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9

The Self, Online

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The Internet offers many venues for social interaction, from topical newsgroups and chat rooms to electronic mail and interactive games. More and more, Internet entrepreneurs are discovering that although people do use it as an information source, much like a fabulous home library, the most popular use of the Internet is to interact with other people. Social interaction has become the number one home use of the Internet (Kraut, Mukopadhyay, Szczypula, Kiesler, & Scherlis, 1998; Moore, 2000). Nearly 80% of those going online in a typical day in 2000 did so in order to send an e-mail to another person (Pew Internet Report, 2000). And access to (and therefore social interaction on) the Internet is no longer solely a North American phenomenon; according to the most recent Nielsen-NetRatings survey, 33% of homes in the Asia-Pacific region now have Internet access, and 25% of European homes do so ("Net access growing," 2001); and although access in Latin America and Africa currently lags behind, it is growing at a rapid rate (Tomlinson, 2001).

With all of these electronic venues available for interaction, combined with people's evident motivation to use the Internet for that purpose, it is to be expected that individuals will meet each other there for the first time, and thereby make new acquaintances. One of the most important current concerns with the explosive growth of the Internet has been the quality of these relationships, and whether they are of lower or impoverished quality compared to "real", face-to-face relationships. Some have described 'virtual' interactions as being of lower quality, people talking online with relative strangers in superficial relationships, taking time away from the deeper discussion and face-to-face comradeship of their relationships with family and friends (e.g., Putnam, 2000). This weakening of social ties would be to the detriment of the social fabric of society as well as the psychological well being of the individual (Kraut, Kiesler, Mukhopadhyay, Scherlis, & Patterson, 1998; Nie & Erbring, 2000).

Not surprisingly, then, there has been much discussion in both the popular

and the scientific press about this issue, with front page newspaper coverage given to the conclusions of some researchers that Internet use causes people to become lonely and depressed, and more distant from family and friends (e.g., Harmon, 1998; Kraut, Patterson, Lundmark, Kiesler, Mukopadhyay, & Scherlis, 1998; Markoff, 2000; Sleek, 1998). At the same time, however, other published findings show that Internet users believe that the personal relationships formed there are just as close, meaningful, and rewarding as those they have formed off-line, and that a substantial percentage of Internet users had formed a close, even intimate relationship with someone they met initially over the Internet (McKenna, Green, & Gleason, 2002; Parks & Floyd, 1995). How can this apparent contradiction be resolved?

IS THE INTERNET HARMFUL TO YOUR MENTAL AND SOCIAL HEALTH?

We believe that the seeming contradictions in the existing literature on the quality of Internet social life are due to several reasons. One, as pointed to recently by Kraut, Kiesler, Boneva, Cummings, Helgeson, and Crawford (2002), is that the population of Internet users has changed dramatically over the past 10 to 15 years. Originally the province of a small number of computer programmers, then a larger but still select group of academics, today the typical Internet user is just that – more typical of mainstream society. Thus depending on when a study of "Internet users" was conducted, the characteristics of the population studied are potentially quite different.

A second, and related possible reason for the different findings is that there have been actual differences between the various samples of "Internet users" studied. Kraut et al.'s (1998) HomeNet study, for example, followed a convenience sample of local Pittsburgh residents who had never owned a computer before, so they were clearly new and inexperienced Internet users; McKenna and Bargh (1998) and McKenna et al. (2002), on the other hand, studied samples of Internet newsgroup posters and readers, who were likely more experienced and knowledgeable about the Internet than the general population. As Howard, Rainie, and Jones (2001) have recently concluded in their review of the first decade of the Internet, there is no longer any such thing as the "average Internet user", thus caution should be exercised in generalizing findings from any particular sample.

Thirdly, different researchers have focused on (at least) three different kinds of outcomes, but have tended to talk about them as if they were all measuring the same thing. One outcome that has been studied is that of the quality of the average or typical Internet *interaction* compared to the typical face-to-face interaction; a second is that of the quality of the *relationships formed* on the Internet versus in 'real life'; and a third is the *psychological and social effects* of social interaction on the Internet. Apparent contradictions between studies can thus occur because the pattern *across* these different dependent variables is not

consistent (i.e., it is not the case that the Internet uniformly produces better or worse outcomes). Happily, however, thus far the evidence *within* each outcome appears to be.

Quality of the Average Internet Interaction

To date, there is consistent evidence that, overall, Internet interactions are not of the same quality as face-to-face interactions. Cummings, Butler, and Kraut (in press) concluded that online interactions are, in general, of weaker strength and poorer quality than off-line or face-to-face interactions, based on surveys in which employees of an international bank, or college students, described their working or personal relationships (respectively) conducted via e-mail. On average, the electronic interactions were rated as being less useful for building or sustaining relationships than face-to-face meetings. In a further study, new Internet users reported feeling less close to people they kept up with by e-mail than those with whom they stayed in contact through face-to-face or telephone conversation.

Thompson and her colleagues (see Thompson & Nadler, 2002, for a review) have reached a similar conclusion based on a program of research comparing the success of online versus face-to-face business negotiations – for a variety of reasons, it is more difficult and less successful to conduct business negotiations electronically versus in person. It appears based on the currently available evidence that online interactions are on average less fulfilling and useful than face-to-face interactions.

Can Close Personal Relationships Form Over the Internet?

The question of whether the average interaction is of a different quality over the Internet versus in-person is not the same as that of whether close, personal relationships can form and develop over the Internet, and whether these relationships, once formed, are as rewarding and of the same quality as the face-to-face relationships one forms and maintains. After all, it is hardly the case that all of one's face-to-face interactions develop into close relationships, nor are all face-to-face interactions of high quality (e.g., those with gym buddies or grocery clerks).

The first evidence on this point came from a survey of 176 Internet users by Parks and Floyd (1995). Respondents in that survey reported that the personal relationships they had formed there were just as close and meaningful as their traditional, face-to-face relationships were. A separate survey of over 500 randomly contacted Internet users confirmed that Internet relationships could become quite close, and even 'real' over time. McKenna et al. (2002) found that a substantial proportion of the Internet users in their sample had developed close, even intimate relationships over the Internet. Interestingly, these

respondents also reported that the Internet relationships had become close quite rapidly, relative to the speed with which their face-to-face close relationships had formed. A goodly number of these relationships had become so close, in fact, that over 20% of respondents reported having become engaged to, married, or were currently living together with a person they had met on the Internet. (We will describe these findings in more detail in a later section of this chapter.) Thus, not only is it possible for close and rewarding relationships to develop over the Internet, people seem to want to bring them out of the electronic realm and into their real-world, face-to-face life.

These findings are distinct from the evidence about the quality of the average Internet interaction, described above. The Parks and Floyd (1995) and McKenna et al. (2002) findings concern not the average Internet interaction, but the quality of relationships *once formed* over the Internet. Evidence on that score suggests that once they are established, Internet relationships have the potential to attain the same high quality and closeness as do face-to-face relationships.

Does Using the Internet Make One Sad and Lonely?

In their 'HomeNet' study tracking new Internet users, Kraut, Patterson, et al. (1998) assessed the effects of Internet use over a two-year period on psychological adjustment variables such as depression and loneliness, as well as social variables such as number of close friends. They reported small but significant regression coefficients between the number of hours online per week and self-reported depression and loneliness scores, and with the size of one's local social circle, leading the researchers to conclude that Internet use causes people to become more lonely and more depressed. (In actuality, given the absolute scale values of the means, what was found was that greater Internet use was associated in their sample with being slightly less happy, and having many but one or two fewer people in one's social network.) Yet one effect of Internet use in the original study was actually to significantly increase the size of the average participant's *total* social circle of friends, because of the additional relationships formed with people outside of the local (Pittsburgh) area.

Most importantly, however, a recent 3-year follow-up survey of the same participants (Kraut et al., 2002) showed that the original negative effects had subsequently disappeared. In addition, findings from a new sample of Internet users showed overall *positive* effects of using the Internet on social involvement and well-being. Thus the general take-home message of the complete HomeNet study is that there are no deleterious effects of Internet use on psychological or social well-being.

In a different study that also received prominent media coverage, Nie and Erbring (2000) in a press release reported results from a survey of over 4,000 Internet users. One of their major conclusions was that Internet use causes people to spend less time with family and friends. However, the full report of the study (as opposed to the press release) revealed that this conclusion was based

on only the 36% of the sample who used the Internet more than 5 hours per week. Of this group, 12%—or only 4.3% of the total sample—reported spending less time with friends and family as a result of using the Internet; thus over 95% of the total sample did not report spending any less time. Even among the heaviest users of the Internet, 88% reported no change in amount of time spent with family and friends as a consequence. In fact, the recent Kraut et al. (2002) study found that greater amounts of Internet use was related to spending more, not less, time with one's family and friends. Taken together, then, these studies show that for the vast majority of those surveyed, using the Internet does not make one sad or lonely, or cause damage to one's existing personal relationships.

THE PERSON x INTERNET INTERACTION

We hope (and believe) that the initial wave of worries about the Internet's effects on society has run its course. First the Internet was said to be "awash in pornography", next to cause "Internet addiction" (see Young, 1998), and finally that it was producing a new, "lonely crowd." But the Internet does not— can not—by *itself* cause sadness or loneliness. Nor does it directly produce happiness and popularity. Rather, the effects its use have on a given individual's psychological and social well-being depend upon that individual's goals and purposes in using it in the first place (McKenna & Bargh, 2000), and perhaps also personality characteristics such as extraversion and introversion that are related to one's social skill level (see Kraut et al., 2002). People have reasons and motivations to use the Internet, and much research has already shown that, in many ways, they use the Internet just as they have used other communication media in the past (and present), such as the telephone and the regular post.[1] In this sense, then, the Internet is not changing social life; people are using it to do the same things that they've always done. Although we will argue below that there are in fact important differences between Internet and face-to-face social interaction—mainly related to self-presentation and self-expression— in many if not most other respects, social interaction and group functioning over the Internet follow the same rules as in face-to-face interaction.

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[1] Take, for instance, the pornography, addiction, and lonely-crowd claims about the Internet. These same charges could be leveled—and with much greater merit and force—at other recent technological innovations. The main impetus behind the purchase of video tape recorders in the 1980s, for instance, was to be able to watch sexually-oriented movies in the privacy of one's home; telephone sex lines are abundant and highly popular; a goodly number of people are 'addicted' to television (we call them 'couch potatoes'); and TV, VCRs and "home entertainment systems" have had a significant effect on reducing social involvement as well as physical and psychological health (see Kubey & Csikszentmihalyi, 1990; Putnam, 2000, pp. 228-246).

The Internet as Just Another Communication Medium

Evidence across several research domains is consistent with this conclusion. People become members of electronic social groups and these group memberships become important components of their social identity just as do memberships in real-life groups (McKenna & Bargh, 1998). Group norms of appropriate conduct emerge in electronic groups in the same way as they do in face-to-face groups (e.g., Postmes, Spears, & Lea, 1999). The same gender differences are found in e-mail as in real-life relationships: in both cases, women are more likely to maintain relationships with kin and far-flung friends and to find all relationship-related activity more gratifying, in general, than do men (Boneva et al., 2001; McKenna et al., 2002). Middle-school children use Internet chat-rooms in order to talk with the same friends they have at school, not new people they don't already know (Gross, Juvonen, & Gable, 2002). Cummings et al. (in press) and Boneva et al. (2001) similarly found that a prime motivation for using the Internet was to maintain already existing important relationships with family and friends. From these similarities in social psychological processes between electronic versus face-to-face interactions and group functioning, and the findings that people tend to use the Internet just as they do other available communication tools, Tyler (2002) concluded that the Internet is no different from other communication modes and interaction venues, with the effects of its use for the individual depending on that person's motivations and needs.

The Internet's Unique Effects on Self-Expression

At the same time, the fact that many social processes run the same way on the Internet as they do in face-to-face interaction is not to say that new technologies never have unique impacts on social life and the social fabric. As Tyler (2002) notes, the U.S. Post Office extended service to remote regions specifically in order to further unite the country. Satellite television and especially CNN have contributed dramatically to "globalization" and the spread of different world cultures like no technological advance before it (Friedman, 1999). Technological advances such as the Internet have often, historically, changed the world and the ways in which people relate to one another in fundamental ways. And the fact that, unlike television, the Internet connects people *interactively* to those in other countries and cultures makes it an additional powerful force towards globalization, and perhaps, toward the spread of democracy (Deibert, 2002).

Moreover, there is little point in studying psychological and social processes as they occur on the Internet if those processes unfold in the same way, and with the same outcomes, as in traditional, face-to-face social interaction. Therefore, researchers of the social and psychological effects of the Internet need to focus

on those aspects that differentiate it from other modes of communication and interaction. As noted above, in many ways the Internet as a communication mode and interaction venue seems to produce the same effects as are known for face-to-face interactions. But in what ways might the Internet be unique, and therefore produce new and different psychological and social effects?

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. First and foremost is the ability to be relatively *anonymous* in one's dyadic or group-level interactions. For two reasons, this enables one to express oneself and behave in ways not available in one's usual social sphere: (a) one is free of the expectations and constraints placed on us by those who know us, and (b) the costs and risks of social sanctions for what we say or do are greatly reduced. As Pennebaker (1989), Derlega, Metts, Petronio, and Margulis (1993) and others have noted, there are very real costs to disclosing negative or taboo aspects of oneself even (or perhaps especially) to close friends and family. Even socially acceptable behaviors and opinions, if they do not conform to one's usual repertoire, may produce disapproval from one's group or interaction partners (e.g., Cooley, 1902; Goffman, 1959; Rogers, 1951). These threatened sanctions create a tension and a conflict for the individual because, at the same time, people have a need to have others see them as they see themselves (Gollwitzer, 1986; Swann, 1983).

The potential for relative anonymity[2] enables a person to express aspects of self to new partners that he or she is not usually able to, because of these constraints and threat of social sanctions. Several theorists have noted that people possess multiple senses of self: Carl Rogers (1951) famously spoke of the individual's "true" or inner self, as opposed to his or her actual, public self; Markus and Nurius (1986) spoke of 'possible selves' that a person believes he or she could become if so chosen; and Higgins (1987) described 'ideal' and 'ought' versions of self that possess qualities the individual strives to or feels obligated to express, respectively. What all of these perspectives have in common is the notion that an individual has alternative senses of him or herself that are distinct from the 'actual' one usually portrayed to others. Turkle (1995) applied this idea directly to the Internet, noting that its relative anonymity and multiple arenas for social interaction provides people with a virtual laboratory of sorts in which to explore and experiment with different versions of self. As will be discussed below, we believe the particular version of self that the typical person will be

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[2] More precisely, it is not anonymity in the sense of not using one's real name that is as important for these effects on communication and self-disclosure, as the lack of *identifiability* by one's interaction partner(s) and their lack of knowledge of and contact with the other members of one's social network (Derlega & Chaikin, 1977). For example, a person can use his or her real name on the Internet (e.g., John.Smith@isp.com) and still be relatively anonymous (in the sense of not being identifiable) if the interaction partners have no other knowledge about that person, such as where he or she lives and what he or she does for a living. Conversely, one can be nameless in a face-to-face interaction but still identifiable later by sight.

most highly motivated to explore and express over the Internet will be his or her 'true' self, defined by Rogers (1951) as those inner-experienced qualities and aspects of personality and identity which the person is not able to express easily in everyday (face-to-face) social interactions.

The second unique way in which the Internet facilitates self-expression is that it affords people the opportunity to find others who share important aspects of self such as hobbies, sexual predilections, political beliefs, and so on, and with these similar others be able to fully express these important parts of oneself and have them socially validated (see Howard et al., 2001; McKenna & Bargh, 1998). There are tens of thousands of topical newsgroups, plus community mailing lists, chat rooms, web site bulletin boards, and so forth, covering every topic and interest imaginable. Ferret owners, butterfly collectors, and fringe political ideologues alike can now find fellow travelers on the Internet. Membership and participation in such groups, and thereby sharing these important aspects of self with like-minded others, has powerful effects on one's identity and self-concept; so much so that even if they are socially taboo one is strongly motivated to 'come out' about them to close family and friends for the first time (McKenna & Bargh, 1998, Studies 2 and 3). The Internet is unlike any previous communication medium in that it enables one to find these other people around the world, where otherwise one would not be able to find similar others (certainly not so readily).

For these two reasons, the Internet as a communication medium is a potentially powerful means by which people can express their inner or 'true' selves, and to meet social and psychological needs that are not being met in 'real life.' In the next section we delineate the consequences of this important quality of Internet social interaction for the development of close relationships.

THE ROLE OF THE 'TRUE SELF' IN INTERNET RELATIONSHIP FORMATION

Our model of Internet close relationship formation—who will form them and why—consists of three causal steps. First, for those individuals who locate their 'true self' on the Internet—feeling that they are best able to express and be who they really are in Internet interaction and communication venues—associative connections will naturally be formed between the true-self concept and the mental representations of one's Internet relationship partners. Second, the very fact of presenting and expressing one's true-self to the partner importantly contributes to the formation of a close and meaningful bond with that person, including greater liking, in part because of the influence of such self-disclosure on the development of intimacy. Third, because these relationships have been incorporated into one's true-self concept, they attain the status of a new and important aspect of one's identity, and therefore the person will be motivated to make these relationships a "social reality" and bring them into his or her 'real life'.

Important Relationships Become Linked to the Self

Several contemporary models of the self see it as embedded or linked with representations of other people—for instance, with the identity important groups to which the individual belongs (e.g., Deaux, 1996; Tajfel & Turner, 1986) or to the significant individuals in one's life (e.g., Baldwin, 1997; Chen & Andersen, 1999). These group memberships and relationships can become important to the person's sense of identity, because they locate or identify the person in the context of his or her social network. Identification is more than mere membership in a social category; a Vancouver schoolteacher of Asian background, for example, belongs to several group categories, but may define himself strongly as a Canadian and feel indifferent about his occupation (see Deaux, 1996).

Similarly, according to recent "relational" models of the self, to the extent relationships with other individuals and also group memberships become important defining features of oneself, then associational mental connections will tend to form between the self concept and the representations of those external social entities. In this manner the mental representations of these groups and significant individuals are said to become incorporated into the self-concept. In short, the more important the relationship or group membership to one's identity, the more likely it will become associated to the self and the stronger that association between self and other will be.

Internet Relationship Formation: Free to Be the "Real Me"

But what determines whether Internet-formed relationships will become this important to the person? Given the above logic, the online activation of the inner or true self should be an important mediator. That is, in which of the two interaction domains (online versus face-to-face) one feels better able to express one's inner or true self will be the domain where one will tend to form these identity-important relationships.

As an example, take the case of stigmatized or marginalized identities—aspects of self that a person would be embarrassed about were his or her family and friends to find out about them. Certainly these qualify as 'true' (as opposed to actual) self aspects as they are important to the individual but he or she is not able to express them in normal social interactions. McKenna and Bargh (1998) found that when these individuals participate in Internet newsgroups devoted to these stigmatized identities, they tend to incorporate that identity into their self concept, indicated by greater self-acceptance of that identity. Self acceptance was measured both by ratings of self-acceptance of this taboo self aspect, and also by whether these individuals became more willing to tell family and close friends about it for the first time (thus showing that it had

become less negative and embarrassing for them).

Theoretically, the potential identity-transforming nature of the 'online self' is not restricted to socially sanctioned, stigmatized aspects of the self. In other words, when the true-self concept is active during Internet interactions, we would expect a greater likelihood of those relationships becoming important aspects of identity, and to be incorporated into one's real life, compared to others who are able to express their true self offline (i.e., in traditional social interactions).

This prediction was tested by McKenna et al. (2002) through structural equation modeling of survey responses furnished by hundreds of randomly selected Internet newsgroup members (i.e., they had posted messages to one of a variety of topical newsgroups). The critical mediator of whether the respondent would form close relationships over the Internet was his or her responses to a "Real Me" scale (see Table 9.1). This contained several items having to do with whether respondents felt more their true selves during Internet as opposed to face-to-face interactions—that is, better able to express aspects of self and personality there than in offline social life. Compared to those who reported feeling more their true, inner self in traditional social interaction settings, those who located their true selves on the Internet were significantly more likely to have formed close and intimate online relationships—and to have taken steps to bring those partners into their face-to-face interaction world.

Table 9.1. The "Real Me" scale.

1. Do you think you reveal more about yourself to people you know from the Internet than to real life (non-'Net) friends? ____ Yes ____ No

2. Are there things your Internet friends know about you that you cannot share with real life (non-'Net) friends? ____ Yes ____ No

3. To what extent to you tend to express different aspects of yourself to others on the Internet than you do in real life?

1	2	3	4	5	6	7
Not at all						A great deal

4. To what extent would your family and friends be surprised if they read your e-mail and/or newsgroup postings?

1	2	3	4	5	6	7
Not at all						A great deal

5. Where do you feel better able to be your real self?

1	2	3	4	5	6	7
Real Life (offline)						Internet (online)

Relationship Closeness via the Disclosure of the True Self. Why should activation and expression of the true self during Internet interactions lead to close relationship formation? One possible reason is the act of disclosing to the other person these important, "inner" aspects of self which one is not usually able to express. Self-disclosure is an important ingredient in the development of closeness and intimacy, as it entails being able to express and have accepted one's inner or 'true' feelings and personality (Derlega et al., 1993; Laurenceau, Barrett, & Pietromonaco, 1998). Thus, those who more consistently present their inner or true self over the Internet should be more likely than others to develop close relationships there.

McKenna et al. (2002, Study 3) therefore tested whether undergraduates randomly assigned to meet each other for the first time over the Internet (via a chatroom) would tend to like each other more and develop a closer relationship (although the interaction only lasted for 20 minutes) compared to those assigned to meet face-to-face. As predicted, those meeting initially on the Internet both liked each other better and felt that they had developed a closer relationship (e.g., knowing the other person better) than did those who met face-to-face. This effect held even when the two participants met each other twice, once over the Internet and once face-to-face, unaware that it was the same person each time. In line with the posited role of self disclosure, there was a significant correlation between how well the participant felt he or she had gotten to know the interaction partner, and his or her degree of liking for the partner. There was no such correlation in the face-to-face interaction conditions.

This effect of Internet communication to facilitate self-disclosure and produce greater liking between the interaction partners occurred for undergraduates who had not been preselected for the study on any basis, including whether they located their 'Real Me' on the Internet versus real life.[3] Thus there is a "main effect" of Internet communication on the average person, one that facilitates relationship formation, and which is distinct from the effect of locating one's true self on the Internet on the development of close relationships.

Online Expression of the True versus Actual Self-Concepts. Although this finding is consistent with the idea that the Internet fosters faster and closer relationship development because of the greater involvement of the true self online, it does not offer direct evidence of the role played by the true-self concept. Therefore, we (Bargh, McKenna, & Fitzsimons, 2002) conducted additional laboratory experiments in order to assess the degree to which the true self, as opposed to the person's *actual* self concept (the person they feel they actually are with other people in typical social interactions; see Higgins, 1987), was more accessible and activated while interacting online versus offline. In Study 1, participants first listed the characteristics of their actual self and also

[3] As shown in Table 9.1, the Real Me variable concerns past and existing experience with online relationships; the average survey respondent in the McKenna et al. (2002) study was in his or her mid-30s. Most of the undergraduates who participated in the laboratory experiments described here were too young to have had much if any experience with online relationships and so the Real Me scale was not as applicable to them.

their true or inner self. On this task, they listed the traits or other characteristics (maximum of 10) that they believe they actually possess and express to others in social settings (the actual self measure) and, separately, those that they possess and would like to be able to express but are not usually able to in social settings (the true self measure). They also listed the qualities they'd ideally like a good friend to possess.

Participants then interacted with a cross-sex partner either over an Internet chat-room, or face-to-face. Then they privately gave a free response description of their partner. We coded these descriptions of one's partner for matches with the partner's own description of both his or her actual self and true self. An analysis of variance on the numbers of these matches revealed the predicted interaction, such that over the Internet, participants successfully conveyed more true-self features than actual-self features, whereas the opposite was true of the face-to-face interactions. As assessed by their partner's own candid descriptions of them, participants expressed more of their true than their actual selves over the Internet.

Motivated Projection of Ideal-Partner Qualities. In the Internet condition only, participants showed a tendency to *project* onto their partners aspects of their ideal best friend, as assessed by the participant's ascribing to their partner, in their free response descriptions of him or her, features the participant had previously listed as ideal, hoped-for qualities. Importantly, this projection occurred only when the participant reported liking the partner; when there was no initial liking, no such projection occurred. In fact, the degree of projection (number of matches) was significantly correlated with degree of liking—indicating a motivated perception of the interaction partner. That is, the more the initial liking, the more the participant was motivated to see his or her partner in an idealized way.

This projection tendency is probably an important reason for why Internet relationships develop closeness more rapidly than do face-to-face relationships. Murray, Holmes, and Griffin (1996) found that for (traditionally formed) relationships, the extent to which an individual idealized his or her partner predicted the closeness, intimacy, and stability of that relationship. Once again, in our Study 1, there was no such correlation between initial liking and projection of ideal qualities in the face-to-face condition, showing that Internet interactions uniquely foster such idealization and hence greater relationship closeness.

Online Accessibility of True Versus Actual Self-Concepts. In Study 2, we measured the relative activation or accessibility in memory of the actual versus the true-self concepts, during face-to-face as well as Internet interactions. We reasoned that the true-self concept should be more accessible during an Internet interaction, and the actual-self concept relatively more accessible during a face-to-face encounter. Participants again listed the qualities of their actual and their true selves, following which they interacted with a new acquaintance either online or face-to-face. Following the interaction, each participant individually engaged in a speeded self-judgment task, modeled after the "me/not-me"

reaction time procedure of Markus (1977). In this task, participants responded with either the "me" or the "not me" key on each trial, as quickly as possible, according to whether they considered the adjective presented on the computer screen in front of them to be self-descriptive. Embedded in a larger list of positive and negative adjectives were the participant's actual and true self characteristics they had given earlier. The pattern of mean response times bore out the predictions: content related to the participants' actual self was more accessible following a face-to-face interaction than following an Internet interaction; content related to the participants' true self was more accessible following an Internet interaction than following a face-to-face interaction.

Additional conditions shed additional light: it did not matter for the obtained differential accessibility effects whether the interaction lasted 5 minutes or 15 minutes—thus the effect was not an artifact of possible differences in the amount of information that can be conveyed in one communication mode versus the other. That the true self becomes more activated than the actual self after just 5 minutes of Internet interaction suggests that this interaction modality has a nearly immediate effect on bringing forth a person's true self.

Another condition showed that the true self did not become more accessible (or alternatively, the actual self did not become inhibited or less accessible) when participants merely anticipated an Internet versus a face-to-face interaction but did not actually have one. Thus the self-concept accessibility effects were shown to be a consequence of the Internet interaction experience itself. Importantly on that note, all participants, and a control group that was not led to expect any interaction at all, showed greater accessibility of their actual than their true self concept. Thus, the default state appears to be for the actual self to be more accessible for use than the true self-concept.

Finally, that the greater expression of the true self produces relatively greater liking and relationship closeness in these studies is not attributable to the possibly greater positivity of the content of the true compared to the actual self. If it were the case that the true-self descriptions were more positive in content than the actual-self descriptions, then the liking and closeness results might not demonstrate anything fundamentally important about disclosing and sharing one's inner qualities, merely that the qualities expressed were more positive than otherwise. But a comparison of the content of the true versus actual self descriptions showed if anything that the opposite was true—computing the mean likability of the true versus actual self descriptions based on normative ratings of trait adjective likability revealed that the true-self content was significantly less positive than was the actual-self content (but note, not negative: both means were on the positive side of the scale). In other words, the effect of expressing the true-self concept on increased liking and relationship closeness was strong enough to overcome the fact that the content of what was being expressed was less positive than was that of the actual-self concept.

Important New Self-Aspects Become a Social Reality

People don't keep new, important changes to their identity to themselves; rather they want to make these new aspects a *social reality* by sharing them with their colleagues, family, and friends (Gollwitzer, 1986; Wicklund & Gollwitzer, 1982). We want those around us to accept and validate for us the important features of our inner identity, as soon as we have accepted and incorporated them within our self concept and social identity. Thus, new acquaintances and relationships that begin over the Internet—whether in e-mail exchanges with fellow electronic interest-group members or business colleagues, in chat rooms, or in interactive games—have the potential to move into 'real life' should they become important enough to the individual.

McKenna et al. (2002) did in fact find that when a close relationship had been established over the Internet, people tended to eventually bring it into their real life. They did this by first calling their partners on the phone, then meeting them in person, and in many cases, moving in with them, becoming engaged, and getting married. As shown in Table 9.2, the frequencies with which the survey respondents took these real life steps are rather striking. (For instance, 5.3% of respondents had married someone they initially met online.) And in each case, those who located their true self on the Internet in an absolute sense engaged in significantly more of these behaviors than did the other respondents.[4] Moreover, a two-year followup survey found that these close friendships and intimate relationships were remarkably durable: 67% of acquaintanceships, 79% of friendships, and 71% of romantic partnerships in 1997 were still intact in 1999. The stability of these romantic partnerships is comparable if not greater than that found in previous studies of partners who initially met face-to-face after the same time interval and using the same criterion of stability (56%; see Hill et al., 1976).

CONCLUSIONS

Popular notions of the Internet as a social trap that replaces rich and rewarding 'real' relationships with weak and impoverished 'virtual' ones are largely incorrect. Although one's average e-mail interaction might be less rewarding or useful than one's average face-to-face interaction (e.g., Cummings et al., in press), this is tangential to the question of whether the relationships one forms over the Internet can become as important and satisfying as do ones formed out

[4] We classified respondents in this absolute way instead of relative to each other (e.g., a median split on scale scores) because otherwise all or most respondents could have considered their true selves to reside offine (or, conceivably, online), merely to varying degrees. Approximately 25% of respondents located their true self online, 25% located it off-line, with the 'tweeners comprising the rest of the sample.

of traditional, offline meetings. The research we have reviewed in this chapter strongly suggests they can, and do—with the critical mediator of this tendency the greater accessibility and expression of the individual's inner or true self on the Internet compared to face-to-face interactions. First, features of the Internet communication setting make it more likely that the true-self becomes active for

Table 9.2.
Location of "Real Me" and Probability of Online and Offline Activities With Internet Relationship Partner (McKenna et al., 2002, Study 1)

	Location of "Real Me"				
Behavior	Pure Off-Line	'Tweeners	Pure Online	$F_{(5, 240)}$	p
E-mail	97%	100%	99%	2.48	<.086
Talk in IRC	35%	52%	63%	9.69	<.0001
Exchange Pictures	37%	61%	65%	14.06	<.0001
Exchange Letters	35%	59%	61%	12.37	<.0001
Telephone	46%	68%	68%	10.33	<.0001
Meet in person	42%	56%	62%	5.72	<.0035
Have an affair	8%	20%	30%	11.34	<.0001
Become engaged	4%	9%	13%	3.33	<.037

Note. "Pure Offline" respondents answered No to both questions 1 and 2, and less than 4 to the other three questions; "Pure Online" respondents answered Yes to both questions 1 and 2 and greater than 4 to the other three questions; "Tweeners" did not consistently locate their true self in one venue or the other. IRC = Internet Relay Chat, or electronic "chat-rooms".
[†]A further 29 respondents, or 5.3% of the total sample, reported having married someone they initially met online. However, roughly half of these respondents spontaneously noted difficulty in answering the "real me" questions, because this very identity-important online relationship had now moved offline.

people in general (Bargh et al., 2002, Experiment 2). Second, there are individual differences in the extent to which an individual locates his or her true self online (McKenna et al., 2002, Study 1). Thus there is both a main effect of the Internet setting, as well as a "Person x Internet interaction," contributing to the probability that a given individual will form close relationships over the Internet.

To the extent that this true-self concept is activated during Internet interactions, it will tend to become linked to representations of those interaction partners—if instead one's true self concept is more likely to be activated during traditional interactions, then one will tend to form close relationships there and not on the Internet. Once those associative connections are formed between one's true self and relationship partners, there is a strong motivational pull to make those relationships a social reality, to bring them into one's face-to-face world. People are not content to leave important new Internet relationships