet, plus the likelihood that the same features of Internet communication that free one to express one's true self should also affect how one perceives one's partner. Specifically, the greater anonymity of Internet communication encompasses the fact that people lack information about each other that is usually highly influential on first impressions and liking, such as physical attractiveness, dress, and mannerisms (see, e.g., Hatfield & Sprecher, 1986). In the absence of this information, then, people should be freer to project hoped-for, idealized qualities onto their partners. (Importantly, however, such projection should only occur after initial liking has been established, as people will not be motivated to project wished-for features onto someone they initially dislike.) This projection of the ideal would be a second contributor to the predicted greater liking of each other by new acquaintances after an Internet versus a face-to-face meeting. In order to provide a test of the projection prediction, Experiment 3 participants also provided descriptions of their idealized friend and idealized romantic partner.

Method

Participants. Twenty male and 20 female NYU undergraduates were recruited from the introductory psychology class and received course credit for their participation.

Procedure. Participants met in cross-sex pairs for a single session of 40 min each. They were randomly assigned to either the face-to-face meeting condition or the Internet meeting condition. Prior to meeting each other, participants completed both the *actual self* measure and the *true self* measure as in Experiments 1 and 2. In addition, they also listed a maximum of five traits or characteristics that they would most like for a future romantic partner (the *ideal partner* measure) to possess, and then a maximum of five traits or characteristics that their ideal close friend (the *ideal friend* measure) would possess.

Following completion of these measures, each participant engaged in a 10 min filler task, comprised of rating the average college student on a variety of traits. Next, participants met with their assigned partner either face to face or in an Internet chat room. All participants were instructed to get acquainted and interact with their partner. After 40 min, the interaction was ended. At this point, the face-to-face participants were taken to separate rooms and the Internet participants were logged out of the chat room. All participants then rated the amount of liking they felt for their interaction partner on a 14-point scale ranging from -7 (strong dislike) to +7 (strong liking). They were then asked to list the traits and characteristics

(maximum of 10) they believed their interaction partner possessed (*actual partner* measure).

Results

Self-presentation measures. Each participant's listed attributes for both the actual self and the true self were compared to the attributes listed in his or her interaction partner's ratings of him or her. The total of all synonymous matches (i.e., funny/witty) for both versions of self were coded by judges blind to the participant's gender and experimental condition. This created the Presentation of Actual Self and the Presentation of True Self measures. Intercoder reliability was 94.4%, and all differences in coding were resolved through discussion.

Projection measures. Each participant's descriptions of an ideal romantic partner and of an ideal close friend were compared to the attributes he or she ascribed to the interaction partner. As above, all synonymous matches were counted. This created the Projection of Ideal Romantic Partner and the Projection of Ideal Friend measures. Intercoder reliability was 91.7%.

Liking for partner. An independent samples t-test comparing the degree of liking at the conclusion of the interaction between those participants who talked face to face and those who spoke in an Internet chat room revealed significant differences, t(38) = 3.01, p < .01. Those who interacted on the Internet liked one another significantly more (M = 5.55) than did those who interacted in person (M = 3.05). This replicates the liking findings of McKenna et al. (this issue, Study 3).

Self-presentation on the Internet versus face-to-face. A one-way ANOVA was conducted on the number of self/partner matches with communication mode (Internet vs. face to face) as the between-participants factor and self-concept (actual vs. true self) as the within-participants factor. The main effect of communication mode was not reliable, F(1, 38) = 1.62, p = .21, nor was the main effect of self-concept, F < 1. However, the Communication Mode \times Self-Concept interaction was reliable, F(1, 38) = 5.05, p < .05. As predicted, those in the Internet condition successfully presented their true selves to their partners to a significantly greater extent than did those in the face-to-face condition, whereas there were no differences in ability to present the actual-self concept (see Figure 2). Those in the face-to-face condition, on the other hand, were no more successful in conveying their true selves than their actual selves.

Projection of the ideal. Whereas expression of the true self was predicted (and found) to be a factor that facilitates initial liking between interaction partners, projection of idealized qualities onto one's partner is a mechanism hypothesized to contribute to the speedy development of Internet relationships once initial liking

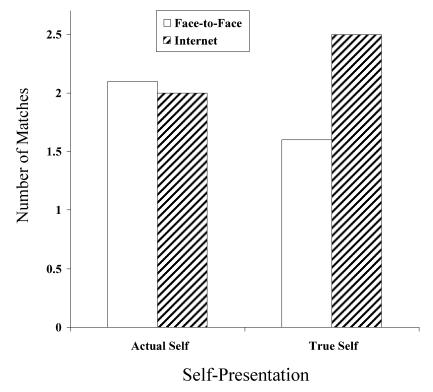


Fig. 2. Success of self-presentation over the Internet versus face to face, separately for participant's description of actual self and of true self, in terms of number of content matches with partner's free description of participant after their meeting, Experiment 3.

is established. Thus, we had predicted that such projection should occur in the Internet condition, but only for those new acquaintances one initially likes, and not for every new partner indiscriminately. Therefore, we analyzed the degree of relation between liking and these projection tendencies separately for the Internet and the face-to-face interaction conditions.

In the Internet condition, there was a significant and substantial correlation between degree of liking for a partner and the tendency to project attributes of an ideal close friend onto that partner (r=.51, p<.05). The identical correlation for the face-to-face meeting group was nonexistent (r=-.01). Notably, there was no relationship between liking for partner and the degree of projection of an ideal romantic partner's characteristics in either interaction condition (r=.23) in the Internet and r=.14 in the face-to-face condition). Thus, we obtained a clear tendency to project onto a liked new Internet interaction partner (but not a new face-to-face interaction partner) the qualities one hopes for in a close friendship, but not the qualities one desires in a romantic partner. In retrospect, the relative

reluctance to ascribe romantic-partner qualities is understandable given the very early stage of the relationship at which we assessed the projection effect. (That projection of the ideal is dependent upon initial liking was further demonstrated by the results of an ANOVA conducted on the number of ideal/partner content matches, which revealed no general projection differences between the Internet and face-to-face conditions independently of degree of initial liking, all Fs < 1.)

Discussion

Experiment 3 examined two key processes hypothesized to underlie the formation and development of Internet relationships. First, consistent with predictions, participants interacting with a new acquaintance over the Internet successfully presented aspects of their true selves to their partner, as measured by the degree of match between their self-descriptions and the partner's postinteraction description of them. Participants interacting face to face were no better able to convey their desired but unexpressed selves to their partner than their actual selves. Second, also as predicted, participants interacting over the Internet projected the characteristics of their ideal close friend onto their interaction partners to the extent they liked them, whereas there was no sign of such projection between interaction partners who met face to face. We believe that both of these effects of the Internet—to foster presentation of one's true self to the other person and to allow the projection of idealized qualities onto the other—are independent contributors to the greater liking found between strangers meeting on the Internet, versus face to face.

General Discussion

Carl Rogers (1951) held that people are cognizant of the fact that they are one type of person in social settings but contain within them relatively unexpressed qualities and interpersonal abilities (e.g., being witty, bratty, aggressive) that they would like to but feel unable to present to others (i.e., the "true self"). Because of the relative anonymity of Internet communication settings, including the absence of physical "gating features" in text-based, non-face-to-face interactions, we argued that one's true self is more likely to be active during Internet than face-to-face interactions. Consistent with this prediction, Experiment 1 showed that trait content related to a participant's true self was more accessible in memory following an interaction with a stranger over the Internet, compared to after a face-to-face interaction. Experiment 2 confirmed that these effects were not due merely to the participants having an expectancy of interacting in one communication mode versus the other or strategically activating one self-concept or the other because of the anticipated communication mode.

Experiment 3 replicated the finding that people like each other better when they meet first over the Internet versus face to face (McKenna et al., this issue) and delved further into the reasons for this phenomenon. We examined the ways that

individuals *present* themselves to their new partner as well as how they *project* their hoped-for qualities onto that partner. As predicted, those who interacted over the Internet were more successful than the other participants in presenting their true self to the partner, as there was a significantly better match between the partner's description of the participant and the participant's own true-self description than with his or her own actual-self description. Thus, as expected, compared to face-to-face interactions, people are better able to present, and have accepted by others, aspects of their true or inner selves over the Internet.

We also predicted and found that there was a greater tendency to project one's ideal or hoped-for partner qualities onto those whom one initially meets and likes over the Internet. There was a strong and significant correlation between liking and the degree of match between one's description of the ideal close friend and one's own description of the partner's characteristics for those who interacted over the Internet, but a near zero correlation between these measures for those who met and interacted face to face. We believe that this projection tendency over the Internet, facilitated by the absence of the traditional gating features that dominate initial liking and relationship formation, is a contributor to the establishment of close relationships over the Internet. Believing that one's partner possesses such idealized qualities also has a way of becoming a self-fulfilling prophecy; it is well-established that treating one's partner with such expectations and assumptions has the effect of producing those very behaviors and qualities (see Murray et al., 1996; Snyder, Tanke, & Berscheid, 1977; Walther, 1996).

Implications for Policy

The present findings have identified two important and unique qualities of Internet (compared to face-to-face) communication: (1) that by its very nature, it facilitates the expression and effective communication of one's true self to new acquaintances outside of one's established social network, which leads to forming relationships with them; and (2) that once those relationships are formed, features of Internet interaction facilitate the projection onto the partner of idealized qualities. In fact, these are precisely those features that previous research has determined to be critical for the formation of close, intimate relationships: Internet communication enables *self-disclosure* because of its relatively anonymous nature (e.g., Derlega et al., 1993), and it fosters *idealization* of the other in the absence of information to the contrary (e.g., Murray et al., 1996).

Like Rogers, we believe that being able to express one's true self is a positive thing; so too is forming rich and meaningful relationships with other people and expanding one's sphere of friends. At the same time, these features of Internet communication are powerful influences that should not be taken lightly. They can cause feelings of closeness and intimacy to occur at breathtaking speed (see McKenna et al., this issue), and this can be a double-edged sword. Even for people who are not currently looking for friends or romantic partners, these features of

Internet communication are likely to be seductive. Before one realizes it, one can find oneself in a friendship or intimate relationship that one wasn't looking for and that in fact causes complications and difficulty within an established social circle and home life. People in all cases—even those who are looking for new close relationships—need to distinguish the positive feelings about the relationship that are due to its Internet nature (e.g., the satisfaction of expressing the true self) from those due to the relationship itself.

Anyone (such as a well-meaning counselor or therapist) who might be considering advising his or her clients, based on the present findings, to engage in anonymous Internet interactions should provide caution and guidance as to the seductive nature of expression of the true self and the rose-colored glasses through which we tend to view our Internet partners. We worry in particular about the lonely and socially anxious, because they are the most highly motivated to find friends and romantic partners—and our Experiment 3 results show that the projection effect has a motivational basis.

Therefore, our first piece of advice to Internet users is: Take it slow. Happily, it would seem that most already do. They move their virtual close relationships through a series of smaller steps—Internet chat, telephone, initial face-to-face meeting—into their real-life social network of family and friends (McKenna et al., this issue).

And beyond keeping one's head on straight about the reasons for potentially strong feelings toward Internet relationship partners, our second piece of advice would be to make sure that any relationship is founded on shared interests, goals, and values: the factors that contribute to durable, long-lasting friendships (see McKenna & Bargh, 2000). Again, it seems that many if not most Internet users know this too: McKenna et al. (this issue) found that close Internet relationships are at least as durable as those formed face to face and (also reassuringly) that many of those who formed them were socially anxious or lonely to begin with (McKenna et al., this issue). How important it must be to lonely schoolboys or -girls to have Internet friends who like and accept them—as long as their parents pay just as much attention to their Internet friends as to their non-Internet friends (see Gross, Juvonen, and Gable, this issue).

So if a counselor, therapist, or parent adds to his or her advice that the client or child interact not just anywhere on the Internet (such as in a random chat room) but in venues in which he or she is likely to find others with similar and identity-important interests (e.g., teen idols, gournet cooking, liberation theology), this will help found any relationship on solid ground. After all, being seduced into a rewarding, long-lasting relationship is not a bad thing.

Conclusions

In closing, we believe along with Turkle (1995) that the Internet affords a panoply of interaction domains in which alternative forms of the self can be

expressed. But we would add to this that these acts of self-expression—in particular expression of one's true self—also have important consequences for establishing liking, rapport, and bonds of understanding with other people. The present findings indicate that psychological self-processes are likely to play a central role in the social life of the Internet.

References

- Altman, I., & Taylor, D. A. (1973). Social penetration: The development of interpersonal relationships. New York: Holt, Rinehart, and Winston.
- Anderson, N. H. (1968). Likableness ratings of 555 personality trait words. *Journal of Personality and Social Psychology*, 9, 272–279.
- Bargh, J. A., & Chartrand, T. L. (2000). A practical guide to priming and automaticity research. In
 H. Reis & C. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 253–285).
 New York: Cambridge University Press.
- Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (4th ed., pp. 680–740). New York: McGraw-Hill.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. Psychological Bulletin, 116, 457–475.
- Cooley, C. H. (1902). Human nature and the social order. New York: Scribners.
- Derlega, V. L., & Chaikin, A. L. (1977). Privacy and self-disclosure in social relationships. *Journal of Social Issues*, 33, 102–115.
- Derlega, V. L., Metts, S., Petronio, S., & Margulis, S. T. (1993). Self-disclosure. London: Sage.
- Goffman, E. (1959). The presentation of self in everyday life. New York: Doubleday.
- Gollwitzer, P. M. (1986). Striving for specific identities: The social reality of self-symbolizing. In R. Baumeister (Ed.), *Public self and private self* (pp. 143–159). New York: Springer.
- Hatfield, E., & Sprecher, S. (1986). Mirror, mirror: The importance of looks in everyday life. Albany: State University of New York Press.
- Higgins, E. T. (1981). The "communication game": Implications for social cognition. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), Social cognition: The Ontario Symposium (Vol. 1, pp. 343–392). Hillsdale, NJ: Erlbaum.
- Higgins, E. T. (1987). Self-discrepancy theory. Psychological Review, 94, 1120-1134.
- Jung, C. G. (1953). Two essays in analytical psychology (trans. R. F. Hull). New York: Pantheon.
- Laurenceau, J.-P., Barrett, L. F., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology*, 74, 1238–1251.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63–78.
- Markus, H., & Nurius, P. (1986). Possible selves. American Psychologist, 41, 954-969.
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 from cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Bulletin*, 4, 57–75.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is blind, but prescient. *Journal of Personality and Social Psychology*, 71, 1155–1180.
- Pennebaker, J. W. (1990). *Opening up: The healing power of confiding in others*. New York: Morrow. Rogers, C. (1951). *Client-centered therapy*. Boston: Houghton-Mifflin.
- Rubin, Z. (1975). Disclosing oneself to a stranger: Reciprocity and its limits. *Journal of Experimental Social Psychology, 11*, 233–260.
- Snyder, M., Tanke, E. D., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology*, 35, 656–666.
- Swann, W. B., Jr. (1990). To be known or to be adored? The interplay of self-enhancement and self-verification. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition* (Vol. 2, pp. 408–448). New York: Guilford.

Turkle, S. (1995). Life on the screen: Identity in the age of the Internet. New York: Simon & Schuster. Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. Human Communication Research, 23, 3–43.

Zajonc, R. B. (1960). The process of cognitive tuning in communication. *Journal of Abnormal and Social Psychology*, 61, 159–168.

JOHN A. BARGH is Professor of Psychology and Director of the Graduate Program in Social-Personality Psychology at New York University, where he has been on the faculty since receiving his PhD in Social Psychology from the University of Michigan in 1981. He is the editor of four books and the author of over 100 publications focusing mainly on the role of nonconscious influences on emotion, judgment, and social behavior. He is a recipient of the Early Career Contribution Award from the American Psychological Association and a John Simon Guggenheim Memorial Foundation fellowship.

KATELYN Y. A. MCKENNA is Assistant Research Professor in the Department of Psychology at New York University. She received her BA with honors from Tulane University and her PhD from Ohio University in 1998. Her research interests focus on relationship cognition and social identity processes, especially as these unfold over the Internet.

GRAINNE M. FITZSIMONS is a graduate student in the Social-Personality Program in the Department of Psychology at New York University. She earned her BA with honors in psychology from McGill University in 1999. Her research interests focus on the role of nonconscious motivations in close relationships and in interpersonal behavior more generally.