

# HELPING PEOPLE ADAPT TO NEW COMMUNICATION TECHNOLOGIES

## Changing Interpersonal Relationships

Just about everyone seems to have an opinion about how the Internet affects our day-to-day lives. Early fears and early research held that e-mail, chat rooms, and other text-based forms of interaction would limit our ability to interact normally with others because they were nonvoice methods of communication. More recent sophisticated communication research has shown that people are often able to accomplish much of the same kinds of interactions online as they do offline, depending on a few circumstances. Studies have shown that it takes longer to get to know one another online than it does face-to-face, but that online relationships are similar, and in some cases better, than those formed in face-to-face interactions.



Communication in families is also changing as a result of technological developments and a faster-paced lifestyle. Parental supervision of media use in the family is weakened by the Internet; parents report concerns about child safety as well as concerns about content issues, such as pornography, violence, and hate speech. Nevertheless, the benefits of new communication technologies in families are also becoming apparent. The interactions between working parents and children and among working parents are becoming increasingly dependent on technology as family members use e-mail, cell phones, and other new media to stay in touch and relay information. Parents can maintain

effective relationships with their children over time and distance via e-mail, as can adults in “commuter” marriages.

As the Internet becomes familiar to more people, more family members are creating family Web sites and round-robin family messages, researching family history, sharing family pictures, and maintaining and rekindling relationships with long-lost relatives. E-mail has increased communication in some family relationships and has been used as a substitute for face-to face conversations in others. In fact, many siblings stay in touch by using electronic messaging as opposed to talking with each other on the phone. Women in particular are taking advantage of electronic messages to maintain family ties, according to research by the *PEW Internet and American Life Project*.

In work settings, the way we use the Internet to communicate can bring special benefits. When people devote themselves to virtual work teams, they sometimes achieve better relationships than they do offline. In professional contexts, the relationship aspects of e-communication can also prompt more and better work by drawing on electronic resources. Even though we have natural inclinations to want to see and hear each other, research demonstrates that with patience and effort, virtual relationships can pay off. Indeed, a recent experiment showed that people who get to know each other online without seeing pictures of one another get along better in the long run than people who see photos online.

The Internet is now a primary source for information about physical health, mental health, and lifestyle concerns. Traditionally, most people went to their small circles of friends and family members for advice about health, often enduring embarrassment and the discomfort of dependency. Online support groups now allow people access to useful information 24 hours a day/7 days a week from others who often have no more in common than their shared

circumstances and a willingness to compare experiences by typing messages in these public forums. Aside from official information from the Web sites of health agencies, Internet users answer each other's questions, offer advice and stories about hundreds of topics online, and share information about side-effects, recovery, and other personal experiences that most health specialists cannot convey from first-hand knowledge. Often most important to these users is that they learn they are not alone in their feelings and their fears and that there are many others out there who feel the same and will show concern for their circumstances. For better or worse, people appreciate the relative anonymity, the available expertise, and the lack of stigma associated with online groups.



Moreover, research shows that the Internet transforms social support through *writing*. Emotionally overwrought or shy users report they can express themselves better when they type their messages to an electronic group than when they talk to those who are closer to them, such as friends or family. In fact,

recent research has shown that people often search among their online resources to find optimal support for their problems.

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Baym, N. K. (2002). Interpersonal life online. In L. Lievrouw & S. Livingstone (Eds.), *The handbook of new media* (pp. 62-76). London: Sage.

Walther, J. (1994). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, 23, 3-43.

Walther, J. B., & Slovacek, C., & Tidwell, L. C. (2001). Is a picture worth a thousand words? Photographic images in long-term and short-term virtual teams. *Communication Research*, 28, 105-134.

### Communicating With Computers

Although computers are machines, we sometimes treat them as if they were people. Research indicates that we react to interactive computer interfaces as though we were reacting to another person, reaching many of the same conclusions and judgments about the computer that we would make about another human being. We respond to the computer on the basis of characteristics normally attributed to human beings, such as trustworthiness, dogmatism, and cooperation. It is surprising that these reactions and judgments can be triggered by relatively simple manipulations, such as the tone or wording of a response. For instance, one study found that subjects evaluated a computer that gave them positive feedback on their work as a more intelligent computer than one that gave them no feedback. This is an important finding for computer design, because it means that designers of interfaces who wish to embody them with human characteristics need to focus on the cues that people use in judging one another. It is not necessary to go to the trouble of simulating a person on the computer. Minimal cues similar to those that people use, such as tone, will cause people to respond to computers as if they are human interaction partners.

A key characteristic of computers and information technologies is their *interactivity*. New communication technologies are interactive when their communication is synchronous and involving, individualized, and creates perceptions of connectedness and similarity. Research has found



that computer and other systems, such as search queries, that put people in an observer role and that interfere with a coordinated, smooth-flowing conversation violate communication expectations and undermine trust. Computer systems that are similar to complex automated phone answering systems can create a sense that the listener is disinterested and detached. Systems that make the user feel connected and interactive promote easy and open use and a satisfying communication experience.

Of course, an open and trusting attitude in computer-mediated communication is not always desirable. As we all know, it is a good policy to be wary in online interactions with systems or people we do not know. Research suggests that lower levels of interactivity allow users to be more task-focused and to carefully examine critical information. In addition, the less involved we are in a conversation, the more likely we may be to detect deception from our conversation partner. The relatively poor communication support offered by some systems may actually make people less likely to be fooled by others than in face-to-face conversation. With fewer nonverbal cues to manipulate, potential liars are less able to adapt to receivers' responses and keep them unsuspecting.

Findings such as these will become increasingly significant as our daily interactions with computers increase. These intelligent, smart, or artificial agents carry out many of the communication tasks traditionally associated only with human agents. Based on the personal information invested in them by their human owners, they can schedule meetings, continually monitor or search for specific information, carry out trades, and even enter bids on auctions.

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Burgoon, J. K., Bonito, J., Bengtsson, B., Ramirez, A., Jr., Dunbar, N. E., & Miczo, N. (1999–2000). Testing the

interactivity model: Communication processes, partner assessments, and the quality of collaborative work. *Journal of Management Information Systems*, 16, 35–58.

Reeves, B., & Nass, C. (1996). *The media equation*. Cambridge: Cambridge University Press.

### **Building Teams and Supporting Communities**

Studies of computer-supported groups suggest that many of the same dynamics that occur in face-to-face groups emerge in virtual, geographically distanced groups. Virtual groups experience the same challenges sharing and using information observed in face-to-face groups, and the processing of information is slower. These and other studies are interesting because they suggest that traditional group communication may be worsened in groups that interact over networks, even though computerized communication systems provide enhanced speed of communication and thorough and rapid information exchange.

However, there is some good news. Studies have shown that the problems in computer-supported groups arise, for the most part, when traditional communication is simply copied using new media. The real potential of communication technologies is to provide features and facilities that go beyond face-to-face communication. Studies of systems that provide higher-level features, such as computerized decision-making laboratories and support for negotiation, indicate that these groups often perform significantly better in decision making and conflict resolution than comparable face-to-face groups, and better than groups that simply interact via computer networks. Current research and development is harnessing electronic communication technologies to help grassroots organizations revitalize their communities. With support from government and private sources, communication researchers are leading a multidisciplinary team in the development of the *Connected*

*Kids* project—a Web-based community information system that links government and not-for-profit agencies in Troy, NY, a once-prosperous upstate city now recovering from the declines of the postindustrial era. Troy epitomizes the *digital divide* in that it hosts a major technical university where the Internet pervades learning, yet the community has many organizations and less affluent residents who cannot afford access to this new information technology. Within this setting, several community service organizations try to enhance the quality of life for the citizens—the city government, the Boys and Girls Clubs, the county’s department of family and child services, school districts, the homeless shelter, community police, and so on. As is unfortunately common, these agencies, notwithstanding their similar goals, often operate separately from one another. Communication technologies, guided by communication theories, are helping reconnect these agencies with one another and with their community. Enhancing the well-being of real-life neighborhoods is another worthy focus of communication research.



*Connected Kids* is developing a searchable, interactive database of information about youth programs and services available to all of Troy’s residents. The community organizations can use the database to become aware of each other’s resources and services, to share information, and to avoid duplication of services and resources so that bigger and better returns can be provided. But information alone won’t do the job. In addition, the researchers are focusing on the communication aspects that will link organizations to one another and provide customizable connections with and for parents, schoolchildren, teachers, and counselors as well. A similar study is focused on the impact of an open community network on public participation in city

government in Santa Monica, CA. Studies of the Santa Monica Public Electronic Network, or PEN, showed how the system was able to involve traditionally underrepresented voices—women and the homeless—in civic discussions.

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Rice, R. E. (2002). Primary issues in Internet use: Access, civic and community involvement, and social interaction and expression. In L. Lievrouw & S. Livingstone (Eds.), *The handbook of new media* (pp. 105-129). London: Sage.

Sambamurthy, V., & Poole, M. S. (1992). The effects of variations in capabilities of GDSS designs on management of cognitive conflict in groups. *Information Systems Research*, 3, 224-251.

# POSTSCRIPT

This booklet demonstrates the significant influence of communication on society and on people's lives. The examples of communication research provided here clearly show how communication researchers are working to help improve the quality of life in the areas of politics, relationships, health, and communication and new technology. We hope you now have a greater appreciation for communication research and will let others know that communication—and behavior—matter!

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