Trust, Civic Engagement, and the Internet*

Eric M. Uslaner
Department of Government and Politics
University of Maryland–College Park
College Park, MD 20742
euslaner@gvpt.umd.edu

Alex Salcedo, a 13 year old boy from Kensington, Maryland, was hit by a car near his home. He went into the intensive care unit at a local hospital and was put into an induced coma and the prognosis was not good. His father created a web page so that the family could keep apprized of his medical condition. Almost immediately, the family began getting messages of goodwill and prayers from as far away as Venezuela and Mozambique. The web site received 66,000 hits, with 2,000 messages posted. Alex did not recover, but an on-line community formed, with a company providing a service to other families in crisis, http://www.medicalstatus.com (St. George, 1999). This is the good Net, a caring place where people give of themselves with no expectation of anything in return.

Kevin, a hospital security guard in Idaho, logged on to the Internet for the first time in 1995 in the hospital library. He accidentally discovered a pornography site and kept coming back to this and similar sites. "Eventually," U.S. News and World Report writer Joannie Fischer wrote, "the online sexual world came to take the place of any real-world contact with women." He eventually fell into a trap set by his employers and "now lives under the constant monitoring of his wife and his boss" (Fischer, 2000, 43). This is the bad Net, a place that denies reality and takes people away from whatever real-world social ties they have made.

Which is the real Internet, the good Net or the bad Net? This is a high stakes question because each side sees the World Wide Web as the possible solution or the villain in the drama of the decline of community. In many western societies, and especially in the United States, there is a concern that citizens are becoming disconnected from each other. We no longer join groups, we don't socialize with each other, and, above all, we don't trust each other as much as we did in the

past (Putnam, 2000). Supporters of the good Net approach see wired communications as bringing people back together in the spirit of those who helped the Salcedo family come to terms with its tragedy. Adherents of the bad Net theory see the Internet as accelerating the decline of civic engagement and good feelings.

Putnam (1993) referred to a "virtuous circle" of trust, group membership, and informal social ties that has become known as "social capital." Social capital helps make society and its government run more smoothly. But it is in shorter supply now than it used to be. At least since the 1960s, Americans began to withdraw from participation in all sorts of civic groups–from the traditional service organizations such as the Rotary Clubs, Kiwanis, and the League of Women Voters as well as bowling leagues and card-playing clubs. They socialized less with friends and neighbors and we voted less often.

The "inevitable result" was that we became less trusting of one another (Putnam, 2000, ch. 8). In 1960, 58 percent of Americans believed that "most people can be trusted" (as opposed to saying that "you can't be too careful in dealing with people"). By the 1990s barely more than a third of Americans trusted each other, according to national surveys such as the General Social Survey and the American National Election Study. Americans have lost their sense of community. We don't mix with each other as much as we used to and we don't trust each other. We have become more balkanized, our public life has become more contentious, and our national institutions (especially the Congress), struggle to compromise on even the most basic public policy questions.

The principal villain in the decline of social capital is technology, especially television but perhaps also the Internet (Putnam, 2000, ch. 13).[1] I (and others) have exonerated television as

the cause of the declines in civic engagement and trust elsewhere (Uslaner, 1998; see also

Newton, 1999; Norris, 1996, 2000, and 2001). I show in this paper that the Internet is *not* to

blame either (see also Norris, 2000 and 2001; Shah, 1998). I shall examine the connection

between the Internet, trust, and civic engagement, using a 1998 survey by the Pew Center for The

People and The Press and a 2000 survey by the Pew Internet and American Life Project. Briefly,

I find no evidence for the claim that people who have stronger social support networks in the

"real world" avoid the web. There is also little support for the argument that the Net is a haven

for people who don't trust others. Nor is there is any evidence that people who spend time on-

line are less likely to trust others.

<u>Civic Life in the New Technological Era</u>

The ultimate pay-off of civic engagement is the trust it engenders with our fellow citizens.

As Putnam (1993, 90) argues: "Participation in civic organizations inculcates skills of cooperation

as well as a sense of shared responsibility for collective endeavors." Technology, especially

television (but perhaps also the Internet), can lead us away from socializing into our private

worlds. Watching a lot of television keeps us inside our homes and away from the civic organiza-

tions and social connections that generate trust. Heavy TV viewing also leads us to believe that

the real world is as "mean" and violent as the programs we see on television–so it makes us less

likely to trust strangers (Gerbner <u>et al</u>., 1980).   Television produces misanthropes–who see the

world as a dark and threatening place and whose "Friends" are fictional characters whom you will

never be asked to help out. The ultimate television viewer was Chauncy Gardner, the character in

Jerzy Kosinski's novel, <u>Being There</u>. Gardner had no social ties and thought the television world

was the real world.

That's the old technology. Today there are even more mistrusters and civic engagement has dropped further. The new culprit seems to be the Internet. Even more so than television, the Internet may be a lonely place. We hear stories of people who become addicted to the Net, who spend their hours in front of a computer screen and ignore their families and dissociate themselves from friends. Television programs may make you think that the world is mean. The Internet will show you just how nasty folks can be.

When you enter an Internet chat room, you can hide your identity, "flame" other people, and "troll" first time visitors to a web site. The Net can be a dangerous place, where "charities" solicit funds for nonexistent causes (Abelson, 1999), scoundrels feign love for lonely hearts, and unscrupulous hackers uncover your credit card numbers. The newsmagazine U.S. News and World Report (2000, 36) published a special investigative report suggesting that "the amount of bad stuff out there is truly staggering"–adoption scams, stalking complaints, rigged auctions, and even "the first Internet serial killer." We picture the Internet version of Chauncy Gardner as a loner sitting in front a keyboard, mouse, and monitor playing "Doom" (or whatever gamers do these days). This is the bad Net.

It would be easy to ignore these horror stories if there were not serious academic research supporting the view of the Internet as a haven for social isolates. At a minimum, Nie and Erbring (2000) report that heavy Internet users report that they have cut back on their social ties. Net use leads people away from social contacts and toward staring at their monitors in not-so-splendid isolation. Heavy Internet users *become* more depressed, lead more stressful lives, and have fewer friends–even though they may start out as well off psychologically as the rest of us (Kraut et al., 1998).

Yet, this is just one face of the Internet. Others see the Net as the great opportunity to rebuild our lost sense of community and trust. People come together on the Net through e-mail lists, affinity groups, support groups, and chat rooms. The Internet connects people from all over the world–and may be, as Hauben and Hauben (1997, 5) argue "a grand intellectual and social commune in the spirit of the collective nature present at the origins of human society."

The Internet also lets us connect with people with shared interests whom we otherwise would not meet. The Internet is the great leveller of class and race barriers–which have proven to be strong barriers to effective participation in American society (Verba, Schlozman, and Brady, 1995). Our net contacts may come from different backgrounds or live far away from us (Etzioni and Etzioni, 1997). All sorts of good things happen on the Net, including opportunities to volunteer (Maloney, 1999) and many different types of support groups. Some are simply outlets to share information. Others provide forums for people to connect with each other, such as USENET chat groups and the now-famous WELL, the Whole Earth 'Lectronic Link, that established itself as the counterculture on the web (Rheingold, 1993). And others even serve as forums for people to help each other in times of crisis and grief (St. George, 1999). When people go online, they feel less restrained in interacting with strangers than they would in daily life (Tranvik, 2000, 13-14).

Shah, Kwak, and Holbert (2001, 150-152; see also Shah, 1998) argue that people who use the Internet for information (primarily exchanging e-mails) are slightly more likely to get involved in their communities and are significantly more likely to trust other people compared to people who use the Net for other reasons (ranging from chat rooms to buying goods to doing research to not connecting at all). Younger people who communicate with others are especially likely to trust

others and to participate in their communities.

The Internet may well be the route to *restoring* our frayed social ties (Wellman and Gulia, 1999). While some studies see the Net as a mean place, others see it as a ray of hope. The Pew Internet and American Life Project reported survey results showing that Internet users had *wider* social networks than people who do not connect to the web (Raney, 2000; Robinson et al., 2000). Moreover, these online connections often lead to "real world" friendships (Blanchard and Horan, 2000; Parks and Floyd, 1996; Wellman and Gulia, 1999). As computer literacy and Internet access grow, Americans should reconnect with each other– thus forming the base for a new era of trust. This is the good Net. Which is the real Net

The Net: Who Goes There?

I offer a third perspective: The Internet neither destroys nor creates social capital. There are both altruists and scoundrels on the Net, just as there are in everyday life (cf. Bimber, 2000; Wallace, 1999, 190). Indeed, the Internet, like television, mirrors everyday life. What people do online is pretty much what they do offline: They shop, they get sports news and weather, they plan their vacations, and, most of all, they contact people they already know through e-mail. At least one survey (Cole, 2000) and a time-diary study (Robinson et al., 2002) suggest that net surfers socialize with others about the same amount as other people. The Net is not a threat. But it is not Nirvana either.

The major reason why the Internet is not the "new new thing" of trust and civic engagement is that much of the current discussion of the "virtuous circle" of trust, civic engagement, and socializing is misplaced. Trust in other people is trust in strangers, people who are different from yourself. Trust is essential for a civil and a cooperative society, but it does *not* depend upon your

life experiences–whether you visit friends and relatives, join civic organizations, watch television, or surf the Internet. Instead, trust reflects an optimistic world view and a belief that others share your fundamental values. You learn trust from your parents, mostly when you are young. Elsewhere I show how trust in others stems from an upbeat world view and is transmitted early in life from one's family rather than later in life from your friends and civic groups (Uslaner, 2002, chs. 4-5). If trust does not stem from social interactions--joining groups, participating in politics, and all sorts of informal socializing–there is little reason to presume that new technologies will fare any better in engendering faith in others.

You are not likely to become more trusting in people who are different from yourself by interacting in clubs or in coffee klatches with people like yourself (Uslaner, 2002, ch. 4). Nor are you likely to become more trusting through on-line communities. In each case, your social interactions occur with people who share your interests. There is no reason to presume that on-line support groups will do a better job of creating trusting attitudes than will choral societies or playing cards, two of Putnam's key civic associations.[2]

Similarly, there is little reason to presume that the Internet will make social butterflies out of homebodies. The Net does make communications easier–so it would hardly be surprising that people with lots of friends and large support networks will use the Internet more than loners. They have more people to talk to. However, these impacts should not be large. The Net is not transformative.

Much of the debate over whether "on-line communities" are really communities (cf. Etzioni and Etzioni, 1997; Galston, 1999; Rheingold, 1993) is misplaced–for two distinct reasons.

First, we may expect too much of technology. Putnam's indictment of television may have

been too hasty, as other research has shown (Newton, 1999; Norris, 1996, 2000, 2001; Uslaner, 1998). Bimber (1998) argues more broadly that there is little reason to expect a link between technology and civic engagement: With each new technology, from the post office to the telephone to television and the Internet, more and more people have access to information that would make it easier to participate in civic life. Yet, participation rates have contracted, not expanded, as information resources proliferate. The Internet can provide a forum for participation. It will not necessarily lead to more people getting involved. As Yogi Berra, the American baseball player and mangler of the English language, said: "If the people don't want to come out to the ballpark, nobody's going to stop them."[3] The same holds for the Internet: Joiners in the "real world" are the on-line activists. Whatever has happened to communities and trust--throughout the Western world, not just in the United States–is not likely the fault of the Internet or any other medium.

Second, communities, whether on-line or off-line, generally don't build trust in strangers. They can't. Most of our group memberships and informal socializing takes place with people very much like ourselves. And there is no way to get from trust in people like yourself to trust in strangers (Rosenblum, 1998, 45, 48; Uslaner, 2002, ch. 5).

We may be more willing to make contact with "strangers" in on-line communities (Wellman and Gulia, 1999), but are these people we don't know, who may live in another part of the country or even the world, really "strangers"? From e-mail (the most widely used part of the Internet) to chat rooms to support groups, going online involves communicating with others. Trust develops between people of divergent backgrounds, whereas the net excels in bringing together people who already have something in common–be it family ties, friendship, working in

the same office, political views, or needing the same kind of medical information and/or psycho-logical support.   And many (most?) of these on-line communities are composed of transients –people who stop by to gain some information, get or give some moral support, and then go their own way (Galston, 1999, 52). They have little expectation of meeting the same people elsewhere in the wired world. What is perhaps the most widely visited *interactive* site, the auctioneer ebay, is based upon the premise of one-shot on-line meetings, which are commercial transactions rather than social networks.[4]

Are you likely to meet different types of people in a USENET group discussing politics than you are in a "real life" group? Hill and Hughes (1997) suggest not. On-line and off-line we are most likely to connect with people very much like ourselves. Preece's (1997) community of people with sports injuries are all interested in athletics. If we do make different types of connections on-line, it may well reflect an initial reservoir of trust, rather than an acquired set of values.   Stolle (1998) argues that trusting people may be more likely to get involved in their communities, reflecting a "self-selection" effect. The Net may consume trust, rather than produce it.

Trust is not irrelevant to the Internet. Far from it. Going online does not make people either more or less trusting, But trust shapes how people interact with each other. Trusting people are less likely to fear getting involved with strangers. In everyday life, trusters are less likely to lock their doors at night and to use guns to protect themselves. They are more likely to volunteer, give to charity, and invite strangers to their home (Uslaner, 2002, chs. 2, 5). On the Net trusting people should see others as nice folks who won't exploit them–so they should be less worried about violations of their privacy. They should be more likely to interact with strangers

when there is no evidence of shared intersts on the Net. And they should shun the "seamier" aspects of the web, such as hiding their true identity. More generally, there is little reason to believe that people who trust others will be more or less likely to use the Internet.

Much of the "evidence" on the causes and effects of Internet use is anecdotal. This makes it easy for people to offer alternative accounts of who goes there. Yet, more and more of it is more systematic. A small survey by Kraut et al. (1998) and a much larger one by Nie and Erbring (2000) found "mean world" effects. The subjects in each of these surveys were given computers *on the condition that they regularly logged on to the web*. We don't know what effects the "forced" use of the web had on people.[5] The Nie and Erbring (2000) study asked people whether their social interactions increased, decreased, or stayed the same–but provided no baseline for the overall level activity. If heavy Net users had less time for social interactions *but still were more active than the non-connected*, there would be no way for us to know that from the Nie-Erbring study (from Stanford University).

The Cole study (from UCLA) shows no strong differences in social interactions between net users and the unconnected–and these results are from a random sample of the American population, like the Pew surveys. This is more reasonable–but the published results from either study so far have been bivariate. The studies by Shah and his colleagues (Shah, 1998; Shah, Kwak, and Holbert, 2001) do use multivariate analyses. However, they used the DDB Needham Lifestyle Surveys, which are not random samples of the public. And their measure of "trust" is whether respondents see people as "honest." Honesty may *seem like* trust, but in the one survey that asked both questions (the 1972 American National Election Survey), the correlation between trust and honesty was just .345 (tau-b; see Uslaner, 2002, 72).

So there is clearly the need for more systematic testing–and that is what I set out to do here.

<div align="center">What the Data Tell Us</div>

What is the connection between trust, socialibity, and Internet usage? I analyze data from two surveys: a 1998 survey of technology use by the Pew Center for The People and The Press and the 2000 Trust and Privacy Survey of the Pew Internet and American Life Project. The 1998 poll is the "gold standard" of surveys of Internet use. It has many good questions about web usage and social connections, as well as the generalized trust question. The 2000 survey has many more questions on net usage, including a large number that might (and do) depend upon the sense of solidarity with others reflected in the generalized trust question. The 2000 survey, however, has no measures of social support networks. So the statistical models for the 2000 survey are not directly comparable to those for 1998. Each set of results is compelling in its own right to obviate the problems of comparability.

The linkage of Internet use with trust is the key question for determining whether the Net is good or bad (or neither). Questions of sociability are interesting in their own right–but it is unclear whether they are linked with generating trust. There is ample reason to be skeptical. Nonetheless, evidence for either sociability or social pathologies on the web can at least alleviate or confirm the fears about the Internet. Does it lead to social isolation, so that trust can never develop? Or might it lead to the creation of new communities that might provide more fertile grounds for trust?

The 1998 survey asked 2,000 Americans a variety of questions about going online as well as questions about people's social networks, and their trust in others and in government. (Alas, neither survey asked questions on group membership, which is a key element of social capital.) I

estimated 18 models using ordered probit analysis. These models allow me to determine which factors best predict different forms of Internet use. Each model contains many factors that might lead to more Internet usage,[6] but I focus on trust and measures of sociability (how wide is your social support network, how often you visit family members, and how frequently you call friends). The results are in Table 1 below; the table is split into four sections (by shading): frequency of use, sociability on line, concerns about security, and what people do on-line. To save space for so many findings, I only report the significance levels of the ordered probit coefficients. When a cell is blank, the coefficient is insignificant. A negative sign on the significance level indicates that the coefficient is negative.

———————————

Table 1 about here

The results clearly show that the Internet is neither the tool of the devil nor the new Jerusalem–which heralds the renaissance of a national sense of community and trust in one another. For most types of general use of the Internet–using e-mail, getting information on health, business, sports, and stocks, expressing your views online, and buying goods online–trust either doesn't matter at all or not much. Surprisingly, e-mail users are more likely to trust others and people who get stock quotes on-line are ever so slightly more likely to trust others. These relationships are not strong. Beyond that, general use of the Internet is connected neither to trust nor to sociability. All sorts of people go online to seek information–the trusting and the misanthrope, the sociable and the recluse.

There is little reason to expect that simply going online either taps or drains sociability (or trust). Kraut et al. (1998) and Nie and Erbring (2000) argue that people who spend a lot of time

online are the misanthropes. But the Pew Center survey offers little support for this view. People

who use their computers a lot, who spent a lot of time on-line yesterday (both in real time and

how often they connected), and who *say that they spend too much time on the net*, are no less

trusting than people who don't go on-line at all. Neither the Internet nor television remakes

people's personalities (Uslaner, 1998).

The picture of heavy surfers as loners is also wrong: *The heaviest users of the Internet*

*have **wider** social circles and support networks.* People with large support networks were *more*

likely to be on-line yesterday, more often to go on-line often, and less often to say that they are

on-line "too much." People who visit their family often are more likely to use e-mail (perhaps to

contact the same family members) and to spend a lot of time on the computer. People who

believe that the Internet helps them keep in touch (as opposed to isolating them) are significantly

more likely to use e-mail, to go on-line often, to visit chat rooms, to get health information, to buy

goods, and to seek out sports news.   Much of the time, however, the size of support networks

simply *doesn't matter at all*. It is almost never associated with signficantly smaller social

networks. The Internet, then, does not herald a new spirit of community. Rather, it is an

additional outlet for people who already are connected to other people (Katz and Aspden, 1998).

Net usage is largely determined by demographics. The anecdotal profile of the net surfer

is a young male libertarian–and this is pretty much what we see in Table 1. Young male students,

generally single and often with no religion (and sometimes distrusting government), are the

heaviest users of the Net. In a few cases, such as how much time one spends on line and whether

one buys goods on the Internet, income matters. Overall, feeling comfortable with the Net

(believing that it helps keep you in touch) and demographics overwhelm social ties and trust as

predictors of net use. There is little evidence in this survey that Internet users shut themselves off from other people–or other forms of media, either. Net users are also generally more likely to spend a lot of time watching television–and are also likely to read a newspaper regularly (cf. Norris, 2000, 117; Robinson et al., 2000, 2002).

There are two exceptions to this general pattern. First, the new innovation of the Internet–chat rooms–offers some hope that people of different backgrounds might get together and learn to trust one another. But here, of all places, we see some evidence of misanthropy. People who visit chat rooms or who make new friends online are no more or less sociable than anyone else. They don't have bigger or smaller support networks and are no more likely to visit relatives or call friends. Yet, they are ***less trusting*** than others (cf. Shah, Kwak, and Holbert, 149). Perhaps people who make friends online, often anonymously, feel uncomfortable with meeting "real" strangers.   And many, maybe most, chat rooms are marked by a dominant worldview or ideology–and dissidents often find out rather rudely that they are not welcome (Hill and Hughes, 1997; Wallace, 1999, 101-102).   People who frequent chat rooms seem to trust only people like themselves and fear people with different views.

Second, people who mistrust others fear the Internet much as they accept all sorts of other consipracy theories that we see on the "X Files." They worry about their privacy generally and in particular about the security of their medical records and downloading viruses. Trusters see the Internet as more benign. Trusting people believe that they can control the world and have faith that science will solve our problems (Uslaner, 2002, ch. 4). They see the Internet as an additional tool that gives them leverage over their world (Wallace, 1999, 173).

Overall, then, the 1998 Pew technology survey does not suggest a strong linkage between

Internet usage and generalized trust. Misanthropes seem to worry about their security on the web–as they do elsewhere (Uslaner, 2002, ch. 5). There is some evidence that people who socialize with friends and family connect to the web more (likely to connect with many of the same people). And people who go to the Net *for their social life*–making new friends or visiting chat rooms–feel that most people are *not* trustworthy.

Overall, the 1998 Pew technology poll suggests that the Internet neither creates nor destroys social capital. Simply using the Internet does not distinguish trusters from mistrusters. There is some modest evidence that people with larger support networks go online more often, but they are not distinctive in their Internet usage otherwise. There are a few exceptions that seem to support the "bad Net" view: *Mistrusters are more likely to make new friends online and ever so slightly more likely to go to chat rooms.* This *may* reflect mistrusters' misanthropy: their willingness to make new connections when they can hide their own identity (see below) and to substitute vicarious friendships for real ones. Mistrusters are also more likely to worry that the Internet will intrude on their personal space. They are worried about privacy issues and even that their computers might become infected. Yet, none of these results imply that worrying about privacy or even getting a virus would make people *less trusting.* They only suggest that people who worry about others' motives offline also fear being tricked online.

<u>The Evidence Updated: The 2000 Trust and Privacy Survey</u>

The 2000 Trust and Privacy survey, with 2117 respondents (Fox, 2000), has many more questions on Internet usage, but no questions on socialibility. Here I focus on the connections between trust and 43 measures of Internet use in the survey. The models, which are more sparse than for the 1998 survey, are estimated by either ordered or simple probit analysis.[7]

The 43 measures are divided into four groups again–one for time on line and using e-mail, a second for security concerns, a third for privacy issues, and a fourth for what people do on the web. In Table 2, I summarize the results of the 43 probits, again focusing on significance levels of the coefficients. But this is too quick and unsure a method of investigating impacts. So in Tables 3 and 4, I report the probabilities derived from the probit analyses for the Internet variables that had significant coefficients for trust. Unlike regression analysis, the probit coefficients have no straightforward interpretations. The standard way of estimating impacts in probit is to estimate the probability that the dependent variable takes on a given value for both trusters and mistrusters, letting all other variables take their "natural" values.

Finally, in Table 5, I resolve an anomaly from Table 2. In Table 2, it seems that trusting people go on-line less than misanthropes. To see whether this finding is robust, I run a two-stage least squares regression, which permits reciprocal causation between frequency on line and trust. This resolves the anomaly: Trust does not shape frequency on line, nor does how often one surfs determine trust.

_____

Table 2 about here

The easiest way to summarize Table 2 is that once again, demographics are the key determinants of Internet use. Once more, most of the effects of time watching television are positive. But here the rationale isn't quite so compelling in all cases. Many of the most interesting questions in this table bear little relationship to media exposure. They do tap trust–and generally in predictable ways.

The Pew Research Center for The People and the Press (1998, 1) warned that Internet

users who had not made an online purchase were worried about credit card security. The Pew

Trust and Privacy Survey in 2000 shows a high level of distrust of strangers: 61 percent say that

you can't be too careful in dealing with people. And mistrusters are *very* concerned about the

Internet. They see it as a threatening place, where hackers might steal your credit card number,

businesses will get personal information, web dealings will not be private, others will know where

you have been on the web, you might download a virus, and others will learn private things about

your life. In turn, they tend to limit their interactions. They don't respond to e-mail from

strangers–even though they are *more* likely to say that they have received an offensive e-mail from

a stranger. They respond in kind, being *less* likely to use their real name on the web and *more*

likely to use fake identifications and e-mail addresses on the web.

Trusting people show just the opposite profile. Offline, trusting people overall see the

web as a place occupied with lots of trustworthy people and companies. They have no desire to

hide their identity. Trusting people are more tolerant of people of different races and religions

and of minorities that have faced discrimination. They have more favorable attitudes toward

immigrants and are more likely to favor open markets. Online, trusters respond to e-mails from

strangers–and receive fewer offensive missives from people they don't know (either because it

takes more to offend them or they get on fewer lists with people who write nasty notes). They

worry less about what others might learn about them and don't fear that others will invade their

personal lives or spread lies. They are more likely to demand that companies ask permission to get

personal information, but they will use their credit card numbers for phone orders (though,

surprisingly, there is no difference for Internet orders).

On matters not related to privacy and security, there is little that separates trusters and

mistrusters on the Net. Trusting people are no more likely to go on line to get information of any sort–or even to buy products. They are no more prone to go to the web for fun–or to spend lots of time on it. There is one exception: how often people go on-line. There is a modest negative relationship between trust and how often people go on-line. I shall revisit this below.

In Tables 3 and 4 I present the probabilities of some of the significant variables in Table 2 for trusters and mistrusters. For the simple probits in Table 3, the interpretations are straightforward: 63.1 percent of generalized trusters say that they use their real names on the web, compared to 55.7 percent of mistrusters–for a difference of 7.4 percent. This percentage difference is called a probit "effect." We see similar effects for ever used a fake ID on the web and replied to an e-mail from strangers–and slightly larger ones for using a credit card on the phone, and receiving an offensive e-mail from strangers. The effect is somewhat less for whether companies should ask permission for personal information on the Internet. This is not surprising since the issue is more consensual–and also less prone to personal worries. In Table 2, trusters are (perhaps surprisingly) less likely to use Internet banking. Here we see the difference is about 5 percent. Overall, on matters of privacy, trusters are between 7 and 10 percent more likely to give strangers (and companies) the benefit of the doubt.

———————————————

Tables 3 and 4 about here

The interpretations for Table 4 are somewhat more complicated, since each of the dependent variables is categorical. I have divided the table into four columns of data, since most of the Internet questions had four categories. Frequency on line and time on line have seven and eight categories respectively, so I report the extreme categories. 18.5 percent of trusters *never* go

online, compared to 14.9 percent of misanthropes; 18 percent of trusters, compared to 22.1

percent of misanthropes, go on line several times daily. For time on line, there are few significant

differences.

We see more pronounced differences for privacy concerns. Mistrusters are 12.4 percent

more likely to be *very* concerned that business gets personal information (and four percent less

likely to be not at all concerned). They are almost 20 percent more worried that web dealings are

not private (combining the last two categories) and eight percent less likely to dismiss a worry

that someone might know which web sites you have visited. Mistrusters are eight percent more

likely to worry a lot about downloading a virus and almost 15 percent more likely to be very

worried about hackers getting their credit card number. The differences in concern for false

rumors on stock prices and learning about people on auctions are smaller–five to six percent.

These differences probably reflect lower participation rates in either stock trading on-line (just 11

percent of the sample) and taking part in auctions (16 percent).

Perhaps people don't participate in these activities because they are concerned about

security–though the data in Table 2 don't provide much support for this argument. Nevertheless,

these findings suggest that people who already mistrust others will be particularly concerned

about Internet security and privacy. Since most Americans don't trust each other, this is a

potentially worrisome feature for the growth of on-line business and investing. While it seems at

least a bit curious that people will do business on the Internet even as they worry about its

security, it doesn't take much imagination to think what type of scare might drive people away

from e-commerce, or perhaps web sites more generally.

These findings suggest that many Americans see the web as more threatening than

welcoming. There is a resevoir of suspicion that technologies beyond our control, often beyond our comprehension, are intruding on our personal lives, with less than benign intentions. This makes sense when we realize that mistrust reflects a pessimistic world view and a feeling that things are beyond our control (Uslaner, 2002, chs. 2, 4). And these worries go well beyond our own personal fears. Almost 60 percent of Americans worry that others might learn about them from online auctions, even though just 16 percent have ever taken part in such an auction.

The growing opportunities for socializing on the web are not havens for caring people looking to bond with like-minded folk. Forty-three percent of people who have made new friends on-line have used a fake ID, compared to just 19 percent of people who have *not* made a new friend (phi = .232, Yule's Q = .511). Thirty-eight percent of folks with new on-line friends have used a fake e-mail address, compared to 15 percent without such friends (phi = .247, Yule's Q = .555). We see a similar dynamic for chat rooms, with almost identical percentages and measures of association.[8] This pattern even holds for using on-line dating services: Twenty percent looking for love used fake e-mail addresses, compared to just 6 percent who did not seek a mate (phi = .185, Yule's Q = .560).

We should not mistake socializing with trusting. One is neither the cause nor the effect of the other. Misanthropes have friends and family too–and it seems that many of their friends are on-line. Deception is easy on the Internet. Recall the cartoon in the magazine The New Yorker where a canine sits in front of a computer and mumbles to another dog: "On the Internet, nobody knows you're a dog." The ability to hide your true identity gives mistrusters a defense mechanism on the Internet that is not so easily available in real life.

Some forms of web use make us vulnerable to people who would deceive us. People

visiting auctions are also twice as likely to use a false e-mail address as those who don't go to auction (phi = .142, Yule's Q = .388). If you are prone to mistrust others, the Internet will prove you right.

Yet, this is just a partial view of the Internet. Sixty percent of all respondents have never gone to chat rooms *or* made new friends on-line. Only 15 percent of all respondents have used a fake ID and have gone to chat rooms or made new friends on-line. Most people who use the Internet log on for such mundane reasons as getting e-mail (87 percent) or getting information on government (51 percent), travel (37 percent), or medical conditions (36 percent). We are most likely to exchange e-mail with people we already know well, so e-mail can help foster the "good Net." Going on-line for information doesn't involve two-way communication. So you can't be "exploited" by mistrusters (assuming that the information is correct).

Most of the time, then, the Net is neutral. It neither creates social bonds nor destroys them. It does not build up trust nor destroy it. To make the point more clearly, I conducted a two-stage least squares analysis of trust and the frequency of going on-line. Here I seek to determine whether trusting people go on-line less often or whether going on-line a lot makes people less trusting, as the "mean world" thesis would have us believe. I chose the frequency of going on-line for this analysis because trust had a significant effect on it in Table 2. I report the two-stage least squares model in Table 5.

_____

Table 5 about here

The Pew Trust and Privacy study does not have the range of variables that I have generally included in models for trust. The survey is particularly lacking in measures of optimism

and control. I thus include one measure of optimism (satisfied with the direction of the country) and a surrogate often used as part of a trust scale, whether you believe that most people are fair.[9] Aside from that, the model includes the standard demographics, dummies for region (we know that the Southern states have lower levels of trust and many Midwestern states are higher in trust), how much time the respondent watches television, and a series of measures of Internet use, including how often one goes on line. Finally, I use a measure of whether the respondent knows what a "cookie" is as an additional measure of education. Some other models for trust (Brehm and Rahn, 1997; Gerbner et al., 1980; Putnam, 1995) have argued that people who watch a lot of television become less trusting. I have found that once measures of optimism and control are added to the mix, especially in simultaneous equation estimation, the effects of television viewing vanish (Uslaner, 1998). But the present survey has no good measures of optimism, so I include the amount of television respondents view in the equation. The equation for time on-line includes trust, other media consumption, demographics, and two key reasons why people go on-line: to go to auctions and to buy stocks.

The results of the two-stage least squares estimation are clear: Going on-line a lot does *not* make you less trusting. Nor does how much time you spend on line, whether you visit chat rooms, make new friends, have been cheated when you bought something, have your credit card stolen, or are concerned that others will use fake identities. ***Internet usage does not destroy trust, but then it doesn't create trust either. No matter what you do on-line, you don't become more (or less) trusting.*** The model suggests that the more you watch television, the less trusting you'll be–but this result is not sustained in other surveys with better measures of optimism and control. The two measures of optimism and control are by far the best predictors of trust. Of the

other predictors, only the dummy variables for South and black reach significance.

Trusting people are also no more or less likely to go on-line more than misanthropes.
Indeed, the main reason why people go on-line a lot is to buy things, either at auctions or from stock brokers.[10] Some other demographics also matter: people who watch a lot of television also go on-line more frequently, as do the unemployed and retired (more free time at different hours of the day) and people with higher incomes.

Good Net, Bad Net

Overall, there are no grounds for proclaiming a "good Net" or a "bad Net." Most uses of the Internet are rather mundane. Most people don't go on-line looking to build a sense of community–or to destroy it. Yes, there are plenty of opportunities to deceive on the web. The Internet is filled with pornography, but it didn't invent sex and nobody is forcing folks to visit these sites (or others that sell Viagra to dogs or let children gamble).   And yes, there are more opportunities on the Web to give to charities, to find volunteering opportunities, and to give solace to others. But that isn't the whole Internet either. Perhaps if surveys had included questions on these activities, which *are linked to trust* (Uslaner, 2002, ch. 5), I might have found more evidence for the "good Net." The World Wide Web is very much like the World. It makes things better in some ways and worse in others. But it is not transforming. If you want to make a revolution, you have to go offline.

The Internet, then, is not a resevoir of social capital. As in everyday life, there are places where trust matters and there are even more places where it doesn't. Trust matters most when people fear the unknown and worry that this new technology can come back to haunt them. And there is little evidence that the Internet will create new communities to make up for the decline in

civic engagement that has occurred over the past four decades in the United States. Yet, there is even less evidence that the Internet is pushing people away from traditional social ties or making them less trusting.

Here is a brief summary of what I have found regarding the Internet, trust, and social ties: Trusting people are generally not more likely to use the Internet than mistrusters. Mistrusters may substitute virtual friends on the Internet for "real life friends" (although these relations are not strong).

As trust makes people willing to take risks offline, trusters are more willing to take risks online (such as entering their credit card number or replying to e-mails from strangers). Mistrusters worry about their privacy from both business and from people who might learn about them online. They are more likely to use fake names and phony e-mail addresses and they worry about the quality of information they find online. **However, all of this behavior online fits with what we know about the suspiciousness of mistrusters offline (Uslaner, 2002, ch. 5).**

Social ties have little effect on Internet usage overall. The major exception is that people with larger support networks spend more time online. **This is hardly surprising and it does not indicate that the Internet makes people more sociable. Rather, it shows that people use the Internet to connect with people they already know.**

Negative or positive experiences online have no effect on people's trust in others. Spending a lot of time online neither increases nor decreases trust. Even people who have had bad experiences online–or who worry that others might try to exploit them–do not become less trusting. People who make new friends online don't become more

trusting either. Experiences on the Internet, like most events in adult life, do not affect trust.

The principal determinants of trust are demographic: Young, highly educated white males are the Americans most likely to use the Internet (in a variety of ways). While the impact of television viewing is inconsistent on Net usage, most of the time people who use the Internet are also plugged into their television sets (see also Norris, 2000).

The message of these findings is the Internet is not a threat to our society or its moral fiber. Regulating the net won't solve our social problems or save our children from evil influences. Children develop trust in others by learning from–and emulating-their parents, and not from what they (don't) see on television or on the Web. And how much you trust others as a child largely determines how much you trust others as an adult. Yes, the world *may* seem a more dangerous place on television or on the Web. And the Internet makes such mean sites more readily available than the everyday world (or even television). But this does not mean that the net (or any other form of media) poses a real threat to most families. By itself, it is neither a threat to civil society and sociability or its panacea.

26

REFERENCES

Abelson, Reed. 1999. "As E-Giving Sites Spring Up, Some Say It's Donor Beware," New York

Times, Washington edition (November 17):21.

Bimber, Bruce. 1998. "The Internet and Political Transformation: Populism, Community, and

Accelerated Pluralism," Polity, 31:133-160.

_____. 2000. "Information, Technology, and the Organization of Political Engagement

in the United States," http://jsis.artsci.washington.edu/progrma/cwesuw/bimber.htm,

accessed February 27, 2001.

Blanchard, Anita and Tom Horan. 2000. "Can We Surf Together if We're Bowling Alone? An

Examination of Virtual Communities and Social Capital," unpublished paper, Claremont

Graduate School.

Brehm, John and Wendy Rahn. 1997. "Individual Level Evidence for the Causes and Conse-

quences of Social Capital," American Journal of Political Science, 41:888-1023.

Cole, Jeffrey I. 2000. "Surveying the Digital Future." UCLA Center for Communication Policy,

University of California–Los Angeles.

Etzioni, Amitai and Etzioni, Orren. 1997. "Communities: Virtual vs. Real," Science, 277 (July

18): 295.

Fischer, Joannie. 2000. "Base Instincts: Internet Addiction," U.S. News and World Report

(August 28):43.

Fox, Susannah. 2000. "Trust and Privacy Online: Why Americans Want to Rewrite the Rules,"

Washington: Pew Internet and American Life Project, August 20.

Galston, William A. 1999. "(How) Does the Internet Affect Community? Some Speculations in

Search of Evidence." In Elaine Ciulla Kamarck and Joseph S. Nye, eds.,

democracy.com?: Governance in a Networked World. Hollis, NH: Hollis Publishing

Company.

Gerbner, George, Larry Gross, Michael Morgan, and Nancy Signorielli. 1980. "The

'Mainstreaming' of America: Violence Profile No. 11," Journal of Communication, 30:10-

29.

Hauber, M. and R. Hauben. 1997. Netizens. Los Alamitos, CA: IEEE Computer Society Press.

Hill, Kevin A. and John E. Hughes. 1997. "Computer-Mediated Political Communication: The

USENET and Political Communities," Political Communication, 14:3-27, 1997.

Katz, James.E. and Phillip Aspden. 1998 "Social and Public Policy Internet Research: Goals and

Achievements, http://www.communitytechnology.org/aspden/aspden_talk.html, accessed

December 30, 1999.

Kraut, R. E., W. Scherlis, M. Patterson, S. Kiesler, and T. Mukhopadhyay, 1998. "Social impact

of the Internet: What Does It Mean?" Communications of the ACM, 41, 12, 1998.

Maloney, Janice. 1999. "Volunteers Log On, Help Out," New York Times, Washington edition

(November 17):20.

Newton, Kenneth. 1999. "Mass Media Effects: Mobilization or Media Malaise?," British Journal

of Political Science, 27:577-599.

Nie, Norman H. and Lutz Erbring. 2000. "Internet and Society: A Preliminary Report," Stanford

Institute for the Quantitative Study of Society, Stanford University.

Norris, Pippa. 1996. "Does Television Erode Social Capital? A Reply to Putnam," PS: Political

Science and Politics, 29:474-480.

_____. 2000. A Virtuous Circle: Political Communication in Postindustrial Societies, Cambridge: Cambridge University Press.

_____. 2001. Digital Divide? Civic Engagement, Information Poverty & the Internet in Democratic Societies. Cambridge: Cambridge University Press.

Parks, Malcolm R. and Kory Floyd. 1996. "Making Friends in Cyberspace," Journal of Computer-Mediated Communication, 1, available at http://www.acsuc.org/jcmc/vol11/issue4/parks.html, accessed January 10, 2001.

Pew Research Center for The People and The Press. 1998. "The Internet Audience Goes Ordinary: Online Newcomers More Middle-Brow, Less Work-Oriented," http://www.people-press.org/tech98sum.htm, accessed February 23, 2001.

Putnam, Robert D. 1993. Making Democracy Work: Civic Traditions in Modern Italy. Princeton: Princeton University Press.

_____. 1995. "Tuning In, Tuning Out: The Strange Disappearance of Social Capital in America." PS: Political Science and Politics (December): 664-683.

_____. 2000. Bowling Alone. New York: Simon and Schuster.

Preece, Jenny. 1999. "Empathic Communities: Balancing Emotional and Factual Communication," Interacting with Computers, 12:63-77.

Raney, Rebecca Fairley. 2000. "Study Finds Internet of Social Benefit to Users," New York Times, Washington edition (May 11):E7.

Rheingold, Howard. 1993. The Virtual Community: Homesteading on the Electronic Frontier. Reading, MA: Addison-Wesley.

Robinson, John P., Meyer Ketsnbaum, Alan Neustadtl, and Anthony Alvarez. 2000. "Mass

Media Use and Social Life Among Internet Users," <u>Social Science Computer Review</u>, 18:490-501.

_____. 2002. "Information Technology, the Internet, and Time Displacement," <u>Social Science Quarterly</u>.

Shah, Dhavan V. 1998. "Civic Engagement, Interpersonal Trust, and Television Use: An Individual-Level Assessment of Social Capital," <u>Political Communication</u>, 19:469-496.

Shah, Dhavan V., Nojin Kwak, R. Lance Holbert. 2001. "'Connecting" and 'Disconnecting' with Civic Life:Patterns of Internet Use and the Production of Social Capital," <u>Political Communication</u>, 18:141-162.

St. George, Donna. 1999. "On the Web, a World of Hope Is Spun for Teen," Washington <u>Post</u> (November 26):A1, A28.

Stolle, Dietlind. 1998. "Bowling Together, Bowling Alone: The Development of Generalized Trust in Voluntary Associations," <u>Political Psychology</u>, 19:497-526.

Tranvik, Tommy. 2000. "Surfing Together and the Rise of Social Capital?" Unpublished manuscript, LOS Centre, University of Bergen, Norway.

U.S. News and World Report. 2000. "The Web's Dark Side" (August 28):36-45.

Uslaner, Eric. M. "Social Capital, Television, and the 'Mean World': Trust, Optimism, and Civic Participation," <u>Political Psychology</u>, 19:441-467.

_____, 2000. "Social Capital and the Net," <u>Proceedings of the ACM</u> (Association for Computing Machinery), v. 43 (December):60-64.

_____. 2002. <u>The Moral Foundations of Trust</u>. New York: Cambridge University Press.

Verba, Sidney, Kay Lehman Schlozman, and Henry Brady. 1995. <u>Voice and Equality: Civic Voluntarism in American Politics</u>. Cambridge: Harvard University Press.

Wallace, Patricia. 1999. <u>The Psychology of the Internet</u>. New York: Cambridge University Press.

Wellman, Barry and Milena Gulia. 1999. "Net Surfers Don't Ride Alone: Virtual Communities as Communities." In Peter Kollock and Marc Smith, eds., <u>Communities and Cyberspace</u>. New York: Routledge.

TABLE 1
Summary of Effects from 1998 Pew Technology Survey

	Trust	Support	Visit family	Call friends	Keeps in touch	Paper	Watch TV	TV News	TV Time	Trust Govt	Other significant variables
Use e-mail	.05	*-.10*	.10		.0001	.05					Age, student
Computer time			.05			*-.05*			.001		No religion
Online yesterday		.05									
Time on line									.01		Male, student
Often on line		.05			.0001					.01	Family income, age
Too much online		-.01									Male, single
E-mail: more communication									.01		Single
Chat online	**-.10**				.01						Age
New friend	**-.05**						.10				
Give views on line						.05					Student, not self employed, single
Worry privacy	**-.0001**				**-.0001**					**-.01**	
Worry medical records insecure		**-.01**			**-.05**				.01		
Worry virus	**-.01**					.01					Male
Health info					.0001		**-.05**			**-.10**	Male, single, no religion
Buy goods					.01						Age, male, income, single, no religion
Sports news					.05	.10			.05	**-.10**	Male, own home, single
Business news											Male
Stock quotes	.05						.05		.05		

TABLE 2
Summary of Significant Predictors from 2000 Pew Trust and Privacy Survey

Dependent Variable	Trust	TV Time	Significant Predictors
Time spent on line		.10	Education, black (-), male
Frequency on line	-.10	.05	Male, retired, divorced/separated (-)
Read e-mail on line		-.05	Age (-), education, female
Worry business gets personal info	.0001	-.10	Black (-), age (-), divorced/separated
Worry others get credit card number			Black (-), single
Concerned hackers get credit card #	-.001	.10	Female, single, age
Confident web dealings private	.0001	-.05	Black (-), age (-)
Worry others read e-mail			Education (-)
Worry others know web site visits	-.05		Unemployed (-), male, single (-)
OK for companies to track visits			Age (-), student, single (-), male
Companies must ask permission	.10	.05	Black (-), unemployed, female, single (-)
Worry download virus	-.01		Unemployed (-), black
Concerned rumors on stock prices	-.05	-.10	Black
Concerned bad medical advice			Student, black, female
Concerned others learn about you	-.10		
Concerned others use fake identity		.10	Female, single
Willing to use real name on web site			Female
Have used real name on web site	.10	.10	Age (-)
Ever used fake identity on web	-.05		Education, male, age (-)_
Ever used fake e-mail address	-.10		Age (-), read newspaper, male, education
Sent encrypted e-mail			Male, education, age (-)
Sign name on medical web site		.10	Read newspaper, black, male, retired (-),
Sign name on dating site		.05	Education, black, male, single (-), unemployed
Use credit card for telephone orders	.001	.05	Read newspaper, black (-), single (-), divorced (-)
Use credit card on web		.05	Education, male, black, read paper, retired (-)
Use online calendar for appointments		-.10	Education, female
Reply to e-mail from stranger	.05		Male, age (-)
Got offensive e-mail from stranger	-.05		Black (-), education
Made new friend on internet			Age (-), single, divorced/separated
Visit chat rooms online		.10	Age (-), single, education (-)
Use online dating services			Single, divorced/separated
Participate in auction online			Black (-), male, retired (-), divorced/separated (-)
Use online banking	-.10		Student (-), age (-), read paper (-), male, single (-)
Ever clicked on ad on web			Male, age (-), black, read newspaper
Get news online			Student, education, male
Get financial news online			Education, male, unemployed (-), retired, age (-)
Get product information online		.05	Single (-), male, read newspaper
Get travel information online			Education, female
Get medical information online		.05	Female, black, single (-)
Get political information online			Education, retired (-), unemployed, divorced/separated
Get government information online			Education, retired (-), read newspaper, single (-), un-employed (-)
Go online for fun			Education
Ever buy product online		.05	

Entries are significance levels from probits and ordered probits, with signs of probit coefficients.

TABLE 3

Simple Probit Probabilities for Trust: 2000 Pew Trust and Privacy Study

Dependent Variable	Careful	Trust	Change in Probability
Use credit card on phone	.559	.647	.088
Use real name on web site	.557	.631	.074
Ever used fake ID on web	.308	.232	-.076
Replied to e-mail from stranger	.236	.307	.071
Received offensive e-mail from stranger	.329	.235	-.094
Companies on internet should ask permission for personal information	.837	.874	.037
Used Internet banking	.178	.131	-.047

TABLE 4
Ordered Probit Probabilities for Trust: 2000 Pew Trust and Privacy Study

Frequency on line	careful trust	Never = .149 .185	Rarely = .024 .028	Every day = .256 .239	Several times daily = .221 .180
Time on line	careful trust	None = .482 .451	Less than 15 min = .028 .028	3-4 hours = .045 .050	4 hours or more = .058 .067
Concerned business gets personal info	careful trust	Very = .660 .536	Somewhat = .242 .298	Not too = .055 .084	Not at all = .043 .082
How confident web dealings private	careful trust	Very = .064 .143	Somewhat = .427 .525	Not too = .307 .234	Not at all = .203 = .098
Worry someone might know web sites visited	careful trust	A lot = .094 .063	Some = .240 .197	Not very much = .274 .264	Not at all = .392 .476
Worry about virus from downloading	careful trust	A lot = .201 .126	Some = .379 .332	Not very much = .263 .300	Not at all = .157 .242
Worry hackers get credit card number	careful trust	Very = .503 .357	Somewhat = .099 .130	Not too = .099 .130	Not at all = .133 .229
Concerned about false rumors on stock prices	careful trust	Very = .292 .231	Somewhat = .218 .204	Not too = .202 .209	Not at all = .288 .356
Concerned others learn about you from online actions	careful trust	Very = .327 .277	Somewhat = .281 .275	Not too = .186 .199	Not at all = .205 .249

TABLE 5

Two-Stage Least Squares Estimation for Trust and Frequency On Line:
2000 Pew Trust and Privacy Study

Equation for Trust in People

Independent Variable	Coefficient	T ratio (significance)
Frequency on line	-.054	-.919
Time on line	-.001	-.045
Visit chat rooms	-.032	-.523
Make new friend on line	−.009	-.126
Been cheated when buying online	.139	.908
Credit card ever stolen	.006	.093
Concerned others give fake ID	.022	1.031
Know what cookies are	.080	1.286*
Most people are fair	.359	6.320***
Satisfied with direction of country	.125	2.223**
Age	.001	.430
Education	-.015	-.813
Family income	.018	1.070
Black	.122	1.399*
Student	.028	.458
South	-.133	-2.169**
Midwest	-.114	-1.438
Time watching TV per day	-.035	-2.115**
Constant	.326	.203*

N = 327, R^2 = .229   RMSE= .436

* p < .10; ** p < .05; *** p < .01; **** p < .0001

TABLE 5 (continued)

Two-Stage Least Squares Estimation for Trust and Frequency On Line:
2000 Pew Trust and Privacy Study

Equation for Frequency On Line

Independent Variable	Coefficient	T ratio (significance)
Trust in people	-.527	-.987
Read newspaper	-.269	-1.128
Time watching TV per day	.112	1.475*
Education	.055	.646
Student	-.046	-.163
Unemployed	.759	1.870**
Black	.178	.462
Gender	.052	.218
Retired	.893	1.640*
Single	-.188	-.592
Divorced/separated	-.255	-.360
Family income	.158	2.351**
Age	-.011	-.955
Ever buy at auction	1.160	3.988****
Ever buy stocks	.888	2.438**
Constant	.899	.96

$N = 327$, $R^2 = .050$ RMSE= 2.759

* $p < .10$; ** $p < .05$; *** $p < .01$; **** $p < .0001$

NOTES

1.   Putnam (2000, 170-171) is agnostic about the positive or negative effects of the Internet, even as he is convinced that television leads people away from social contact.

2.   See Uslaner (2002, ch. 5) for evidence that neither of these activities, nor any other form of group membership or informal socializing, leads to more trusting attitudes.

3.   Cited on http://www.yogi-berra.com/yogiisms.html. Accessed March 5, 2001.

4.   If there were more frequent interactions, people could buy and sell without the need for an
      intermediary auctioneer.

5.   Examining only those people who go online may lead to erroneous conclusions, especially
      since most people don't spend a lot of time on the Internet. The Kraut et al. (1998)
      survey only had 169 respondents and most of the correlations were rather low.

6.   I use other variables to ensure that the relationships between Internet usage, on the one
      hand, and trust and sociability, on the other hand, are not spurious. The other variables
      are: age, gender, being a student, family income, owning your own home, being self-
      employed, being single, having no religion, how much time you watch television each day,
      how often you read a newspaper, whether you trust the federal government, and whether
      you believe that the Internet helps keep people in touch with one another.

7.   There are more than 43 questions on the survey (as there were more than 18 in 1998). I
      selected those that were of greatest theoretical relevance to trust. The models included
      trust, how much time spent watching television, newspaper readership, education, student,
      unemployed, race, gender, retired, single, age, and a dummy variable for being either
      divorced or separated. The survey also asked income, watching television news, how
      often the respondent watched television news, and whether one watches television other
      than news at all. However, these variables were highly collinear with the others and were
      dropped from many analyses, so I excluded them from all models. I used simple probit
      analysis for dichotomous variables and ordered probit analysis for dependent variables
      with three or more categories.

8.   The coefficient for trust in the probit analysis for the 2000 Pew Trust and Privacy survey was not significant, while the coefficient for trust in the 1998 Technology survey was significant at $p < .10$. This is *not* attributable to an attenuation of the relationship between going to chat rooms and trust–since the simple correlation was *higher* in 2000 than in 1998. It seems that the constellation of controls may be the reason for an insignificant coefficient in the 2000 data.

9.   See Uslaner (2002, ch. 3) as to why the fairness question should *not* be part of a trust scale. It seems to be a workable substitute for a measure of optimism and control.

10.   The variable frequency on-line is the *number of times a day you go on-line*, while the variable time on line is *how much time each day you spend on-line*.