8 The Sexy Side of the Internet: an Examination of Sexual Activities and Materials in Cyberspace

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“Every technological innovation creates deviant as well as respectable possibilities” (Edgley & Kiser, 1981, p. 59). Edgley and Kiser (1981) were referring to “Polaroid sex,” that is, instant photography methods used to create homemade pornography. A quarter of a century later, this statement may equally be applied to the Internet. Ever since the beginnings of the World Wide Web, people have engaged in online sexual activities. These activities include, but are not limited to, cybersex, hot chatting, locating others to have sex with offline, seeking information or advice about sexual health, romance and relationships, downloading pornography, and purchasing erotic materials.

In this chapter, we explore the many types of available online sexual activities and the types of people who engage in these activities. We also examine the pros and cons of the sexy side of the Internet. On the one hand, we argue that the Internet can be used to explore one’s sexuality, but on the other, some people become too obsessed with engaging in online sexual activities. Importantly, the Internet can also be used to educate both adolescents and adults about sexual issues. Finally, this chapter turns to examine the future of online sexual activities.

The Beginnings of Internet Sex

People have been engaging in Internet sexual activities since its inception. Although at first individuals were limited to textual exchanges, many found no difficulties with talking “dirty” online and reconstructing the body online. This is nicely illustrated in Carol Parker’s (1997) book, The Joy of Cybersex:

Gersh I press against you...
geekgirl and I rub my belly to slick my hand with oil
Gersh pushing against you... hot... Can’t take my eyes off you... Watching you arch...
geekgirl stroking lightly up your thigh with one hand... stroking my breast with the other as my nipples harden under your gaze... sigh
Gersh my hand dips down and strokes between your legs... just a touch...
Definitions have been given to the varying levels of sexual activities online. For instance, hot chat is “when two or more individuals engage in discourses which move beyond light-hearted flirting” (Whitty & Carr, 2006, p. 21). In contrast, cybersex is “generally understood to be synchronous communication in cyberspace where two or more individuals engage in discourses about sexual fantasies” while typically masturbating at the same time (Whitty & Carr, 2006, p. 21).

Bulletin board systems (BBs) were an especially popular space in the early days of the Internet and many of these bulletin board systems were sexual in nature. BBs were a precursor to the World Wide Web; however, they look very different from spaces currently available on the Internet. BBs were typically single-line systems, which meant that only one user could be online at a time. Individuals could only communicate using text. Even in the early days, BBs were social spaces where people met, had discussions, published articles, downloaded software, and even managed to play games. Some of these were moderated by a systems operator who would sometimes censor messages. Users could leave both public and private messages.

Some BBs were especially designed for people to meet others who share their sexual interests and to live out their sexual desires online or offline. Social scientists have examined the sites and the people who use them (e.g., Wysocki, 1998; Wysocki & Thalken, 2007). Wysocki (1998) was for instance interested in seeing whether online sex was a replacement for face-to-face relationships or whether instead it enhanced them. She interviewed participants using a BB called the “Pleasure Pit.” In this study, she identified five main reasons for using sexually explicitly BBs, including anonymity, time constraints in one’s personal life, the ability to share sexual fantasies with other people, the desire to participate in online sexual activity, and to find people with similar sexual interests to meet face-to-face. Wysocki also found that many of the people she interviewed did not reveal to their offline partners exactly how they were using the Internet as a sexual outlet.

**The Internet: a Potent Medium for Sexual Activity**

From the early days of the Internet, researchers across disciplines have been interested in whether engaging in online sexual activities can be harmful or therapeutic. Turkle (1995) was one of the early theorists who advocated that online sex could be emotionally and physically powerful. Whitty (2003a, 2004) has argued that engaging in cyberflirting can be very therapeutic for some individuals, especially shy people, and Cooper and his colleagues have considered online sex to be threatening for some and healthy for others (e.g., Cooper, Scherer, & Marcus, 2002). Cooper (1998) proposed that the Internet
is a potent medium for sexual activity because it is accessible, affordable, and anonymous. This he referred to as the Triple A Engine.

Others also maintain that the Internet can have a seductive appeal – so much so that some people are believed to have cybersex addictions. These individuals are compulsively involved in engaging in online sexual activities, such as cybersex, or downloading pornography, such that Internet sexual activity interferes with personal and social adjustment. Cooper, Delmonico, and Burg (2000) found a small proportion of individuals whose online sexual behavior is clearly compulsive. They also found that both women and gay men were more highly represented in the group of individuals they identified to be cybersex compulsives. Daneback, Ross, and Månsson (2006) found that online sexual compulsives were more likely to be men who are in a relationship, are bisexual, and have a sexually transmitted infection (STI). Schneider (2000) has argued that cybersex addiction is a major contributing factor to separation and divorce. Moreover, Schneider’s (2000) study found that about half (52%) of cybersex users had lost interest in relational sex.

Another problematic online sexual activity is Internet infidelity. Internet infidelity can of course be both emotional and sexual forms of infidelity (see Whitty, 2003b, 2005, 2007; Whitty & Carr, 2005, 2006). However, in this chapter, we are more concerned with the sexual component of Internet infidelity. Whitty (2003b, 2005) has found that sexual activities online, such as cybersex and hot chatting, are perceived by many to be a relationship transgression and that people can be just as upset by these transgressions as they might be from offline penetrative sex. She also found that cybersex posed a greater threat to the relationship than downloading pornography. As further support, Parker and Wampler (2003) have found that interacting in adult chat rooms, having cybersex, having telephone sex, becoming a member of an adult website, and engaging in cybersex various times were viewed as acts of infidelity.

In addition to identifying different types of online behaviors that might be perceived to be relationship transgressions, researchers have theorized about why these acts might be upsetting to couples. Whitty and her colleague (Whitty, 2003b, 2005; Whitty & Carr, 2005, 2006) have suggested that desiring another and the time dedicated to another upset individuals. Moreover, the act of keeping one’s online sexual activities secret ought to be deemed as unfaithful.

Of course, one’s Internet infidelities might initiate online and progress offline. Moreover, there are webpages that have been set up to hook up people looking for an offline affair. For example, Philanderers.com (http://www.philanderers.com) is an online service to introduce people seeking an extramarital offline relationship. They write on their site that:

Why you are here is our main concern. Helping you sort out your thoughts, provide some direction for your extramarital affair, and a safe, secure outlet for your extramarital desires is our mission.

We are not a sex or personals site that provides empty promises. Our clientele are well educated and informed before they become members. We
are not “the biggest,” “the best” or the “most popular” – we don’t want to be. We are honest, forthright and caring. Three things that we value in our extramarital web-relations.

Come in and explore. Learn why you may want to pursue an extramarital affair and what you can do about it. Find out the reasons why this may be just the right place for you. Find out how you can fulfill your extramarital desires. (Anonymous, Philanderers.com)

Interestingly, some software designers have been cashing in on individuals’ fears that their partners might be cybercheating. Such software can track not only every webpage one’s spouse visits but also every keystroke they make. For example, Spector (n.d.) advertises that its software enables one to “see exactly what your spouse, kids and employees have been doing online and offline.”

### Pedophiles on the Internet

The numbers of pedophiles who use the Internet to prey on children has been of growing concern over the years. Offenders often inhabit online areas such as chat rooms and MySpace and use seduction techniques to lure in their victims. For instance, they will listen and pretend to empathize with children. They might initially build up a friendship with a child to gain his or her trust and then move onto sexually exploiting children. This exploitation might happen online via sexual talk or requesting naked pictures of children or could move offline. Sometimes a pedophile will try to groom minors by sending them erotic pictures and website addresses in an attempt to lure the minor into believing that sexual acts between youth and adults is common and enjoyable. The Internet is arguably an attractive arena for pedophiles as they can be anonymous and hence believe they are more likely to get away with their crimes. Nonetheless, police across the world are putting their energies into locating and arresting these criminals (Fulda, 2002).

### Internet Pornography

Pornography, unsurprisingly, permeates the Internet. During the past decade, explosive growth in the availability of sexually explicit text, visual, and audio materials on the Internet has provided anonymous, cost-free, and unfettered access to an essentially unlimited amount and variety of sexual imagery (Fisher & Barak, 2001; Freeman-Longo, 2000). Adult men and women – as well as boys and girls – can acquire sexually explicit materials on the Internet effortlessly and privately, with essentially no cost, no age limitations, and no impediments, reflecting their self-directed expression and gratification and sexual interests and inclinations. The sexually explicit materials that are consumed may in turn affect, not at all or profoundly, the sexual interests and
dispositions that guided the individual to seek out Internet sexually explicit materials in the first place.

The type of pornography available online is quite varied. There is obviously the professional commercial pornography that individuals can purchase online. However, amateur pornography is equally popular (Jacobs, 2004) and often sold online. Some individuals are happy to make their homemade videos freely available. Others enjoy swapping erotic pictures via chat rooms and newsgroups (Griffiths, 2004). One type of pornography that has been a source of consternation for lovers and scholars of Japanese popular culture is manga and anime pornography (Dahlquist & Vigilant, 2004). Some of this form of pornography presents human fantasies in interesting ways – performing acts that are not humanly possibly. Fans of this type of pornography are often drawn in because they believe it is better than real sex (Dahlquist & Vigilant, 2004). However, it has been argued that some hentai (adult-oriented material that presents extreme graphics of sexual imagery) goes too far. For example, Dahlquist and Vigilant (2004) state:

The experience of hentai is morally distancing. Tentacle hentai offers the telegenetic signs of the most perverse and debased sexualities. It opens for fantastic examination a sexuality that transgresses all “simulated” moralities of the “real” world., where tentacle sex between nubile girl-women and cloned boy-men monsters are the order of the day – a monstrous sex-feast of the most abnormal acts: pedophilic bestiality, sex with machines, sex with cyborgs, sex with dangerous protruding tentacles, and, of course, an endless stream of the most debasing, brutal, and humiliating rape images. (pp. 99–100)

Psychological theory has been employed to conceptualize potential effects of exposure to Internet sexually explicit materials (see Fisher & Barak, 2001). On the basis of relevant theory and research (e.g., Bogaert, 1993, 2001; Eysenck, 1978; Malamuth, 1989a, 1989b; Malamuth, Addison, & Koss, 2001; Mosher, 1980, 1988; Snyder & Ickes, 1985), it can be hypothesized that antisocial personality characteristics will encourage a limited number of individuals to exploit the Internet to seek out antisocial sexually explicit materials (e.g., rape, degradation) that gratify and reinforce their antisocial inclinations. The “goodness of fit” (Mosher, 1980, 1988) of the individual’s antisocial personality with antisocial sexual content easily selected and accessed via the Internet may be theorized to promote considerable depth of involvement with antisocial sexual materials, loss of awareness of the actual constraints on action found in reality regarding enactment of antisocial sexual behavior, and uniquely strong negative effects of the availability of Internet pornography on individual enactment of antisocial sexual behaviors, such as, for example, sexual aggression or coercion enacted by men against women.

A complementary point of view, also based on relevant theory and research (e.g., Barak & Fisher, 1997; Barak, Fisher, Belfry, & Lashambe, 1999; Bogaert, 1993, 2001; Fisher & Barak, 1991, 2001; Malamuth et al., 2001; Mosher, 1980, 1988; Snyder & Ickes, 1985), asserts that most individuals – those in
the normal range – will be inclined to exploit the Internet to seek out sexually explicit materials that are more or less consistent with their lifetime learning histories concerning acceptable versus unacceptable sexual behavior. Such materials would be likely to gratify and encourage acceptable, normal range sexual fantasy or sexual behavior that is already within the individual’s repertoire (see, for example, Fisher & Byrne, 1978; Mann, Sidman, & Starr, 1973). In fact, the “poorness of fit” of normal range personality characteristics with antisocial sexual content available on the Internet is assumed to provoke avoidance and rejection of such material and termination of contact with antisocial sexually explicit content if encountered accidentally. According to the foregoing “confluence” analysis (see Fisher & Barak, 2001; Malamuth et al., 2001), individuals with highly antisocial personality characteristics will be highly susceptible to antisocial sexual content on the Internet – or anywhere else (including the evening news and any number of Biblical passages), while individuals with a lifetime learning history and expectations about acceptable and unacceptable sexual or other behavior will be unlikely to access or act on antisocial sexual content on the Internet.

Despite widespread public concern about the proliferation of sexually explicit imagery on the Internet (see, for example, the Time cover story, as early as 1995 [Elmer-Dewitt, 1995] as well as Cooper, Scherer, Boise, & Gordon, 1999; Rimm, 1995; Sprenger, 1999; and the U.S. Communications Decency Act of 1996, subsequently declared unconstitutional), there is surprisingly little systematic research concerning the prevalence of specific sexually explicit content – antisocial, neutral, or otherwise – on the Internet. Experimental research concerning effects of exposure to Internet sexually explicit materials is almost as sparse. Barak and Fisher (1997) report an investigation in which male university students interacted with sexually explicit software on personal computers that permitted them to either view geometric forms passively, nude females passively, nude females with control over browsing speed and direction, or nude females with control over browsing speed, direction, zoom focus on favored body parts, and manipulation of the nude female’s coloring. Compared with exposure to geometric forms, no effects of exposure to even the most high-level manipulation and control over female sexually explicit pictures were seen on any outcome variable, including attitudes toward women, likelihood of sexual harassment, or verbal aggression against a female confederate. Similarly, Barak, Fisher, Belfry, and Lashambe (1999) had male undergraduates browse Internet bookmark lists that contained 0 percent, 10 percent, 50 percent, or 80 percent sexually explicit websites, and found no effects of exposure to increasing levels of Internet sexually explicit content on outcome measures that included attitudes toward women, likelihood of rape, and willingness to work under the supervision of a female manager.

In correlational research, Emmers-Sommer and Burns (2005) report that users of pornography that depicts sexual coercion more strongly endorse rape myths than do nonusers of such materials. In contrast, Fisher and Barak (2001) report that since the spectacular growth of availability in Internet sexually
explicit material began in the mid-1990s, rates of reported forcible sexual assault in the United States have declined by some 15 percent from a rate of 37.1/100,000 in 1995 to a rate of 31.7/100,000 in 2005 (see Figure 8.1). Similarly, D’Amato (2006) has reported that the four U.S. states with the lowest rates of Internet access have increased rates of forcible rape by 53 percent from 1980 to 2000, while the four U.S. states with the highest rates of Internet access have decreased rates of rape by 27 percent during this period. Evidence for a confluence model of intense effects of sexually explicit materials on those with antisocial personality dispositions is also lacking in relation to findings for sex offenders’ reported use of pornography, which generally either does not differ from or is lesser than that of controls (see, for example, Abel, Becker, & Mittleman, 1985; Becker & Stein, 1991; Goldstein & Kant, 1973; Langevin et al., 1988; Malamuth et al., 2001; for an exception see Marshall, 1988).

At least one highly interactive, software-based antipornography intervention, Peggy’s Porn Guide (Isaacs, 2003) has been developed and tested, with a view toward Internet deployment as an educational immunization against pornographic messages that link sexuality and sexual violence. Research by Isaacs and Fisher (in press) involved exposing men to (among other stimuli) violent and degrading pornographic videos taken from the Internet, accompanied by interactions with Peggy, a buxom antipornography educator, and results suggest that such interventions may assist men to recognize and reject
Monica T. Whitty and William A. Fisher

Figure 8.2. Screen shots illustrating the Peggy’s Porn Guide antipornography intervention (Isaacs, 2003).

themes of sexual violence portrayed in Internet sexually explicit materials. Screenshots illustrating the Peggy’s Porn Guide intervention are presented in Figure 8.2.

Given public concern about Internet sexually explicit materials and the paucity of research on prevalence and effects of Internet pornography, research beyond extant work (e.g., Barak et al., 1999; Fisher & Barak, 2001; Isaacs, 2003) is clearly needed.
Internet sex Education

An additional and potentially positive aspect of the Internet is the way it has been used to educate people about sex. Sexual and reproductive health challenges as abiding and diverse as sexual dysfunction (Basson et al., 2000, 2004; Fisher, Boroditsky, & Morris, 2004b; Laumann & Rosen, 1999; Zilbergeld, 1992), contraceptive method choice (Black, Francouer, & Rowe, 2004a, 2004b, 2004c; Fisher et al., 2004a, 2004b), adolescent sexual activity (Byrne, Kelly, & Fisher, 1993; Fisher & Boroditsky, 2000), sexually transmitted infection (Acker, Goldwater, & Dyson, 1992; Fisher & Fisher, 1992; Centers for Disease Control and Prevention, see at: http://www.cdc.gov./std/default.htm), and the experience of menopause (Fisher, Sand, Lewis, & Boroditsky, 2000; Writing Group for the Women’s Health Initiative Investigators, 2002) confront individuals worldwide who need accessible, expert, and personally relevant information. Sexuality and reproductive health education efforts – aimed at providing individuals with information, motivation, and behavioral skills that will enable them to avoid sexual and reproductive health problems and achieve well-being in this area (Barak & Fisher, 2001, 2003; J. Fisher & Fisher, 1992; W. Fisher & Fisher, 1993, 1999) – are increasingly exploiting the Internet to deliver sexual and reproductive health promotion content.

Exploiting Unique Characteristics of the Internet for Sexual and Reproductive Health Education

It has been asserted that the Internet’s core characteristics are uniquely and optimally suited to the communication of sexual and reproductive health education (Barak & Fisher, 2001, 2002, 2003). The Internet is affordable to audiences who seek or require sexual and reproductive health content; it is accessible at any time of day or night and at an enormous number of locations worldwide; it is acceptable and regarded as a credible and legitimate communication channel; and it is anonymous or at least perceived as such by users, who can access this sexual and reproductive health information channel while alone, unobserved, and unmonitored (Barak & Fisher, 2001, 2002, 2003; Cooper, 1998; Cooper et al., 2000). Moreover, individuals using the Internet to access sexuality and reproductive health education material can do so with little or no fear of censure or stigma owing to their level of sexual knowledge or sexual ignorance, their age or physical appearance, or the nature of their specific sexual interests, inclinations, or questions. From the point of view of the creation of sexual and reproductive health education initiatives, the Internet can be an exceedingly efficient and cost-effective channel for collecting and communicating the most expert and up-to-date information to the widest possible audience, and it is capable of providing rich, interactive, and individually tailored audio, visual, and text information to sexuality and reproductive health education consumers. For these reasons, Internet-assisted sexual and reproductive health websites have proliferated.
(for example, http://www.sexualhealth.com; http://www.iwannaknow.org; http://www.goaskalice.columbia.edu; http://www.teenwire.com), and at least one widely used website (http://www.ssexualyandu.ca) has been explicitly based on a sophisticated and well-validated behavioral science model of sexual and reproductive health promotion (e.g., Byrne et al., 1993; J. Fisher & Fisher, 1992; W. Fisher & Fisher, 1992, 1999).

Comprehensive, Theoretically Grounded, Internet-Based Sexual and Reproductive Health Education: Sexualityandu.ca – masexualite.ca

The sexualityandu.ca website provides an illustration of a comprehensive, theoretically grounded, Internet-based approach to sexual and reproductive health education. Responding to sexual and reproductive health challenges facing Canadians, the Society of Obstetricians and Gynaecologists of Canada, together with other interested organizations, initiated a sexual and reproductive health promotion project which – while initially focused on traditional media (e.g., books, brochures, and the like) quickly changed course and decided to invest resources in an Internet-driven comprehensive sexual and reproductive health platform (Barak & Fisher, 2003). Recognizing that the accessible, affordable, and anonymous nature of the Internet provided optimum conditions for seeking and assimilating sexual and reproductive health content, and the tremendous efficiencies of an Internet-based approach for collecting and conveying comprehensive, expert, and up-to-date materials in this domain, sexualityandu.ca – masexualite.ca was created as a bilingual English-French website. Sexualityandu.ca – masexualite.ca contains sexual and reproductive health promotion content dedicated and directed separately to teens, parents, adults, teachers, and health care professionals. This content is created by a panel of experts, and it is continuously updated and conveyed with rich, interactive, audio, visual, and text materials. Website content and approach is grounded in the Information-Motivation-Behavioral Skills (IMB) model (J. Fisher & Fisher, 1991; W. Fisher & Fisher, 1993, 1999) which has been adopted by Health Canada (2003) as a well-validated model for sexual and reproductive health promotion intervention. The IMB model (J. Fisher & Fisher, 1991; W. Fisher & Fisher, 1993, 1999) is based on an integration of social and health psychology theory and research and holds that individuals who are well-informed and possess easy-to-apply sexual and reproductive health knowledge, who have attitudes and norms that motivate them to enact sexual and reproductive health practices, and who possess the behavioral skills necessary to act effectively, are likely to engage in sexual and reproductive health promotion behavior. Conversely, the poorly informed, the poorly motivated, and those who lack relevant behavioral skills are likely to engage in sexual and reproductive health risk behaviors (see J. Fisher & Fisher, 2000, for a review of empirical support for the IMB model). Accordingly, sexualityandu.ca – masexualite.ca’s educational approach exploits the Internet to communicate comprehensive sexual
and reproductive health information, motivation, and behavioral skills content to diverse audiences.

The teen section of sexualityandu.ca – masexualite.ca contains information concerning traditionally focal issues (e.g., puberty, contraception, sexually transmitted infections), emerging issues (e.g., drug-assisted sexual assault), conveys scriptlike and easy-to-apply information for addressing sexual and reproductive health problems, and a set of engaging audiovisual games and virtual scenarios (e.g., “It’s Party Time,” “War of the Condoms”) that permit an adolescent to try out sexual choices and address the consequences of these choices in virtual space. The parent section of the website discusses the parental role in sexual and reproductive health promotion; provides information, motivation, and behavioral skills content concerning puberty, adolescence, and living with teenagers, and approaches to talking with teens about sexual and reproductive health issues; and links to essential resources. The adult section of sexualityandu.ca – masexualite.ca includes relevant material concerning sexual function and dysfunction, contraception, and scriptlike tips for talking with partners about sexuality, among other topics; and the teacher’s section of the website is provides detailed information concerning approaches, strategies, lesson plans, and directly applicable materials for delivering sexual and reproductive health education in the classroom. The health care professionals section of the website conveys information about clinician-patient communication about sexual and reproductive health; male and female sexual function; contraception, disability, and illness, menopause; and domestic violence.

The creators of sexualityandu.ca – masexualite.ca have devoted considerable resources to creating and updating content and presenting it in rich, interactive fashion to convey easy to act on information, motivation to act, and behavioral skills for acting effectively in promoting sexual and reproductive health, as the IMB model stipulates. Moreover, considerable resources have been devoted to design issues (the sexualityandu.ca – masexualite.ca logo, seen in Figure 8.3, is a Canadian underground classic) and to public service and paid advertising, including bus shelter and subway ads, radio spots, and widespread distribution of sexualityandu.ca – masexualite.ca mouse pads and rulers in high schools, physicians offices, and other consumer contact settings. The net result of this activity is that sexualityandu.ca – masexualite.ca is visited by some 280,000 unique visitors each month, for an average of approximately ten minutes per visit (see Figure 8.4), illustrating the efficiency and reach of Internet-driven sexuality education and the access and comfort level of its users.

A Specialized, Theoretically Grounded, Internet Compatible Approach to Health Promotion for HIV-Positive Persons:
Lifewindows

Highly active antiretroviral therapy (HAART) represents the single most important achievement in the treatment of HIV since the beginning of the HIV/AIDS epidemic (Dybul, Fauci, Bartlett, Kaplan, & Pau, 2002). Within the decade since its introduction, HAART has dramatically reduced the morbidity
Figure 8.3. Sexualityandu.ca website logo.

Figure 8.4. Sexualityandu.ca – masexualite.ca unique website visitors, 2003–2006.
and morality of HIV infection, and, where available, HAART has changed HIV from an always fatal disease into a chronic infection. Despite these dramatic benefits, however, HAART regimens are often complex, side-effect laden, toxic, and extremely unforgiving of suboptimal adherence (Altice, Mostashari, & Friedland, 2001; Holzmer, Henry, Portillo, & Miramontes, 2000; Fisher, Fisher, Harman, & Amico, 2006). Unless an HIV-positive individual is 90 percent adherent to his or her HAART regimen, viral resistance may develop and the HIV-positive individual’s health may be severely compromised (Paterson et al., 2000). At present, some 57–77 percent of HIV-positive patients are unable to adhere to HAART at necessary levels (Montessori et al., 2000; Rigsby et al., 2000).

Lifewindows (Lifewindows Working Group, Center for Health, Intervention, and Prevention, University of Connecticut) is a specialized, IMB model–based approach to promotion of adherence to HAART among HIV-positive persons that employs sophisticated, completely interactive, and highly attractive software. Lifewindows is currently being tested in clinical settings, with some 500 HIV-positive men and women, with a view toward future widespread dissemination of an empirically validated educational intervention via computer kiosks in clinical settings and on the Internet. Lifewindows participants – HIV-positive patients on antiretroviral therapy – are greeted by Marcus (see Figure 8.5), a friendly and supportive “guide” who works with patients, taking them through a richly illustrated medication adherence assessment routine, and a comprehensive review of patient information, motivation, and behavioral skills barriers to adherence to HAART. Based on adherence levels and identified information, motivation, and behavioral skills barriers to adherence, HIV-positive participants are encouraged to choose from among twenty relevant intervention activities. Adherence promotion intervention activities range from richly illustrated simulations in which participants position icons indicating their daily activities (which are converted into naturally occurring cues for taking medication), to “Positive Voices,” in which a panel of articulate HIV-positive persons discuss their own strategies for managing adherence, to “Doc Talk,” in which highly expert and patient-friendly HIV care physicians take the time to answer common patient questions about HAART adherence and toxicity. Other adherence promotion interventions that are interactively offered on the basis of individual patient needs include “Bill the Pill,” a humorous cartoon that describes ways to make taking medication easier, “Bloodstream Animation,” a cartoon to teach exactly how HAART works, why adherence is critical, and how nonadherence damages the immune system and health, and “Side Effects” prescribes scriptlike approaches to dealing with side effects of HAART that work against adherence. Lifewindows assists HIV-positive patients to set goals for adherence, “remembers” patient adherence goals and concerns, and “checks in” with patients periodically. Once again, the Lifewindows approach, like the sexualityandu.ca approach, is based on validated behavior change theory, and it explicitly exploits the anonymity,
Figure 8.5. Lifewindows introduction screen and adherence promotion intervention screen examples.
Figure 8.5 (continued)
accessibility, affordability, and aloneness characteristics of patient-computer interaction on Internet, which facilitate nonjudgmental and personally relevant and applicable health promotion intervention, in this instance specialized and targeted toward lifesaving adherence to HAART.

Internet-Based Sexuality Education: Second Thoughts

Despite the promise of Internet-based sexuality education as an efficient and effective channel for sexual health promotion, we note that health education websites in general are quite variable in accuracy and that website users are often not sensitive to or discerning of such differences in website quality (see Morahan-Martin, Chapter 3; see Smith, Gertz, Alvarez, and Lurie’s [2000] discussion of variable sex education website quality). Moreover, research focused on sexual health education websites shows that use of search engines with terms such as sexual health and sex education may identify a preponderance of pornographic sites and a small minority of useful and legitimate sex education sites (Smith, Gertz, Alvarez, & Lurie, 2000). Use of search engines to locate specific sexual health information (e.g., condom use instructions, sexually transmitted disease symptoms) however, was much more efficient and produced usable results very rapidly (Smith, Gertz, Alvarez, & Lurie, 2000). In addition, Bay-Cheng’s (2001) content analysis of sex education websites found that – mirroring classroom-based sex education – web-based sex education had a heavy emphasis on sexual problems and a frequent moralizing focus. At the same time, experimental research has demonstrated that Internet-based sex education has positive effects on reproductive health knowledge in populations as diverse as disabled North American women.
The Sexy Side of the Internet

(Pendergrass, Nosek, & Holcomb, 2001) and mainland Chinese high school and college students (Lou, Zhao, Gao, & Shah, 2006). Further research and application of Internet technology to provide accessible, anonymous, and high-quality sexual and reproductive health education efficiently and effectively is clearly a future objective.

The Rainbow Web? Gays, Lesbians, and the Internet

There is a strong basis for assuming, once again, that the core characteristics of the Internet – accessibility, affordability, acceptability, anonymity, and aloneness – might make it an extremely good medium for communication with and among members of sexual minorities who experience, in addition to numerical minority, enduring stigma. As it happens, the Internet has proven to be an extremely widely exploited channel for communication among gay, lesbian, bisexual, and transgendered (GLBT) individuals worldwide. A special issue of the International Journal of Sexuality and Gender Studies (see, for example, Alexander, 2002; Heinz, Gu, Inuzuka, & Zender, 2002) has been devoted to GLBT individuals’ use, presence, and identity on the Internet, and the interested reader may peruse any number of GLBT-focused and friendly websites (e.g., Gay.com, http://www.gay.com; PlanetOut, http://www.planetout.com).

Perhaps inevitably, the Internet has had both positive and negative effects on the GLBT community. The Internet can be employed as a venue for coming out and for learning about and exploring gay identity and gay community in the safety, anonymity, and user-controlled environment of the web (see, for example, Munt, Bassett, & O’Riordan, 2002), and it can be employed as an anonymous and effective means for conducting research with GLBT individuals who would not otherwise be available for research participation (see, for example, Chiasson et al., 2006; Pequegnat et al., 2007).

The Internet can be a potentially safer space for GLBT individuals to explore their sexuality. Mathy (2007) found in her large sample of 7,037 participants that heterosexuals are significantly less likely than others of the same sex to use the Internet to explore their sexuality. Moreover, she found that bisexual men were more likely than heterosexuals to use the Internet to engage in offline risky sexual behaviors (e.g., anonymous sex with strangers). Interestingly, Mathy found that a larger proportion of male bisexuals compared with gays had stated that they used the Internet to explore their sexual fantasies. In contrast, a larger percentage of gays compared with male bisexuals claimed they engaged in online sexual activities as a way of coping with stress, to meet dates, and to meet for pure sex.

The Internet provides an ideal context for meeting – and having unsafe sex with – other members of sexual minorities, and research has repeatedly found that use of the Internet to find sexual partners may be very common among men who have sex with men, and that men who find male sexual partners on the Internet are at considerably greater risk of sexually transmitted infection, including HIV, than men who do not (see Benotsch, Kalichman, & Cage,
At the same time, however, the Internet may also prove to be an exceptionally suitable means for reaching sexual minority communities with prevention messages. For example, the World Health Organization (2000) reports on the use of Internet users’ screen names, obtained from chat rooms, to convey prevention information during a syphilis epidemic among homosexual men in San Francisco, which resulted in a substantial increase in men seeking screening and care for this infection. Others (Grove, 2006) report on Internet-based interventions to address barebacking (unprotected anal intercourse among men who have sex with men), and Internet-based research on suicidality among gay and bisexual men and women on five continents, that could provide critical guidance for Internet-based prevention interventions. Although space limitations preclude further discussion, this brief introduction to the subject of the Internet and the GLBT community suggests that core characteristics of the Internet make this a highly appropriate channel for communication with and among sexual minorities and that the effect of the Internet in this community may be immense, health relevant, and in need of research and prosocial exploitation.

**The Future of Online Sex**

Online sexual activities no longer are restricted to text, pictures, videos, webcams, and audio. Nowadays, while still in its infancy, we have teledildonics. Teledildonics is essentially a virtual reality application that allows individuals to have sex interactively with people miles away. At present, mobile phones can call up and activate internally worn vibrators. Futurists have dreamed up many other potential ways that technology can be used to pleasure people. In the future, we expect that full body suits will exist that will be able to stimulate all five senses (Whitty & Carr, 2006).

**Conclusions**

This is obviously not the final story about online sexual activities. We expect that people will continue to harness the Internet to live out their sexual fantasies – and as a substitute for living out their sexual fantasies. We also expect that more problems will emerge for couples as the Internet becomes a more common and accessible part of individuals’ lives – and that couples sexual relationships may be enriched by what they may learn on the Internet. Given the amount of research that has found that individuals can benefit from exploring their sexuality online, therapists ought to consider also new ways to assist their clients. Moreover, educators and health workers need to find new ways to use the Internet to provide credible information to those seeking out
help and information about sexuality and sexual health issues. The Internet, and its potential positive and negative effect on sexuality, is clearly only in its early stages of development, with a future yet to unfold.

References


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