Demarginalizing the Sexual Self

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For anyone, the expression of one's particular sexuality can be difficult even within the framework of an intimate relationship. On the Internet, however, many barriers to such expression (e.g., fears of embarrassment, rejection) are absent and individuals may feel freer to express their sexual needs there. We propose a process model by which these embarrassing aspects of an individual's sexuality become demarginalized through identity-relevant sexual activity: Those barred from expressing important sexual needs in their offline relationships will be more likely to turn to the Internet to do so. Greater expression of the sexual-self online leads to increased importance of that identity and then to real-world consequences for oneself and one's relationships. We report two studies testing this model.

Sexuality is an integral and important component of self and identity, and yet it is perhaps one of most difficult aspects of self for an individual to express, to explore, and to have positively validated. Social sanctions, embarrassment, and fear of negative reactions are only some of the constraints that may hinder an individual from expressing his or her sexual orientation, fantasies, or sexual desires. However, with the emergence of Internet websites, newsgroups, and chatrooms, there are now a multitude of arenas in which an individual can explore and express aspects of sexuality without fear of "real world" repercussions.

Sexual expression, exploration, and other forms of sexual activity are thriving on the Internet. There are countless websites offering everything from sexual advice and message boards to erotic pictures, movie clips, live video feeds, and interactive forums such as chatrooms, tele-, and video-conferencing. There are thousands of electronic newsgroups and listservs that cater to every sexual interest imaginable—and even some of those that are not. At any given time of the day or night, one can find more than 8,000 chat rooms devoted to cybersex or the discussion of sexual topics in operation on Internet Relay Chat.

In a sense, the Internet has democratized access to sexually related material. Erotic bookshops and video stores can generally be found only in urban areas, often in the seedier parts of town, and with a limited offering of materials. Little erotic material has traditionally been made available that caters to women, and women have had little opportunity to discover its existence. Now, however, erotic material of all kinds is freely available to anyone with access to the Internet. Individuals can obtain, peruse, and create erotica without leaving the privacy of their own homes. They can actively interact with other people who share their sexual interests without the necessity of the other person being physically present. Not surprisingly, therefore, both men and women take an active role in online erotic activities. A recent poll conducted by MSNBC (June 9, 2000) with 9000 online participants found that 59% of the female participants in the survey were regular visitors to cybersex sites.

The fact that one can access sexually related materials and interact with others anonymously on the Internet has opened the doors even wider. Using anonymous screen names, individuals can explore and express their sexual interests with little fear that friends, coworkers, or even spouses will discover their activities. Nor can those with whom one anonymously interacts seek real world reprisals or retribution should a virtual encounter go awry, for example. Further, because a person's physical appearance is not in evidence unless he or she so wishes (by exchanging pictures or engaging in video-conferencing), a person can literally change his or her gender (known as *gender-bending*), personality, or physical description at will. As Turkle (1995) has noted, the Internet is a ripe environment for the experimentation and exploration of one's identities.

The questions that arise from all this are who will be motivated to turn to the Internet for sexual expression, and what are the consequences for the individual who does so?

Motivations Underlying Online Sexual Exploration and Expression

By motivations, we refer to sources of purposive and goal-directed behavior that serve to energize and guide action towards desired ends (Atkinson & Birch, 1970; Gollwitzer & Moskowitz, 1996; Lewin, 1951; Locke & Latham, 1990). According to classic motivational theorists, such as Lewin and Atkinson, all behavior is motivated in some way, in that it is not random but for a reason and in order to further some desired end. Motivations are enduring, chronic, and pan-situational, and find expression through situationally-appropriate goals. For instance, enduring motivations for personal safety manifest themselves in a variety of situational goals, such as acts of personal hygiene, looking both ways before crossing the street, and using a condom. In the present con

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text, we speak of two basic, enduring motivators underlying use of the Internet for sexual expression and exploration: personal safety (both physical and emotional), and sexual gratification. (It is noteworthy in this regard that these are the two central motivational manifestations of Freud's [1940/1974] concept of *eros*, or the life instinct.)

Safety. There are a number of safety issues which may serve to put a damper on one's sexual exploration and activity in the everyday world. There are a number of health and physical risks involved when one engages in one-night stands, affairs, or simply a sequence of dating relationships in search of Mr. or Mrs. Right. Sexually transmitted diseases are far from uncommon and, with the spread of the Human Immunodificiency Virus (HIV) into the heterosexual as well as the homosexual population, increasingly a risk concern for many. The possibility of an unplanned pregnancy may serve as another deterrent. With the high incidence of date and acquaintance rape, women in particular may have qualms about taking part in the singles scene (McKenna & Bargh, 1999).

In addition to physical safety concerns, there can also be quite real emotional and social risks to sexual exploration and expression, particularly if one has sexual preferences or fantasies that are culturally devalued or taboo. An individual may fear rejection not only from an existing or potential partner if his or her sexual desires are made known, but also from the real risks to one's important close relationships at home and at work (Derlega, Metts, Petronio, & Margulis, 1993, pp. 73-88; Pennebaker, 1990, chapter 9). Indeed, the perceived threat to an intimate relationship is the most commonly cited reason for not discussing one's sexual needs and preferences with one's partner (see Baxter & Wilmot, 1985). Fears of embarrassment, relationship threat, and shame were one to expose one's sexual needs are not only experienced by those who have marginalized sexual identities, but are also common for those with quite mainstream sexual preferences and needs (see Metts & Cupach, 1989). Women may fear the social sanctions that accompany acting in a manner counter to socialized gender roles (i.e., a female initiating sex, being forthright about her sexual needs and desires: Metts & Cupach, 1989).

The Internet, on the other hand, with the anonymity it affords, provides a relatively safe medium for the expression and exploration of one's sexuality. One can engage in virtual sexual expression and activity in the absence of physical safety risks and with greatly reduced emotional and social risks. Those who feel restricted by real world safety concerns may thus turn to the Internet as a means to express important aspects of their sexuality.

Frequency and Convenience. Individuals who are currently lacking satisfying sexual partnerships may turn to the Internet as a means to meet their sexual needs. Those who are currently single or in a relationship in which their sexual needs are not being met as often as they desire and in the ways in which they desire, can find willing virtual partners online at any time of the day or night, with no strings attached.

The Sexual Self Online and Social Identity

McKenna and Bargh (1998) conducted two studies with participants in Internet groups devoted to stigmatized aspects of identity—that is, aspects of self that were potentially embarrassing and therefore tended to be kept secret even from close family members and friends (e.g., homosexuality, bondage, fringe political groups). The anonymity of Internet interactions allowed these individuals to find similar others who shared the stigmatized aspect, where finding similar others in non-anonymous real-life settings is virtually impossible. McKenna and Bargh (1998) found that a model of social identity transformation developed originally for real-life (non-Internet) group memberships (e.g., Deaux, 1996; Ethier & Deaux, 1994) held for these Internet group identities as well. The more that Internet group members participated in the group (through posting messages to it), the more they incorporated the previously taboo aspect of identity into their self-concept. As a direct result of their Internet group participation these individuals reported greater feelings of self-acceptance of the stigmatized aspect and also had a greater tendency to "come out," telling important friends and family members about this previously hidden self-aspect for the first time in their lives.

Study 2 of McKenna and Bargh (1998) focused on individuals with marginalized sexual identities, and so is particularly relevant to the present concerns. Participants in this study were drawn from newsgroups that focused on socially taboo sexual topics: bondage, sexual spanking, and homosexuality. In harmony with Deaux's (1996) model, active participation in the particular newsgroup was necessary for increases in the importance of the stigmatized sexual identity to occur and the garnering of the benefits resulting from increased identity importance. Active participants (i.e., *posters*) found the newsgroup itself and interaction with other group members to be more important to their lives than did those who only read the posts (i.e., *lurkers*). Posters spent more time per day in the newsgroup than did lurkers and the perceptions other members held of them mattered more to them than to their lurking counterparts. Lurkers—those group members who did not actively participate—were mainly left out of this first, crucial part of the process in which sexual identities were transformed. The power of the identity transformation effect is underscored by the fact that sexual preferences and orientations are often formed early in life, and the mean age of participants was 37 years. Nonetheless, involvement in their particular Internet newsgroup caused these people to reveal something to close friends and family members that they had kept hidden from them as an embarrassing secret well into their adult lives.

A recent study conducted with those who have mainstream, nonmarginalized identities (McKenna, Green, & Gleason, 2002) found that the same process that occurs for group-level bases of an individual's social identity also occurs for individual relationship bases for identity. In line with recent relational models of self (see Baldwin, 1992;

Chen & Andersen, 1999), individuals who formed important relationships over the Internet incorporated those relationships into their self-concept. A key mediator of this process was whether a person felt better able to express or "be" his or her "true" self (Rogers, 1951) on the Internet than in real life. The true self is comprised of those attributes an individual feels he or she possesses and would like for others to perceive but, for whatever reason, is generally unable to express and have acknowledged. Those who "located" the self online—that is, felt better able to express important aspects of self on the Internet than in real life—not only formed more intimate and enduring online relationships but also moved those relationships into their offline lives—exchanging letters, talking on the telephone, meeting in person, becoming engaged, and moving in with one another.

In line with self-completion theory (Brunstein & Gollwitzer, 1996; Gollwitzer, 1986; Wicklund & Gollwitzer, 1982), individuals in both sets of studies were highly motivated to make new, important aspects of their identity a "social reality" by incorporating new and important relationships into their everyday lives. Thus, in "coming out" to family and friends about the stigmatized aspects of identity, making what could have been left private and anonymous on the Internet a social reality, the Internet newsgroup members demonstrated how important the group was to their sense of identity. Similarly, those who located their true self on the Internet were motivated to bring this online identity into their real lives, along with the relationships that accompanied it.

In general, individuals tend to express more aspects of their true selves when they interact with others on the Internet than when they interact in person. Bargh, McKenna, and Fitzsimons (2002: Study 3) conducted a laboratory study comparing stranger dyads who communicated either face to face or in an Internet chat room. Results from the study indicate that those who interacted on the Internet were better able to present important true-self qualities than were those who interacted face to face. When the paired participants were asked to assess one another at the end of the study, online participants described their partners more in terms of the partner's previously reported true self than his or her reported actual self. In contrast, those who interacted face to face described their partners more in terms of the partner's self-reported actual self.

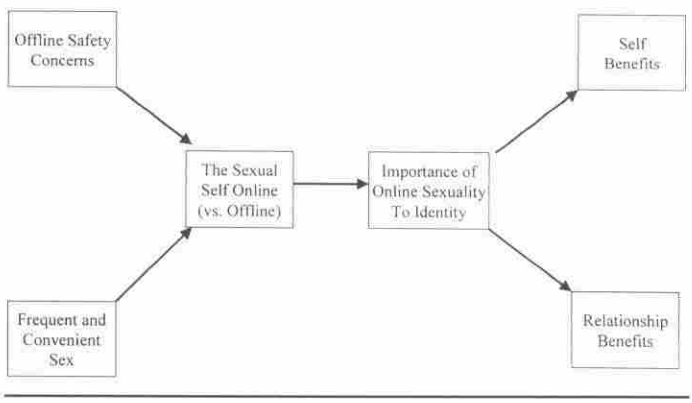
The relative accessibility, or readiness to be utilized, of these two mental representations of self in face-to-face versus Internet interactions has also been examined (Bargh et al., 2002: Study 1). This experiment tested the hypothesis that one's true self becomes more accessible for use in interaction and self-presentation on the Internet, whereas one's actual self is more accessible in face-to-face interactions. In this study, stranger dyads again conversed either face to face or in an Internet chat room. Following the interaction all participants engaged in a "Me versus Not Me" self-judgment task (Markus, 1977) on a computer. Response times were significantly faster for those in the Internet condition as compared to those in the face-to-face condition for "true me" self attributes. Conversely, those in the face-to-face condition were significantly faster to respond to "actual me" attributes than were those in the Internet condition. This greater accessibility of the true versus actual self concept for those who interacted on the Internet as compared to those who interacted face to face held even when the length of the interaction was shortened to just 5 minutes.

The Present Study

It has been previously found that individuals who lack a satisfactory offline social network—for instance, the socially anxious and the lonely—are more likely than others to turn to the Internet to express important self-aspects which are barred from expression in their offline lives (McKenna et al., 2002). In line with this finding, we propose (and here test) that those who are hindered from acting upon or expressing important aspects of their sexuality in real life will turn to the Internet as a means through which they can explore these important self-aspects (see Figure 1). These individuals, more so than others, will locate the sexual self on the Internet instead of with offline intimates. In other words, they will express more aspects of their sexuality on the Internet than they do offline, find it easier to discuss important aspects of their sexuality online, and reveal important sexual needs and feelings to people online that they cannot share with offline intimates. Moreover, they will explore aspects of sexuality on the Internet that they would be embarrassed to explore in real life.

We hypothesize that the greater expression of one's sexual self on the Internet as opposed to with one's non-Internet intimates is necessary, but not sufficient, to bring about a transformation of one's sexual identity. Individuals have complex and multiple self-schemas (e.g., Markus, 1977) and salient identities (e.g., Stryker, 1986), as well as a myriad of possible selves (Markus & Nurius, 1986) that can be situationally activated. An individual may indeed feel that the sexual self is better expressed on the Internet, but unless this online self becomes important to an individual's identity, the process of identity transformation is

Figure 1. A process model of sexual identity demarginalization.



less likely to unfold. As many have argued, individuals are motivated to reduce discrepancies between the self-concept and their important self-guides (e.g., Higgins, 1987; Wicklund & Gollwitzer, 1982).

Previous research has shown that the more an individual participates in an identity-relevant group, the more important that identity is likely to become (Deaux, 1996; McKenna & Bargh, 1998). In line with this, we predict that the more that one actively expresses one's sexual self online, the more important that identity will become. Identity importance should then result in a number of self and relationship benefits for the individual. We expect to find that self-guides are strengthened, as evidenced by increased self-acceptance of one's sexuality and heightened self-confidence for non-Internet sexual encounters. At the same time, reliance on normative standards for sexuality, and feelings of shame one experiences from deviating from those standards, should weaken as one's online sexual identity gains in importance. Benefits to the person's relationships should include forging connections on the Internet with those who share important aspects of one's sexuality, and then making these important online sexual relationships a social reality by bringing the relationship into their real lives and meeting the partner in person.

To recapitulate, previous work has looked separately at the mediational role of identity importance (McKenna & Bargh, 1998) and the expression of the true self (McKenna et al., 2002) for self and social consequences. In the current study, we examine the roles that both of these proposed mediators play in the identity demarginalization process. We propose and test the hypothesis that, alone, neither of these proposed mediators adequately account for the process by which identity transformation occurs. Rather, we propose that both of these mediators are necessary to the process. That is, an individual must not only feel that his or her true self is better expressed on the Internet than offline but also that this online self is an important aspect of his or her identity.

Method

In-depth Interviews

Interviews were initially conducted with 36 individuals who were participating in Internet chat rooms devoted to cybersex. All but 6 of those initially interviewed were male, due to the difficulty of gaining the female participants' attention (see below). The four interviewers were female and originally entered the chat rooms using their real first names. Within seconds of entering the chat room, the interviewers' screens were completely filled with private message hails from male participants in the room –far more chat requests than could be answered. Interviewer-originated chat requests were sent to a total of 40 male participants, 30 of whom agreed to take part in the study (all 40 responded to the initial chat request). Chat requests were also sent to 40 female participants; however, only one female responded, stating simply that she was "not into" female-female chat and ending the chat session. In an attempt to reach more female participants, the interviewers reentered the rooms using male nicknames. Chat requests were then sent to 60 female participants. Seven females responded to the initial chat requests from the male-named interviewers and six of them agreed to engage in an interview. Prior to beginning the actual interviewing process, the female participants were informed that the interviewer was, in fact a female, and the rationale for using the male nickname was explained. All six of the female participants agreed that they would have ignored a chat request from someone with a female nickname on the assumption that the requestee was interested in female-female cybersex. The majority further noted that they receive so many simultaneous chat requests from males that they generally respond only to a random sampling of them and that it was only by chance that they selected our chat request from among the many others. None of the participants expressed any concerns or reservations about continuing with the interview after being informed that the interviewer was a female. Following the interviews, all of the participants were debriefed and thanked. The average age of these interview participants was 34 years.

Participants were asked about their online sexual activities, what initially motivated them to engage in cybersex, and why they continued, as well as about the role that their online erotic activities played in their lives and how they felt such activity may have affected them. The majority of the responses were supportive of our a priori predictions pertaining to motivations for engaging in cybersex, the expression of the true self online, the importance of the online sexual self, and the resulting consequences (e.g., gains in self-confidence, meeting sexual partners in person).

There were, however, several issues raised by respondents that we had not previously considered. Nearly half of the participants spontaneously mentioned their views on cybersex and cheating, with great variation of views about under what conditions, if at all, cybersex should be considered cheating on a partner. Similarly, 20% of the respondents noted that their cybersex experiences had helped them to feel less "bad" or "dirty" about their sexual needs and desires. Finally, a small number of participants (3) discussed their experiences with gender-bending—that is, pretending to be of the opposite sex—during an online sexual encounter. We therefore included questions about these issues in the survey.

A further 19 interviews were carried out by e-mail with female participants drawn from three of the mainstream, sexually-oriented groups not included in survey (see below). Responses did not differ substantively from those interviews carried out in the chat rooms, with the exception that responses were more detail-rich and that fewer (7%) of these respondents mentioned feeling less shame about their sexual needs as a result of their cybersex experiences.

Survey Respondents

As groups involving individuals with marginalized sexual identities (e.g., homosexuality, sadomasochism) have been

previously studied (McKenna & Bargh, 1998), this study focused on those online groups devoted to more mainstream sexual interests. Groups available through the Egroups website (http://www.onelist.com) were selected for the study. Unlike Usenet newsgroups, in order to access or participate in an Egroup an individual must first become a member and a majority of groups provide a list of valid e-mail addresses for all group members. For this reason, one can tell how many members a group consists of and can gauge participation by the individual group members.

At the time the survey was conducted, there were 52 electronic groups devoted exclusively to mainstream forms of cybersex, as identified by the group's stated purpose. That is, the group description stated that the focus was on normative (and heterosexual) sexual interests, or did not include statements that discussions of various fetishes (e.g., bondage, voyeurism, foot-fetishes) were also welcome. (In contrast, there were 127 groups specifically devoted to various aspects of bondage alone.) Groups devoted to the exchange of binary files (in this case, erotic pictures that have been scanned into the computer from magazines) rather than textual exchanges among members were also excluded from the sample. Group membership ranged from a low of 3 members to a high of 890 members. Across all 52 groups, average membership per group was 214 members. From the list of these 52 groups, 15 electronic groups were randomly selected for the study. Membership in the selected groups ranged from a low of 9 members to a high of 813, with the average group size being 229.

Permission from the groups' moderators was obtained for moderated groups and the survey was posted only once to each group.[1] Participation in the groups was observed over a 3-week period, beginning one week prior to the posting of the survey and continuing for the following 2 weeks.

Measures

The survey contained a total of 25 items. In addition to demographic questions, 18 items were designed to assess the relationship among (a) reasons for turning to the Internet for sexual self-expression, (b) the location of the sexual self on the Internet versus in the real world, (c) the importance of online sexual expression to identity, (d) self-acceptance of one's sexuality and self-confidence in non-Internet sexual encounters, (e) sexual relationships initiated through the Internet, and (f) reliance on social judgments of acceptable sexual practices and desires. We strove to keep the questionnaire brief in order to decrease the time burden on our volunteer respondents and thus increase response rates.

An open-ended question was used to assess the primary reason(s) that motivated respondents to engage in sexual activity and expression on the Internet. Responses to this question were first content analyzed by three coders blind to the hypothesis (inter-coder agreement was 93%). Three categories of responses emerged from the content analysis: (a) safety concerns about offline sexual activity, (b) the convenience of frequent and uncommitted sexual activity, and (c) the expansion of one's sexual knowledge and repertoire.[2] For each of these three categories responses were dichotomously coded as a *yes* or a *no* (that is, did the respondent list this as a primary reason or not?).

A modified version of the Real Me Scale (McKenna et al., 2002) was used to measure the degree to which respondents located their sexual selves on the Internet as opposed to in offline intimate relationships. Three items, to which the respondent answered either *yes* or *no*, were:

1. Have you ever shared your important sexual fantasies, needs, and feelings on the Internet (in a chat, e-mail, or post) that you feel you cannot express to non-Internet sexual partners?

2. Do you engage in cybersex or other forms of interactive sexual activity on the Internet in order to explore important sexual fantasies that you would be embarrassed to act out in "real life"?

3. Is it easier for you to talk about your important sexual fantasies, preferences and needs with people on the Internet than it is with your off-line romantic partner(s)?

A further two questions using response scales ranging from *not at all* (1) to *a great deal* (7), asked respondents to rate the extent to which they felt better able to express important aspects of their sexuality with others on the Internet than with offline sexual partners. The five items were scale standardized, such that each scale had a mean of 0 and a standard deviation of 1, making all scales perfectly comparable. The mean of these items was then taken to form the Sexual Self Online index variable.

Five questions addressed the importance of online sexual expression to the respondent's social identity. On response scales ranging from *not at all important* (1) to *very important* (7), respondents rated how important being sexually expressive online was to them, and the importance they placed on interacting with others concerning sexual topics and activities on the Internet. Respondents answered *yes* or *no* to the question, "Does expressing a sexual fantasy or need with others on the Internet make that fantasy stronger, more desirable, and more important to you?" The final items related to importance were the frequency per week an individual engaged in sexual expression and activity on the Internet, rated on a 5-point scale ranging from *never* (1) to *daily* (5), and the average amount of time spent per each of

[1] Several of the moderators stipulated that the survey only be posted to their group on one occasion, thus surveys were only posted once in order to apply the same standard equally to all the groups under study.

[2] A total of 14 other, distinct motivations were reported by individual respondents but did not fit within the three categories described above, nor did they share similarities with one another. For example, one woman reported engaging in cybersex as a therapeutic exercise to come to terms with issues resulting from having been raped several years ago. Another female participant reported a tit for tat motivation, engaging in cybersex herself after she discovered her husband had been having "cyber-affairs." Because each of these 14 motivations were mentioned by no more than one respondent, they were not included in the analysis.

these sessions on a 5-point scale of *0 to 30 min* (1) to *more than 5 hours* (5). Responses to each of these items were first scale standardized and the mean taken (as described above) to compose the importance index (see McKenna & Bargh, 1998, for the rationale behind using this index variable).

The self-acceptance index was based on two additional questions that concerned the degree to which expressing important aspects of one's sexual identity to others on the Internet had enabled the respondent to accept that identity. On a 7-point scale, respondents rated the extent to which they had come to accept and feel comfortable with sexual aspects of identity as a direct result of online activities. A final item, to which respondents answered *yes* or *no*, was "Do you think your sexual experiences on the Internet have made you feel less 'bad and dirty' about your sexuality?" We had originally intended to create a single self-acceptance index by standardizing and averaging these two scores; however, the coefficient alpha was insufficient to justify this index (see Results and Discussion), and the two measures were therefore treated as distinct outcome variables.

To measure the effect of Internet interactions on relationships, we included three items. Respondents answered with a *yes* or *no* to "Have you ever met an online sexual partner in person?" and "Do you think your sexual experiences on the Internet have helped you to meet like-minded others?" and "Have any of your sexual activities on the Internet negatively affected an offline intimate relationship?" There was a floor effect for the final item, with only 1 individual reporting that a relationship had been negatively affected by his or her online sexual activities, and thus it was not included in the analysis.

Two items, with *yes* and *no* responses, measured self-confidence: "Do you think your sexual experiences and activities on the Internet have: made you more confident in non-Internet sexual encounters" and "made you feel less confident sexually." Again, there was a floor effect on the second item, with no respondents answering in the affirmative, and therefore it was not included in the analysis.

The questionnaire also included seven questions regarding the respondent's age, gender, current relationship status, and sexual orientation; under what circumstances, if any, the respondent considered sexual activities online to constitute cheating on a relationship partner; whether the respondent had ever taken part in gender-bending (that is, pretending to be of the opposite sex) for the purposes of sexual interactions; and whether they had ever experimented with same-sex cybersex.

Results

Sample Characteristics

Sixty-two female and 42 male respondents completed and returned the survey, for a total of 104. Ninety-seven percent of our respondents were observed to be active participants in their particular groups, posting at least one message to the group during the 3-week period. Member participation in the groups varied widely, with 100% of the members posting messages in some groups and less than 1% in others. In general, there were higher percentages of members participating in the smaller groups than in the larger groups. Across all 15 groups, 11% of the members were active participants and 89% were lurkers. That is, 89% of those subscribed to the groups were not taking an active part in the group, at least during the 3-week time period of this study. Of the active members in these groups, 27% responded to the survey.

Respondents ranged in age from 16 to 64, with the mean age being 32 years and 80% of the respondents over the age of 24 years. Ninety-four percent of the respondents identified themselves as having a heterosexual orientation, 4% as bisexual, and a further 2% as homosexual. Of the respondents, 67% reported currently being involved in a serious (married or long-term) off-line relationship.

Forty-one percent of the respondents did not consider interactive cybersex to constitute cheating on a relationship partner under any circumstances, while 14% considered it to be cheating only if one engaged in cybersex repeatedly with the same person. Another 5% and 6% respectively felt that one would be cheating on a partner if interactive videocameras were used or if one engaged in phone-sex with a cybersex partner. Thirty-three percent felt that any form of cybersex was an act of cheating as real as any physical sexual act with someone other than one's partner, with women (39%) more so than men (23%) feeling this way. Thus, 33% of the respondents felt that what occurs in the virtual realm is rather more real than virtual; that sexual actions that take place in cyberspace, in the physical absence of another person, constitute cheating on one's partner in the same way as if one undertook sexual actions with someone in the flesh. Women were more likely than men to feel that cybersex always, or under some circumstances, constitutes cheating ($t = 2.23$, $p < .05$).

Creation of Indexes

The five items comprising the *Sexual Self Online* were significantly intercorrelated (average $r = .42$, all $ps < .01$) with an associated reliability coefficient (Cronbach's alpha) of .77. The more the respondent expressed different aspects of his or her sexuality on the Internet (through newsgroup postings and e-mail or through Cybersex in chatrooms) than with face-to-face sexual partners, (a) the greater the probability that he or she would reveal sexual needs and feelings to Internet sexual partners which the respondent was unable to share with off-line sexual partners, (b) the easier it was for him or her to express important sexual needs and preferences with Internet partners than to non-Internet sexual partners, and (c) the more likely he or she would be to act out sexual fantasies and desires online that he or she would be embarrassed to act out or express with off-line partners.

The five items comprising the *Importance of Online Sexuality to Identity* were significantly intercorrelated (average $r = .50$, all $ps < .01$), and the importance index had an associated reliability coefficient of .69. The more impor-

tant that expressing his or her sexual identity on-line was to an individual, (a) the greater the frequency and amount of time devoted to such expression an individual was likely to expend, (b) the more important actively interacting with others online was likely to be, and (c) through expression, the stronger a sexual fantasy or need was likely to become.

However, the two items involving self-acceptance of one's sexuality and a lessened reliance on society's evaluation of one's sexual preferences and desires did not intercorrelate sufficiently to form a single index (average r = .07). Therefore, these items were treated as separate outcome variables in the structural equation model.

Structural Equation Modeling Procedure

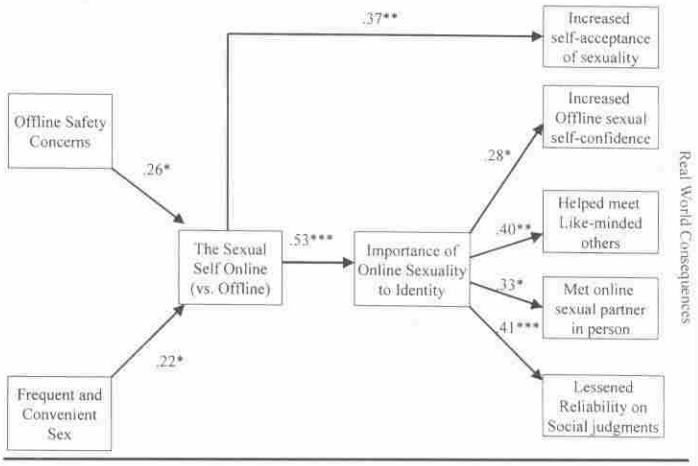
In order to test the hypothesized mediational model of sexual identity demarginalization, we conducted a structural equation modeling analysis of the relations between Offline Safety Concerns, Convenience, Sexual Knowledge Expansion, the Sexual Self Online, the Importance of Online Sexuality to Identity, and the consequences of these for internal and external self-guides and for relationships.

The model tested is shown in Figure 2. Several aspects of the modeling should be noted. First, a saturated model was estimated including all possible paths (paths not shown were nonsignificant at $p > .20$) and the disturbances in the outcomes were free to covary. That is, our estimation procedure allowed for any direct effects of offline safety concerns, convenience, and sexual knowledge expansion (i.e., those not mediated by either the location of the sexual self or identity importance) to emerge. Second, both the online sexual self and identity importance are included as index variables instead of as latent variables represented by the separate index-related items, because those items were related to the outcome variables in unique ways as well as through the variance the items share. For example, four of the five items related to the online sexual self had a small positive correlation with meeting an online sexual partner in person, but the "ease of discussing important sexual needs" variable showed a small negative correlation. Similarly, there was a small positive correlation between the importance-related frequency variable and feeling "bad or dirty," while the other four variables showed a small negative correlation. This violates an assumption that latent variables' separate indicators correlate with the outcome variables in similar ways; consequently, the latent variable version of the model fit the data poorly (CFI = .86, Chi^2/df = 1.38). As there was no theoretical rationale for correcting the residual correlation in the latent variable version, the analysis was conducted with the index variables (see Bollen, 1989; Kline, 1998). In any event, the results of the latent variable analysis were highly similar to those depicted in Figure 2.

Safety, Convenience, and the Online Sexual Self

In line with our a priori predictions and the responses from those who participated in the in-depth interviews, the main reasons given for turning to the Internet to express one's sexuality were offline safety concerns (reported by 31% of

Figure 2. Structural equation modelling analysis of the hypothesized determinants of sexual identity demarginalization and the consequences for internal and external self-guides and for Internet relationships. Only statistically reliable paths shown. * $p < .05$, ** $p < .01$, *** $p < .001$.



the survey respondents), and the desire for frequent and convenient sexual outlets (24%). A third, and unpredicted, reason—reported by 12% of the respondents—was the desire to expand one's sexual knowledge and repertoire (often in order to improve or enliven an offline sexual relationship). Perhaps surprisingly, there were no gender differences among these three items (all ts < 1.2, all ps > .25), nor were there differences between those who were currently involved in a serious relationship and those who were currently single (all ts < 1.6, all ps > .10).

All three of these identified motivations were next entered into the model as predictors of the location of the sexual self (online versus offline). As predicted, those who reported being concerned about offline risks of sexual activity (i.e., contracting sexually transmitted diseases, physical harm from a one-night stand) and expression (i.e., judgmental or negative reactions from a relationship partner) were significantly more likely to turn to the Internet to express important aspects of their sexuality, as were those who desired more frequent, convenient, and uncommitted sex than they were experiencing in their offline lives. The desire to expand one's sexual knowledge, however, did not significantly predict the location of one's sexual self (beta = –.08, p = .44)

The Sexual Self Online and Identity Importance

Next, the model calls for the location of the Sexual Self Online to form the first mediational step between the motivations for turning to the Internet for sexual expression on the one hand, and the importance of online sexuality to identity and the benefits of fuller self- expression and disclosure on the other. Consistent with this prediction, for those who felt that they could better express and explore sexual self-aspects on the Internet as opposed to with offline sexual partners, the more important that the online sexual identity was to them (see Figure 2). Those who

were stymied from expressing their sexual preferences, needs, and desires with offline partners spent more time engaging in online sexual activities. They found that expressing aspects of their sexuality and that interacting with others on the Internet was more important to their lives than did the other respondents.

Consequences of identity importance

The final step of the model calls for the importance of online sexuality for one's identity to mediate between (a) the location of the sexual self (online versus offline) and (b) the consequences for internal self standards, perception of external guides for behavior, and for relationships formed via the Internet.

Strengthening of internal self guides to behavior. As can be seen at the top right of Figure 2, the more important one's online sexual identity was to one's sense of self, the greater his or her confidence when engaging in real life sexual encounters. This increased confidence was a direct consequence of the individual's online sexual activities. Contrary to our prediction, however, sexual identity importance did not produce a reliable increase in the self-acceptance of one's sexuality. Rather, the location and expression of one's sexual self on the Internet (compared to with offline sexual partners) predicted increased feelings of self-acceptance about one's own sexual needs and preferences. This finding held equally for those who were currently involved in intimate (offline) relationships and for those who were currently single. Thus, expressing and exploring on the Internet those particular sexual needs, fantasies, and preferences which one cannot express in the real world has the effect of increasing one's acceptance of those self-aspects.

Weakening of external guides to behavior. Whereas internal self-guides were strengthened for those who located their sexual self on the Internet and for whom this sexual identity was important, external guides were weakened (see bottom right of Figure 2). As predicted, identity importance did predict a reduced reliability on the judgement of society as to what are acceptable and normal sexual feelings, fantasies, and needs. Those for whom the online sexual identity was important to the self tended to feel that their online sexual experiences had resulted in a change in the way they perceived their sexual desires, making them feel less shame about those needs.

Bringing Internet relationships into real life. Finally, the more important one's online sexual identity, the more one felt that the Internet had allowed one to connect with those who share the identity. Such individuals also tended to take the step of moving an online sexual partnership into their real lives by meeting cybersex partners in person. They were motivated to make this important identity and the relationships that accompanied it a social reality (see Gollwitzer, 1986) in the offline world as well as in the virtual realm.

Testing alternative explanations. Although the data support our a priori predictions (derived from the social identity model of Deaux, 1996), we considered the possibility that the order of the two mediators—the location of the self online and identity importance—could be reversed. That is, it may not be the case that for those who feel they can better express sexual self-aspects on the Internet the importance of the online identity will increase, but rather that as the online identity becomes more important to an individual's life, he or she then feels that the self is better expressed online than offline. In order to test this alternative, we conducted a structural equation modeling analysis and observed a significant reduction in the goodness of fit for the model (CFI = .53, $Chi^2/df = 2.01$). Thus, the alternative model does not fit the observed data as well as does the original account. We next considered the further possibility that identity importance may be unnecessary for the realization of the benefits for the self and for relationships, with the location of the sexual self online as the only necessary mediator. However, testing a model in which the online self was the sole mediator revealed once again that the goodness of fit was less satisfactory (CFI = .72, $Chi^2/df = 1.45$) than the a priori model which included identity importance as a second mediator.

Discussion

The results of this study are consistent with previous findings (McKenna & Bargh, 1998; McKenna et al., 2002), and illustrate the transformational effect of self-expression and interaction on the Internet on an individual's self- and social identity. McKenna et al. (2002) found that those who are currently lacking in satisfying real-world relationships—for instance, the socially anxious and the lonely—are more likely to locate and express what they feel to be their true selves on the Internet rather than in real life. As the present study shows, so too are those who lack satisfying real world sexual relationships and those who are constrained in expressing their real sexual needs to offline partners more likely to turn to the Internet for their sexual self-expression, and to locate their sexual selves there rather than with their offline sexual intimates.

The more that one tends to locate one's sexual self on the Internet, the more important that sexual identity becomes to one's sense of self. Following McKenna and Bargh's (1998, Study 2) finding that identity transformation occurs when one actively participates in an online group of similar others, we found that as one expresses important sexual needs and interacts with others who share or understand those needs, changes are brought about in one's identity. The result is a *demarginalization* of one's sexual self—specifically, the acquisition of a positive sexual identity where before there were feelings of isolation and shame.

Once an important identity has been realized and expressed in the virtual realm, there is a need for that identity to be realized in daily life (Gollwitzer, 1986). Relationships of high personal significance tend to become incorporated into one's self-concept just as one incorporates important group memberships (Andersen & Chen,

1999; Baldwin, 1992, 1997; Baldwin & Holmes, 1987; Brewer & Gardner, 1996; Chen & Andersen, 1999; Hinkley & Andersen, 1996; Uleman, Rhee, Bardoliwalla, Semin, & Toyama, 2000). People are highly motivated to make important aspects of identity a social reality (Gollwitzer, 1986) through making them known to their social circle of family and friends (see Deaux, 1996; McKenna & Bargh, 1998). As important Internet relationships are integrated into one's identity, people are also motivated to make these important new relationships a social reality by making them public and face to face (McKenna et al., 2002). The present study thus provides additional evidence that those important online relationships which are associated with important aspects of one's online identity will tend to be brought into one's face-to-face life.

It should be noted that there are several limitations of the present study. Our response rate was 27% among those who actively participate in the groups, but negligible among those subscribers who do not take an active part. Indeed, we were unable to determine how many of those inactive group members could be considered lurkers and how many are effectively nonmembers (that is, although they subscribed to the group, they neither post themselves nor read the postings of others). We thus were unable to determine what, if any, benefits or drawbacks may occur as a result of lurking on the groups. However, McKenna and Bargh (1998) found that active participation in the group is a crucial part of the identity demarginalization process and that lurkers do not accrue the benefits of identity-relevant participation, such as greater feelings of self-acceptance. This would suggest that the effects shown in Figure 2 would not hold for those who only read the newsgroups.

A second limitation is that our results are based upon self-report. Individuals may inaccurately report their feelings and behaviors, generally doing so for self-presentational reasons (i.e., providing what they perceive to be the socially desirable response rather than their real beliefs or actions). Individuals may also provide responses that dove-tail with their personal theory as to why they engage in certain behaviors or experience certain emotions. However, it is unlikely that these participants would hold a personal theory about their online sexual activities and the consequences thereof that matches our model.

In closing, we note that the Internet represents a new venue of social interaction and self-expression and thus represents a new domain in which one can present and even reinvent the self. Research on such transitions over the lifespan (e.g. Heatherton & Nichols, 1994; Ruble, 1994) has demonstrated that individuals are able to effect changes in their self-concepts only when they are no longer in the presence of their former social group, because that social group expects and reinforces the former identity. We believe that the Internet affords a variety of interaction domains in which such changes in the self can occur and be brought into one's offline life (see McKenna & Bargh, 1998, 1999, 2000; McKenna et al., 2002). These virtual activities and the virtual relationships one forms do indeed have a tendency to become social realities.

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