

# The Internet, 1995-2000

## Access, Civic Involvement, and Social Interaction

JAMES E. KATZ

RONALD E. RICE

*Rutgers University*

PHILIP ASPDEN

*National Academy of Sciences*

*This research, which began fielding surveys in 1995 (and thereafter with variation in 1996, 1997, and 2000), was apparently the first to use national random telephone survey methods to track social and community aspects of Internet use and compare users and nonusers. The program has explored the Internet in terms of trends in access, political and civic involvement, and social interaction. The authors uncovered serendipitously what they call the Internet dropout phenomenon. The findings have found a decline in some aspects of the digital divide, especially once awareness has been achieved and when the year of adoption is considered. Contrary to the pessimistic assertions of many, no loss was discerned in terms of the indicators of political or community involvement. The findings support a more positive interpretation of the Internet's impact, at least in terms of interpersonal communication, where Internet use was associated with greater levels of telephone use (although not of correspondence by mail) and social interaction (although this was more widely dispersed). It also led to many face-to-face friendships that were judged by respondents as a positive experience. Thus, some of the earliest research on the social consequences of the Internet, confirmed during a half-decade of additional surveys, finds a decreasing but still significant digital divide, few negative effects on civic involvement and social interaction, and some positive consequences.*

## THEMES

Some researchers, media correspondents, and policy analysts have argued that the Internet is harming individual users and the overall quality of community life. Too often, however, discussions of these issues have been conducted without data or, perhaps even worse, with anecdotes, hybrids of local snowball samples, or novice and self-selected Internet users. Our aim has been to use a series of national random telephone surveys to shed scientifically credible

---

**Authors' Note:** *We would like to thank editors Barry Wellman and Caroline Haythornthwaite and two doctoral students working with them, Merav Katz and Wen-Hong Chen, for their very helpful and focused comments on our earlier drafts.*

AMERICAN BEHAVIORAL SCIENTIST, Vol. 45 No. 3, November 2001 405-419  
© 2001 Sage Publications

empirical light on these issues.<sup>1</sup> We have done this because without some sense as to the real situation among the national base of users and nonusers, we will be influenced instead by the most striking or alarming anecdotes or the most publicized or strident claims. Due to their importance to the critical debate over the Internet's societal impact, we have focused on three issues: (a) the digital divide, (b) community and political involvement, and (c) social interaction. The work has been largely supported by grants from the Markle Foundation of New York City as well as the Robert Wood Johnson Foundation.

The first fundamental concern is access, including who has/does not have access to the Internet, what motivates people to use the Internet, what barriers there are to usage, and what characterizes those who stop using the Internet (Katz & Aspden, 1997a, 1997b, 1997c). Access is the major public policy area for those who see the Internet as a universal service and for issues related to political and economic equity (McCreadie & Rice, 1999a, 1999b). Most studies report, for example, that Internet users are more likely to be male, younger, better educated, more affluent, White, and urban (Hoffman, 1998; Katz & Aspden, 1997a, 1997b). The usual term for this differential access to and use of the Internet according to gender, income, race, and location is the *digital divide*.

The second fundamental tension is whether the Internet will decrease community involvement, political participation, social interaction, and integration (Kraut et al., 1998; Putnam, 2000; Selnow, 1994) or whether it will foster diverse mediated communities with greater social capital. Concerns about the decline of community expressed 200 years ago (by Benjamin Franklin, Thomas Jefferson, and John Quincy Adams) often seem little different than those expressed continually since World War II (Merton, 1957, p. 356; Putnam, 1996). A major component of this lively debate has been the question of the impact of communication technology on these processes. Analysis and criticism started earnestly shortly after the telegraph was invented (Standage, 1999) and was reinvigorated and intensified as each new communication technology became popular: the telephone, radio, movies, and, most profoundly, the television (cf. Fischer, 1993; Schiffer, 1991).

We discern two broad but conflicting views on social communities in cyberspace. The first general view is pessimistic. Cyberspace cannot be a source of real community and/or detracts from meaningful real-world communities (Baudrillard, 1983; Beniger, 1987; Gergen, 1991; Kiesler, Siegel, & McGuire, 1984; Nunes, 1995; Stoll, 1995; Turkle, 1996). There has been concern about a possible reduction in the objectivity of traditional media if these media were to lose their status and impact because of the growth of Internet usage (Symposium, 1995; Van Alstyne, 1995). A related concern is that lack of access to Internet resources by various groups in society, relative to traditional outlets such as newspapers, radio, and television, would translate into a narrowing of the basis of political participation and legitimacy of government (White, 1997). Others argue that the Internet could weaken the legitimacy of the governing process by encouraging the spread of small, Net-savvy special interest communities

that could pursue their own narrow agenda at the cost of the public commonweal (Starobin, 1996). The quality and validity of material reported on the Internet is also increasingly problematical, leading to concerns about the corruption or debasement of elections and a consequent reduction in political participation. Some theorists have argued that the Internet is destroying community groups and voluntary associations that are necessary for the democratic process to succeed (Putnam, 1996, 2000; Turkle, 1996). Other critics fear that the Internet will absorb and dissipate the energy of the citizenry away from traditional political processes (Carpini, 1996; Rash, 1997).

The second general view is optimistic. Cyberspace involvement can create alternative communities that are as valuable and useful as our familiar, physically located communities (Poole, 1983; Rheingold, 1993). The Internet may very well foster political involvement: "Life in cyberspace seems to be shaping up exactly like Thomas Jefferson would have wanted: founded on the primacy of individual liberty and a commitment to pluralism, diversity, and community" (Kapoor, 1993, p. 53).

The third concern is whether the Internet will hinder expression or foster new forms of identity and social interaction (Baron, 1984; Gergen, 1991; Hiltz & Turoff, 1995; Parks & Floyd, 1996; Turkle, 1996; Wynn & Katz, 1997). Can online social activity and creativity translate into meaningful friendships and relationships? The first school of thought holds that computer-mediated communication (CMC) technology is too inherently antithetical to the nature of human life for meaningful relationships to form (Stoll, 1995). To type is not to be human, to be in cyberspace is not to be real; all is pretense and alienation, a poor substitute for the real thing. Thus, cyberspace cannot be a source of meaningful friendships (Baudrillard, 1983; Nunes, 1995). Furthermore, the technology is too limited to provide a useful basis for relationship formation. Hence, CMC inherently leads to experimentation (that is, lying to others who cannot immediately know what the truth is) about one's identity and qualities. Such an atmosphere can be dominated by trickery, lechery, manipulation, and emotional swindles. So much posturing, gender-switching, and faking of identities can take place that it is extremely difficult for any real relationships to be created and maintained (Turkle, 1996).

However, a second school of thought increasingly sees the Internet as a medium for social interaction (Rice, 1987b). Numerous case studies of CMC have shown that the social is an important glue that binds together the task-oriented aspects of CMC and in some cases even supplants them (Rice, 1987a). This work has been complemented by research on the functioning of medical discussion lists and newsgroups, health and psychological support groups, Internet relay chats, multiuser dungeons (MUDs), object-oriented MUDs, and even online dating services, all of which are essentially social and affect-oriented as opposed to task-oriented (Rice, 2001). A good proportion of those searching and participating in health information sites and discussion groups do so as third-party intermediaries, seeking information and support for their significant

TABLE 1: Summary Sample Size and Usage Statistics

	October 1995	November 1996	November 1997	March 2000
Sample (N)	2,500	557	2,148	1,305
Users (%)	8	19	30	65
Former users (%)	8	11	10	11.5
Never users (%)	84	70	60	23.4
Augmented sample of users		450	153	

NOTE: Because of as yet still low percentages of Internet users in the general population, the 1996 and 1997 samples were each augmented by an additional sample of Internet users. For those 2 years, we report population estimates of usage from the initial, unaugmented samples, but we use the combined (regular and augmented) samples for comparing relative distributions of variables.

others, for themselves to help them deal with illnesses of significant others, or to bring information from the Internet to stimulate, challenge, or engage their health care providers (Aspen & Katz, 2001). The growth and persistence of Web-based chat rooms and instant messaging offering community would seem to provide additional evidence refuting the nonsocial nature of CMC. Baym (1995) summarized a decade of research as revealing "the ways in which people have appropriated the commercial and non-commercial networks demonstrate that CMC not only lends itself to social uses but is, in fact, a site for an unusual amount of social creativity" (p. 160). Rice (1987b) argued that fundamental aspects of social groups and communities may well be supported, even expanded, through online communities, although the boundaries and permanence of such groups might be quite different.

## DATA SOURCES

The data summarized here, as well as detailed in various reports from the overall programmatic research (see Katz & Rice, in press), came from a series of national representative telephone surveys, all designed by us but administered by commercial survey firms. These surveys follow rigorous sampling protocols and use random-digit dialing to produce statistically representative samples of the adult U.S. population. Table 1 provides summary details on nonusers, users, former users, and sample sizes.

## RESULTS: ACCESS, USAGE, AWARENESS, AND DROPOUTS

During each of the national surveys, we asked users the year that they started using the Internet (referred to in the surveys as "the Internet, also known as the Information or Electronic Superhighway"). This enabled us to establish cohorts

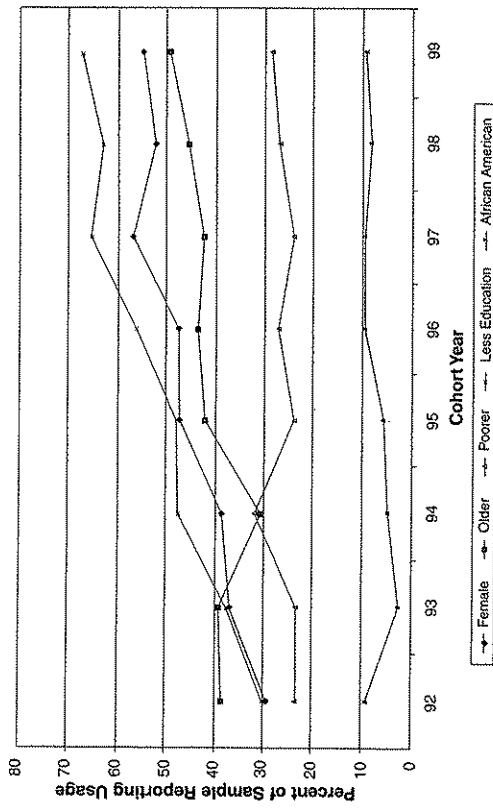


Figure 1: Percentage of All Internet Users (by Cohort Year) Belonging to Each of Several Demographic Categories

NOTE: Each demographic represents one of the dichotomized categories of the full demographic (i.e., gender, income, education, race). Data are from each cohort year for all applicable surveys (the year in which the respondent began using the Internet), not the survey year (the year in which the survey was conducted). Census figures for 1998/2000 for each demographic category were: female, 51%; at least 40 years old, 55%; less than \$35,000 income, 44.6%; less than a college education, 71.9%; African American, 12.7%. Census figures are from the online Statistical Abstracts of the United States, either 1998 counts or July 1, 2000 estimates, available at [www.census.gov/prod/www/statistical-abstract-us.html](http://www.census.gov/prod/www/statistical-abstract-us.html) (January 1, 2001). The overall percentage of African Americans in the survey samples were 9.3% in 1995, 7.3% in 1996, 11% in 1997, and 11% in 2000, whereas the percentage of African Americans in the recent census data is 12.7%. This indicates that at least the 2000 survey, and probably all the surveys, slightly underestimates the percentage of African Americans in the population. This may mean that the surveys slightly underrepresent the percentage of Internet users who are African American; however, if those African Americans who are underrepresented in national representative samples are especially poor or less educated, then they are also less likely to know about or use the Internet, so these percentages may be slight overestimates.

of users based on the year that they started using the Internet—those starting in 1992 or before and those starting in 1993, 1994, 1995, 1996, 1997, 1998, and 1999/2000. Figure 1 portrays the cohort trends.

## GENDER, AGE, INCOME, EDUCATION, AND RACE

Across the cohorts of users (1992 to 2000), the proportion of female users increases. New Internet users are proportionally more female than are reported in surveys that only indicate usage status as of the year of the survey; in recent years, new users are more likely to be female. Despite the increases in the proportion of users aged 40 and older, this proportion is still well below the proportion aged 40 and older in the general population (approximately 55%). Again, new Internet users in a given year are older than the average age of all users in

that survey year. However, the percentage of those 65 years and older who are using the Internet is still well below the proportion of those 65 years and older in the general population.

Concerning income, the trend is less certain. The proportion of new Internet users with a household income less than \$35,000 appears to be slowly increasing over time. However, the proportion of users with household incomes less than \$35,000 is less for the later surveys than for the earlier ones. This discrepancy may be explained by the fact that those with lower incomes are more inclined to stop being Internet users (discussed below). For those users who started in 1992 or before, the proportion of non-college graduates was 28%, rising to 67% for the 1999/2000 cohort. During the years the surveys were administered, the percentage rose from 48% in the 1995 survey to 56% in the 2000 survey. The proportion of African Americans using the Internet rose and then declined a bit during both the cohort and survey years. The difference in percentage of users and nonusers between African Americans and White non-Hispanics was significant only in 1996.

#### MOTIVATIONS FOR USE

Regarding motivations for Internet use, two points stand out (Katz & Aspden, 1997a, 1997b). Users in the 1995 and 2000 survey rated sending/receiving e-mail as a significantly better reason someone might be interested in becoming an Internet user than did nonusers (in this analysis, we include former users, or dropouts, as nonusers). There was no significant difference between users and nonusers in both 1995 and 2000 to the extent that they rated having contact with new people as a motivation for usage. Whereas in 1995 users and nonusers did not significantly differ in the extent to which they believed that people might be interested in becoming an Internet user "because it's a good thing to do," in 2000 users were more likely to believe this, implying a more general social norm of accepting the Internet as a positive innovation.

#### AWARENESS

Our research identified a second digital divide, relating to the awareness of the existence of the Internet (defined by the question, "Have you heard of the Internet or the Information Highway?"). We looked at the percentages of each binary category of gender (male/female), age (younger or older than 40 years), income (less or more than \$35,000), education (less or more than college), and race (African American or White non-Hispanic). Of those who were aware of the Internet, the percentage of women rose from 45.5% in 1995 to 53.3% in 2000, the percentage of those older than 40 years rose from 47.9% to 50.2%, the percentage of those earning less than \$35,000 fell from 52.1% to 33.5%, the percentage of those with less than a college education dropped from 70.6% to 64.9%,

and the percentage of those who were African American rose from 7.2% to 10.5%. Thus, the awareness divide seems to have largely disappeared according to gender, age, and race, but seems to be increasing by income and education, implying a persistent and troubling problem with reaching the most disadvantaged.

#### COMBINED INFLUENCES ON USAGE AND AWARENESS

Summary logistic regressions were run to predict awareness (vs. never heard) and to predict usage (vs. nonusers; here former users/dropouts were not considered) from the same demographic variables.

In 1995, significant predictors of being aware of the Internet were: younger, greater income, greater education, and White American (14% of variance explained, 86% of the 1,814 cases correctly predicted). Significant predictors of being an Internet user were: male, younger, greater income, and higher education (16% variance, 91% of the 1,676 cases correctly predicted). In 2000, significant predictors of awareness of the Internet were the same as in 1995: male, younger, greater income, and White American (9% variance, 93% of the 1,037 cases correctly predicted). Significant predictors of usage were: younger, greater income, and greater education (45% variance, 80.2% of 924 cases correctly predicted). Note that once awareness is achieved, in the multivariate analyses there is no digital divide—differences between nonusers and users—based on gender or race in 2000.

#### DROPOUTS

Internet dropouts—people who have used the Internet but no longer did so at the time of their survey—are usually overlooked in discussions about cyberspace (Katz & Aspden, 1998). Approximately 8% of respondents were dropouts in 1995, 11% in 1996, 10% in 1997, and 11.5% in 2000. Note that dropouts are a very high percentage of the total of those who are both current and former users, compared with the rather steady 8% to 11.5% of all respondents. In 1995, 1996, 1997, and 2000, dropouts were significantly younger, less affluent, and less well educated than users—but not more likely to be female or African American. In 1995, dropouts older than 20 years (compared to current users older than 20 years) were more likely to have been taught to use the Internet by friends (42% compared to 19% for current users), less likely to have learned at work (18% compared to 35%), and less likely to have been self-taught (15% compared to 25%). Of those who dropped out, the following percentage of respondents (averaged across the 1995, 1996, and 1997 surveys) indicated agreement with these reasons for ceasing to use the Internet: they lost access to the Internet (23%), generally due to losing a job or leaving college; the Internet was not sufficiently interesting (12%); connection and/or usage bills were too high (15.7%); and it takes too much time (7.5%).

## RESULTS: CIVIC AND POLITICAL INVOLVEMENT

To see whether Internet usage is associated with community and political involvement (or social capital), we analyzed five categories of respondents to the 1995 survey (longtime users, or those who started using the Internet before the survey year of 1995; recent Internet users, or those who started during the survey year of 1995; former users; nonusers who have heard of the Internet; and nonusers who have not heard of the Internet) (Katz & Aspden, 1997c), and the more parsimonious categories of current users versus nonusers/former users for 1995 and 2000.

### PARTICIPATION IN ORGANIZATIONS

There was no difference between Internet users and nonusers in rate of membership in religious organizations either in 1995 (about 63%) or 2000 (about 56%). However, in 2000, users who spent more hours online per week were slightly more likely to belong to more religious organizations ( $r = .07, p < .01$ ). Current users were significantly more likely to belong to any leisure organizations than were nonusers in 1995 (60.1% compared to 49.4%), but not differently in 2000 (93.4% for both). Users were significantly more likely to belong to at least one community organization than nonusers in 1995 (40.8% vs. 37.1%) and 2000 (28% vs. 15.4%). In 2000, for users, spending more hours online was not significantly correlated with membership in more leisure or community organizations.

### POLITICAL INVOLVEMENT

We identified four dimensions of offline political activity that were all greater for Internet users than for nonusers: (a) political activities such as attending rallies, making phone calls on behalf of candidates, and giving money to political causes; (b) reading and the importance of magazines and newspapers; (c) the importance of national and local television shows and interviews in the 1996 campaign; and (d) voting in the 1996 election. There was no difference in real-world political activity (including voting) between heavy and light users and long-term and short-term users (Katz, Aspden, & Reich, 1997).

There seem to be two kinds of online political activity. Browsing was a composite of reading bulletin boards/discussion groups, visiting Web sites with political information, following part of the election but reading online news, following election day coverage by computer, and viewing information via the computer after the election. In our sample of Internet users, 46% participated in at least one of these. Interaction consisted of four activities: participating in electronic discussions with people about the election, receiving e-mails about the campaign/election, sending/receiving e-mails to/from government officials, and sending e-mails to others regarding the campaign/election. In this 1996

sample, 28% of the Internet users participated in at least one of the four activities.

### COMMUNICATION BY LETTER AND TELEPHONE

Respondents were asked how often in the week prior to the interview they communicated with other people by letter or by phone. In 1995, usage of both increased from nonusers who had not heard of the Internet (37% reported sending at least one letter and 41% reported making 11 or more phone calls) up through current users (letters, 56%; phone calls, 72%). For letter contact, there was no difference between users and nonusers after controlling for significant influences of gender and education. For phone contact, Internet usage was still associated with increased phone contact after controlling for significant influences of education and age. In 2000, two thirds of Internet users had written no letters in the prior week, whereas 60.4% had made more than 10 phone calls.

## RESULTS: SOCIAL INTERACTION, NEW FORMS OF EXPRESSION

### SOCIAL INTERACTION

We first explored the extent that respondents met with friends. In the week prior to the 1995 survey, 38% of longtime users met one to three times with friends and 54% met four or more times. Of recent users, 40% met one to three times with friends and 48% met four or more times. Former users met with friends a broadly similar amount of time—48% met one to three times with friends and 44% met four or more times. Of nonusers who had heard of the Internet, 48% met one to three times with friends and 40% met four or more times. However, nonusers who had not heard of the Internet reported meeting with friends less often—43% reported meeting one to three times with friends and 39% met four or more times in the week prior to the survey. In other words, those who had been using the Internet the longest also were the most likely to have met with four or more friends, whereas those who were not even aware of the Internet were least likely to have met with four or more friends in the prior week. Clearly, long-term Internet usage is associated with more, not less, frequent sociability. These differences between nonusers and users in getting together with friends remained after controlling for employment status (full-time, part-time, retired, and unemployed).

We asked respondents the extent to which they agreed with the question, "In your social life are you frequently away from home?" The aggregate responses to this question were similar to the above analysis, but the differences were more marked with users (current and former) more strongly agreeing to the statement than nonusers. Fifty-nine percent of longtime users, 56% of recent users, and

57% of former users agreed or strongly agreed with the statement. By contrast, only 37% of nonusers who had heard of the Internet and 34% of nonusers who had not heard of the Internet agreed or strongly agreed with the statement. Differences in being frequently away from home remained for nonusers versus users after controlling for significant influences of educational achievement and marital status.

Finally, we asked participants in the survey how many of the 10 people living closest to their home they knew. Of nonusers who have not heard of the Internet, 37% reported knowing the 10 closest people and 31% knowing 4 to 9 of the 10 closest people. Similarly, of nonusers who had heard of the Internet, 33% reported knowing the 10 closest people and 36% knowing 4 to 9 of the 10 closest people. Former users reported knowing slightly fewer neighbors—28% reported knowing the 10 closest people and 42% knowing 4 to 9 of the 10 closest people, followed by longtime users—28% reported knowing the 10 closest people and 37% knowing 4 to 9 of the 10 closest people. Recent users reported knowing the fewest neighbors—21% reported knowing the 10 closest people and 43% knowing 4 to 9 of the 10 closest people. So there is evidence that long-term and recent Internet users are more likely to meet with friends in the past week but also more likely to be away from home and to know fewer neighbors. This implies that users' social communities are more physically dispersed than nonusers'. However, there was no significant difference between categories of users and nonusers in this knowledge of the 10 closest neighbors after controlling for significant influences of employment status and age, implying that the use of the Internet *per se* is not associated with different levels of awareness of one's neighbors.

In the 1995 survey, 42% of users reported contacting family members through the Internet at least once or twice. Longtime users reported contacting family members more often than did recent adopters. In the 2000 survey, 21.8% of the users reported contacting family members online at least several times a year.

Other possible indicators of home and social activity include having children, work situation (full-time, part-time, retired, unemployed, or student), owning one's home, and number of years living in the same home. In 1995, users were significantly more likely than nonusers to work full-time (69.5% vs. 54% for nonusers) or be a student (13.5% vs. 5.9%), and have lived for fewer years in their current house (6.4 years vs. 10.5 years). The same differences existed in 1996, except that users were also more likely to own their home. In 2000, users were significantly more likely to have children, work full-time (62.7% vs. 44.2%) or be a student (8.8% vs. 2.1%), and have lived for fewer years in their current house.

Finally, respondents' sense of overload (rushed, too much to do) was significantly higher for users than nonusers in 1995 but not in 2000, and reported satisfaction (overall and with communication with friends, family, and

work colleagues) was significantly greater for users than nonusers in 2000 but not in 1995.

#### NEW FORMS OF EXPRESSION

In the 1995 survey, 25.5% of users reported being a member of an Internet community. Thirty-one percent of longtime users and 17% of recent adopters reported participating in Internet communities; 23% of users overall participated in three or four communities, and 27% participated in five or more communities. For the vast majority of longtime and recent users, use of the Internet does not appear to have much impact on the time spent with friends and family. The two groups' views were not statistically different. Eighty-eight percent of users reported that the time spent with friends and family face-to-face or by phone had not changed since they started using the Internet. The same proportion of users (6%) reported that they spent more time with friends and family face-to-face or by phone as reported they spent less time. In 2000, 10.4% reported being a member of at least one online community.

In 1995, 11.5% (and in 2000, 13.8%) of users who responded to the question had established friendships via the Internet. Those reporting a higher number of Internet friends in 1995 were more likely to have met at least one of them. In 1995, 17% of users who responded to the question reported that they had met face-to-face at least one person they had first met online (not necessarily one of those online friends), and in 2000, 10.1% of users did so. There were only weak or in most cases nonexistent statistical relationships of this Internet-based friendship formation with demographic variables, traditional forms of interaction, or personality attributes.

#### SUMMARY

This article summarizes some of the major results from one of the earliest and most comprehensive survey approaches to

- understand the societal and individual consequences of the Internet,
- consider issues of awareness and dropouts, and
- study the Internet in a way that compares users to nonusers and that also controls statistically for their demographic differences.

Concerning access on all considered dimensions—gender, age, household income, education, and race—the digital divide is shrinking. Nevertheless, all the differences within the demographic variables, based on the years of the survey, were still significant. Furthermore, for some dimensions there is still a long way to go before the digital divide disappears. Public policy initiatives aimed at extending Internet usage could most usefully focus on low-income families, the

elderly, and African Americans. The inequities of awareness and use will become increasingly urgent as more job-related services (postings of job opportunities, training), government functions, and public service information (health, education, insurance, and financial support) become available via the Internet (Rice, 2001). However, the importance of awareness must not be overlooked. Because one must be aware of the Internet to use it, the value of showing utility and ease of use may be a good path to speed amelioration of the steadily diminishing digital divide.

Concerning community and political involvement, the results show that Internet users were more likely than nonusers to engage in traditional political activity in the 1996 general election, including voting, controlling for demographic differences, and the Internet provided a platform for a significant amount of additional forms of political activity. Users tend to communicate with others through other media (especially telephone) more than do nonusers, meet more with their friends, and interact more with others in general, although in a more widely dispersed physical environment. Users relative to nonusers were more likely to work, have children, and own their home, but had lived in their homes for fewer years. Users experienced greater overload (in 1995) but also greater satisfaction with their communication (in 2000).

Finally, concerning new forms of social interaction, somewhat more than 1 in 10 users have become friends with others online, have met a notable percentage of them, and belong to online communities.

Our conclusions do not in the main support arguments about pervasive negative or paradoxical effects of the Internet, certainly with respect to involvement or expression, and to some aspects of access that have generally been based on case studies and samples that were neither random nor representative. Rather, the findings support perspectives maintaining that this new social technology has substantial benefits to society. Let us be clear, however: Our survey results do not conclude that there are no negative aspects or consequences of the Internet. However, the nature of survey research precludes studying particular kinds of negative consequences or detailed aspects of especially damaging, pathological, criminal, or chronic uses. Nonetheless, we find that Internet usage (a) is becoming more equally accessible and widely used and, controlling statistically for demographic differences, is associated with (b) increased community and political involvement and (c) significant and increased online and offline social interactions.

## NOTE

1. The groundwork for what has become the Syntopia Project began in 1994 with a team headed by James Katz and Philip Aspden; Ron Rice joined it in 2000. The initial spur to action was our concern that the surveys of the Internet we had seen, although having much to offer, typically suffered one or more shortcomings. First, they tended to look only at those who were online. Yet, to be able to

make much meaning about the Internet's role in societal change from whatever data these surveys turned up, one had to have a comparative baseline of nonusers, or at least of the general population. Statistical controls were needed to account for preexisting variation among the characteristics of users versus nonusers (e.g., differential genders, incomes, and ages). Without that, one would not know whether surfers were, for instance, more or less politically conservative or more or less likely to be married. Second, these studies were often by no stretch of the imagination random samples, or even representative ones. Hence, it would be hard to know, for instance, if a sample drawn from subscribers to a PC magazine, or a "snowball/grocery store bulletin board-recruited volunteers" sample of people in Pittsburgh, Pennsylvania, represented anyone other than themselves or whether they might be peculiar in some way. Obviously, no matter how tantalizing the findings drawn from such groups might be, it would be hard to generalize from them. Third, even though the social, interpersonal, and community aspects of behavior were of central interest to those carrying out ethnographic observation and case studies (some of which did include e-mail surveys of a particular online group), these concerns were being ignored by those doing larger scale survey work. Our aim was to address these shortcomings in a series of national random telephone surveys that would constitute a multiyear program charting social aspects of Americans' behavior online and offline.

In seeking a name that would capture our view of the matter, we wanted a term that would transcend the desiccated notion of cyberspace as a place or virtual society as a process because we saw that the "out there" was really more "in here." That is, these processes should be seen as part of an experiential continuum, ranging from interior psychological states through face-to-face interaction and social organization, and that would include a variety of other forms of communication. In particular, we saw that the Internet was and would continue to be part of a fabric of activity that included PDAs and especially mobile phones. At the same time, we wanted to avoid the wrung-out emptiness of bowling alone. The idea of "e-anything" was quickly passed over. Although it is easy to say what we wished to reject, it was harder to find a word or phrase that captured what we did mean. In our view, the Internet is now (and increasingly becoming) a place where people get together. It is part of a continuum of existence that ties life together in new ways. Yet even as it erases some older forms of social interaction, it strengthens and reinforces others. We would also argue that these systems are in their social action and ramifications not altogether different from those of earlier technologies that precipitated communication revolutions, such as the car or the telephone.

The word we selected, *Syntopia*, is a neologism (although others have used it as well) drawn from the words *syn* and *utopia*. Derived from ancient Greek, it means literally "together place," which is how we see the Internet and related mobile communication. The term *Syntopia* invokes utopian and dystopian visions of what the Internet does and could mean. At the same time it brings these two visions together symbolically and, perhaps not so subtly, also alludes to the Internet's dark side in the homophone *sin*. Other nominal connections are *synergy*, *synthetic*, and *synthesis*, all of which are appropriately evocative and also fit with our project results to date. The Internet is a place for people to interact, express themselves, emote, and find new friends. It is also a place in which people seek to hurt, cheat, and exploit others. The Syntopia Project aims to identify what these activities mean for issues ranging from political involvement and health care to friendship formation and family communication patterns. (See Katz & Rice [in press] for a full treatment of Syntopia.)

## REFERENCES

- Aspden, P., & Katz, J. (2001). Assessments of quality of health care information and referrals to physicians: A nationwide survey. In R. E. Rice & J. Katz (Eds.), *The Internet and health communication* (pp. 107-119). Thousand Oaks, CA: Sage.
- Baron, N. S. (1984). Computer-mediated communication as a force in language change. *Visible Language, 18*(2), 118-141.
- Baudrillard, J. (1983). *Simulations* (P. Foss, P. Patton, & P. Beitchman, Trans.). New York: Semiotext(e).

- Baym, N. K. (1995). The emergence of community in computer-mediated communication. In S. G. Jones (Ed.), *Cybersociety: Computer-mediated communication and community* (pp. 138-163). Thousand Oaks, CA: Sage.
- Beniger, J. (1987). Mass media and pseudo community. *Communication Research*, 14, 352-371.
- Carpini, M.X.D. (1996). Voters, candidates, and campaigns in the new information age: An overview and assessment. *Harvard International Journal of Press/Politics*, 1, 36-56.
- Fischer, C. L. (1993). *America calling: A social history of the telephone to 1940*. Berkeley: University of California Press.
- Gergen, K. (1991). *The saturated self: Dilemmas of identity in contemporary life*. New York: HarperCollins.
- Hiltz, S. R., & Turoff, M. (1995). *Network nation* (Rev. ed.). Cambridge, MA: MIT Press.
- Hoffman, N. (1998). Bridging the racial divide on the Internet. *Science*, 280, 390-391.
- Kapor, M. (1993, July/August). Where is the digital highway really heading? *Wired*, 53-59, 94.
- Katz, J., & Aspden, P. (1997a). Motivations for and barriers to Internet usage: Results of a national public opinion survey. *Internet Research: Electronic Networking Applications and Policy*, 7(3), 170-188.
- Katz, J., & Aspden, P. (1997b). Motives, hurdles, and dropouts: Who is on and off the Internet and why. *Communications of the ACM*, 40(4), 97-102.
- Katz, J., & Aspden, P. (1997c). A nation of strangers. *Communications of the ACM*, 40(12), 81-86.
- Katz, J., & Aspden, P. (1998). Internet dropouts in the USA. *Telecommunications Policy*, 22(4/5), 327-339.
- Katz, J., Aspden, P., & Reich, W. (1997, September). *Elections and electrons: A national public opinion survey on the role of Cyberspace and mass media in political opinion formation during the 1996 election*. Paper presented at the 25th Annual Telecommunications Policy Research Conference, Crystal City, Arlington, VA.
- Katz, J. E., & Rice, R. E. (in press). *Synopia: Access, involvement and interaction on the Internet*. Cambridge, MA: The MIT Press.
- Kiesler, S., Siegel, H., & McGuire, T. W. (1984). Social psychological aspects of computer-mediated communication. *American Psychologist*, 39(10), 1123-1134.
- Kraut, R., Lundmark, V., Patterson, M., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, 53, 1017-1031.
- McCreadie, M., & Rice, R. E. (1999a). Trends in analyzing access to information. Part I: Cross-disciplinary conceptualizations. *Information Processing and Management*, 35(1), 45-76.
- McCreadie, M., & Rice, R. E. (1999b). Trends in analyzing access to information. Part II: Unique and integrating conceptualizations. *Information Processing and Management*, 35(1), 77-99.
- Merton, R. K. (1957). *Social theory and social structure* (2nd ed.). New York: Free Press.
- Nunes, M. (1995). Jean Baudrillard in cyberspace: Internet, virtuality, and postmodernity. *Style*, 29(2), 27-31.
- Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Communication*, 46, 80-97.
- Poole, I. (1983). *Technologies of freedom*. Cambridge, MA: Belknap.
- Putnam, R. D. (1996). The strange disappearance of civic life in America. *American Prospect*, 24, 34-46.
- Putnam, R. D. (2000). *Bowling alone*. New York: Simon & Schuster.
- Rash, W. (1997). *Politics on the nets: Wiring the political process*. New York: Freeman.
- Rheingold, H. (1993). *The virtual community: Homesteading on the electronic frontier*. Reading, MA: Addison Wesley.
- Rice, R. E. (1987a). Computer-mediated communication and organizational innovation. *Journal of Communication*, 37, 65-94.
- Rice, R. E. (1987b). New patterns of social structure in an information society. In J. Schement & L. Lievrouw (Eds.), *Competing visions, complex realities: Social aspects of the information society* (pp. 107-120). Norwood, NJ: Ablex.
- Rice, R. E. (2001). The Internet and health communication: A framework of experiences. In R. E. Rice & J. E. Katz (Eds.), *The Internet and health communication: Experiences and expectations* (pp. 5-46). Thousand Oaks, CA: Sage.
- Schiffert, M. B. (1991). *The portable radio in American life*. Tucson: University of Arizona Press.
- Selnow, G. W. (1994). *High-tech campaigns: Computer technology in political communication*. New York: Praeger.
- Standage, T. (1999). *The Victorian Internet: The remarkable story of the telegraph and the nineteenth century's on-line pioneers*. Berkeley: University of California Press.
- Starobin, P. (1996). On the square. *National Journal*, 25, 1145-1149.
- Stoll, C. (1995). *Silicon snake oil*. New York: Doubleday.
- Symposium. (1995). Emerging media technology and the First Amendment. *Yale Law Journal*, 104, 1613-1850.
- Turkle, S. (1996). Virtuality and its discontents: Searching for community in cyberspace. *American Prospect*, 24, 50-57.
- Van Alstyne, W. W. (1995). *First Amendment: Cases and materials* (2nd ed.). Westbury, NY: Foundation Press.
- White, C. S. (1997). Citizen participation and the Internet: Prospects for civic deliberation in the information age. *Social Studies*, 88, 23-28.
- Wynn, E., & Katz, J. (1997). Hyperbole over cyberspace: Self-presentation and social boundaries in Internet home pages and discourse. *Information Society*, 13(4), 297-329.