

Broadband Neighborhoods — Connected Communities

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ABSTRACT

This paper addresses concerns that home-computing and Internet use damage social capital and contribute to a loss of community. Based on survey and ethnographic data from “Netville”, a wired neighborhood equipped with a broadband local network, this paper concludes that the Internet can be used to increase neighborhood social capital and the connectivity of local social networks.

Keywords

Broadband networks, community, social networks, Netville, social capital, technology and society.

INTRODUCTION

Recent evidence suggests that Americans have become significantly less socially involved over the past quarter century [6]. They have experienced a reduction in social capital that includes diminished neighborhood involvement, decreased time spent entertaining at home, and less time spent with social network members. Although this drop in social capital originates too early to be associated with home-computing or Internet use, recent survey research suggests that Internet use may contribute to a further reduction in the size of social networks, public participation, and communication with network members [4, 5]. Critics of new communication technologies suggest that as it becomes increasingly possible to shop, work, socialize and participate in leisure activities online and from the home we will become increasingly home-centered and disconnected from our friends, families and communities [7, 1].

Alternatively, greater home-centeredness does not necessarily mean less interpersonal or public interaction. The development of computer-supported social networks holds the prospect of enhancing both non-local (global) and very local communities. The connectivity of computer-mediated communication (CMC) may provide access to diverse people located at a distance, but at the same time, the location of the technology in the home may facilitate access to local relationships. It is conceivable that through the use of CMC

people may become more familiar and involved with those in their local neighborhood.

Based on survey and ethnographic data from “Netville,” a wired neighborhood equipped with high-speed Internet access and broadband services, this paper explores the effect of living in a wired neighborhood on local social capital.

NETVILLE

Netville is a newly-built suburban neighborhood of detached single-family homes in an outer suburb of Toronto, Canada. In its appearance, Netville is identical to nearly every other residential development in the Greater Toronto Area. Netville was one of the first developments in the world to be built from the ground up with a series of advanced communication technologies supplied across a broadband high-speed local network. The network and its services were supplied and operated free of charge by a not-for-profit consortium of private and public companies called “Magenta” (*Note: Both “Netville” and the “Magenta Consortium” are pseudonyms adopted to protect the privacy of the residents of the wired neighborhood.*)

Netville’s broadband network delivered synchronous network access at 10 Mbps, 300 times faster than conventional dial-up access and 10 times faster than most residential cable-modem and digital-subscriber line (DSL) services. In addition to high-speed Internet access, residents had access to services that included: a videophone, an on-line jukebox, real-time access to various health care practitioners, online access to a library of educational and entertainment oriented CD-ROMs, neighborhood discussion forums, and 24 hour seven days a week technical support.

Of the 109 homes that comprised Netville, 64 were connected to the local network and had access to the network for up to two years (depending on when they moved in). As a result of organizational problems internal to the Magenta Consortium, the remaining 45 households were never connected to the network, despite assurances that residents would be connected when they purchased their homes. Households not connected to the local network provided a natural comparison group for studying the effects of living in a wired neighborhood.

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METHODOLOGY

This paper adopts a social network perspective which recognizes many different types of social ties and the many ways people maintain contact with those ties: in-person, over the phone, and online [8]. To increase the validity and reliability of this research a variety of research methods were incorporated into the study [3].

Netville's small and compact area made it feasible and desirable to live in the research setting. In October 1997 I moved into Netville for two years where I worked from home, participated in online activities, attended all possible local meetings (formal and informal), and completed a community ethnography.

A cross-sectional survey was administered to a sample of wired Netville residents and a comparison group of similar non-wired residents. As a part of the survey, participants were asked about their neighborhood social networks. From a list of all adult Netville residents, participants identified those they recognized by name, talked with on a regular basis, visited at home, and communicated with by phone and email.

RESULTS

A comparison of wired and non-wired Netville residents, in terms of their neighborhood social networks, is provided in Table 1. Compared to non-wired residents, wired residents recognized three times as many of their neighbors, talked to those neighbors twice as often, visited them 50 percent more often, made four times as many local phone calls, and further boosted their local communication through the use of email.

As the following quotes from Netville's neighborhood email list suggest, residents believed that their wired connectivity contributed significantly to their social connectivity:

I have noticed neighbors talking to each other like they have been friends for a long time. I have noticed a closeness that you don't see in many communities.

I would love to see us have a continuation of the closeness that many of us have with each other, even on a very superficial level. Do not lose it, we know each other on a first name basis.

Wired Netville residents used their neighborhood networks to further build social capital by organizing local events (including house parties, block parties and barbecues) and to mobilize in dealing with community issues (including perceived housing deficiencies and problems with the Magenta Consortium) [2]. Compared to non-wired residents, those with access to Netville's high-speed local network were more active in the community, had more neighborhood social ties and communicated with those ties more frequently in-person, over the phone and online.

CONCLUSION

Internet use does not reduce the size of people's social networks or inhibit interpersonal communication. Social ties do not exist only face-to-face, they are a mixture of online and

Table 1. Comparing the neighborhood social networks of wired and non-wired Netville residents.

	Wired	Non-Wired
Mean number of Netville residents recognized by name ^a	25.2***	8.4***
Mean number of Netville residents talked with on a regular basis ^a	6.4**	3.2**
Mean number of Netville residents visited at home in past 6 months ^a	4.8*	3.2*
Number of phone calls to Netville residents in the past month ^b	22.3**	5.6**
Number of emails to Netville residents in the past month ^b	4.1	–

^a N=56 (36 wired, 20 non-wired)

^b N=44 (22 wired, 20 non-wired)

* p < .1 ** p < .06 *** p < .001 (ANOVA)

in-person encounters. CMC is just another method of social contact to be used in forming new social ties and in maintaining existing social networks. At the local level, as home-computer ownership increases and broadband residential networks become more prevalent, the Internet will increasingly be used to expand neighborhood social capital. Internet use may actually serve to reverse the decline of American social capital that has taken place over the last quarter century.

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