

Social connectedness online / offline. Needs of some vulnerable populations in a digital world. The homeless population case

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ABSTRACT

We are witness to unprecedented opportunities for information discovery thanks to the hypertextual linking and Web technologies. Advantages for citizens are numerous, opening opportunities with a single click. We can not only re-find or discover information but it has become the default media for a rich social networking, making possible links among information objects and its producers and consumers. It is becoming our main tool to satisfy basic information needs related to health, housing, job seeking, education, research, entertainment, shopping. Equally or even more important is the possibilities of connectedness offered by social media systems and technologies in terms of peer and or emotional support. Unfortunately these technologies can also increase the inequity for those populations who don't have access to them. Factors that influence "access" include having network connectivity, equipment (computer, cell phones) and different kinds of literacy (informational, technology & digital literacy).

In this paper we discuss preliminary recent findings of an ongoing project aimed at Assessing the Role of Computers, Mobile Phones, and Social Network Sites on Homeless Social Capital and Social Relationships.

The paper introduces the problem, citing related studies, describing the methodology used and preliminary results and analysis. Our goal is to present information that may be used to orient Communications Technologies (ICTs) agendas of researchers, government, non -profit, educators, etc.

Categories and Subject Descriptors
H [Information systems] / H1.2 User Machine systems

General Terms

Design, Human Factors

Keywords

Social media; social capital; social networking; homeless

1. INTRODUCTION / CONCEPTUAL FRAMEWORK

Homelessness is best understood as a complex and perilous life situation. In 2010, the U.S. Department of Housing and Urban Development estimated that 649,917 individuals were homeless on one winter night. 1,593,150 individuals stayed at least one night in an emergency shelter or other transitional housing arrangement in 2010. Federal definitions of homelessness have expanded beyond simply losing one's residence to also describe individuals and families living in survival situations such as fleeing violence. In this regard, homelessness can be "described as a poverty issue, housing issue, job-skills issue, and health care issue" (Swenson Miller et al., 2005).

For the homeless, life on the margin of society should severely limit the opportunities to access and use information communication technologies (ICTs). Le Dantec (2008) argues that the homeless are on the verge of further marginalization by being on the wrong side of technology-mediated urban social interactions.

As the mainstream becomes more engrossed in new social interactions across a variety of technologies, the effective gap between the mainstreams and the margins increases, and the visibility of those at the margins becomes obscured by the creative ways in which we reconstitute our world through these rich technologies. (p. 27).

However, a growing body of research especially in the fields of human-computer interaction and social work suggests that the homeless do perceive the importance of technology and utilize it to address everyday needs (Le Dantec et al., 2010; Karabanow & Naylor, 2010; Rice, 2010). Attempts to address diversity in design motivate human-computer interaction to build inclusive systems that acknowledge the tensions between assumptions and values held by the homeless, researchers, and other

stakeholders. In addition, recent work in public health, social work, and Internet studies examine mobile phone and social media use by homeless populations. In order to add to this literature, we take a sociotechnical perspective as an intellectual tool that recognizes the use of ICTs by the homeless is embedded within a complex set of technologies, people and social settings. To understand online and offline social connectedness among homeless individuals, we will discuss the importance of social context of ICT use.

2. RELATED RESEARCH

2.1 Social context in the use of ICTs

According to Hargittai (2011), technical resources and social circumstances comprise the context for how an individual engages with ICTs. Access to more advanced technologies enable a wider range of uses than outdated equipment and slow connections. In addition, tablets and mobile phones encourage a passive consumption-driven Internet experience in comparison with laptop or desktop computers (Mossberger, Tolbert, & Hamilton, 2012). Social circumstances refer to the social context of one's Internet experience. This mainly consists of the social network that can help to navigate the Web (Kiesler et al., 2000). Internet users gain benefits through troubleshooting and the "know-hows passed along informally in everyday life from those networks" (Hargittai, 2011, p. 234). As result, the technical and social aspects are important factors for examining Internet use among homeless individuals.

Besides context, we need to also consider the factors related to the individual. This includes the social position of the user as well as the skills they possess. Much of the research on the digital divide has demonstrated the importance of demographics for bridging the access issue of the digital divide along with the more recent skills and usage divides. Many users lack skills that limit how they can use the Internet to better their social condition (van Dijk, 2005, van Deursen & van Dijk, 2009). Hargittai (2011) summarizes these factors in the following graphic representation (p. 235). See Figure 1 below.

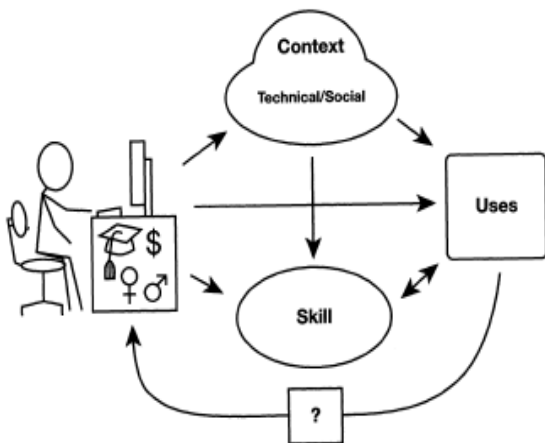


Figure 1 Factors that influence Internet use

"One's demographic characteristics and socio-economic background are likely to influence the technical and social contexts of usage in addition to one's skills. These all, in turn, have implications for how one uses information and communication technologies. Finally, usage feeds back into additional skills leading to a potentially reinforcing effect" (Hargittai, 2011, p. 235).

2.2 Support social network construction

The Second Chilean Homeless Census (En Chile todos contamos. Segundo catastro nacional de personas en situación de calle) (Ortiz and Gallegos, eds. 2012). This census is a work done at a national level with the collaboration of the Ministry of Social Development, university researchers and community groups. It was aimed at addressing the problem of exclusion of homeless by understanding their realities and needs regarding the main areas of government policies: work, education, health and housing. 12,255 homeless people were interviewed by more than 9,000 volunteers.

The homeless situation was found as a gradual and deep process of social detachment. In spite of their difficulties many homeless dream with finding opportunities for rehabilitation, contradicting the stereotype of idleness and laziness. Affective dimensions, social connectedness, relationships, and companionship, sharing memories and experiences, need for feeling part of the community (listening and discussing news, music) were mentioned as more important than money. Maintaining social networks was fundamental surviving strategy. The typology of networks homeless construct was characterized according to size (number of connections), density (localized, diffuse), practices and activities (passive, active). Although the census report focus on person to person communication some of the stories include mentions to the role of CITs to provide the social network support, such as testimony stating that "the only one friend out of the shelter, is one that I maintain using Internet". In the study presented in this paper, the focus is the use of social media CITs as mechanisms for providing homeless with networking support and empowerment.

As noted by Eyrych-Garg (2011), one of the primary purposes for using computers by homeless individuals is to maintain and increase social connectedness. In her study, she determined that participants used social network sites, dating sites, chat rooms, and email to fulfill social connections. These connections provide important benefits for homeless individuals by bolstering physical and mental health (Hwang et al., 2009). Based on her findings, she suggests that social network sites "could potentially be one venue to help people experiencing homelessness meet some of their social needs, providing them with a stable space in their ever-changing lives" (p. 301).

Work by Rice and colleagues have begun to address the impact of social network sites on homeless individuals specifically among emerging adults. One of the most important findings is that social networking technologies (Internet, mobile phones, texting) help homeless young adults connect to their home-based peers and positive social networks (Rice, 2010; Rice, Kurzban & Ray, 2011; Rice, Milburn & Monro, 2011). By connecting to home-based ties, Rice and colleagues consistently found that ICTs played a significant factor in reducing risky sexual behavior, substance abuse, and depression.

3. METHODOLOGY

Survey and interviews

To determine the contextual factors that examine social connectedness with various ICTs used among homeless individuals, we developed a relationship with two homeless shelters in Honolulu, HI. Based on previous research conducted on the homeless and ICTs, we constructed a survey that examines the following measures: demographics, computer use, mobile phone acquisition and use, social network site (Facebook) use, Internet skills, and social support. Table 1 summarizes our variables of interest and the measure chosen. Whenever possible, we have selected measures that have been referenced in the literature.

Table 1 Homeless Use of ICTs Survey Measures

Variable	Relevant Study
Demographic variables	Age, gender, & ethnicity
Computer Use	
Location where participants used computers	Eyrich-Garg, 2011
Time spent on the computer	Eyrich-Garg, 2011
Web-use skills	Hargittai & Hsieh, 2012
Mobile Phone Use	
Own Mobile Phone	Eyrich-Garg, 2010
Communication Patterns	Eyrich-Garg, 2010
Purpose of Communication	Eyrich-Garg, 2010
Social Network Sites	
Facebook Intensity of Use	Ellison et al., 2011
Social Capital Measures	Ellison, Steinfield, & Lampe, 2011
Number of Total Friends	Vitak, 2012
Number of Actual Friends	Vitak, 2012
Type and Diversity of Friends	Vitak, 2012, Rice, Milburn, & Monro, 2011

For data collection, we followed Stennett et al. (2012) recommendation to make a verbal announcement at meal time rather than posting a notice at the shelter. This is the best way to reach the largest amount of homeless people since many shelter participants attend facilities during dinner time. In addition, Stennett et al observed that at least 60% of the homeless participants in their study sometimes or never checked the bulletin boards for new information. As a result, we recruited participants for our survey and interviewed them during the free meal times at the two Honolulu shelter locations.

4. PRELIMINARY RESULTS

We are still analyzing the data from the survey interviews; in total we conducted 150 interviews with homeless individuals; each interview took place near or inside a shelter, with an average duration of 45 minutes. We include now only those results that were very evident during the interviewing process.

Demographics: the sample was equally distributed by gender. Ages range from 18 to 70 years old; most of them Hawaii residents but many coming from mainland, a few from European countries. Race and ethnicity varies in agreement with the mixed population in Hawaii, from Asian descendants to Native Hawaiian and Caucasians.

Education: high school was a common level but a few of the respondents had studies toward doctoral degrees.

Social support: subjects were divided about their perceptions of the support that they could receive from family and friends. When filling the survey some of them answered with perceptions of not having whom to turn to; however while explaining the reasons for these perception noted that in fact they would not request for help as they prefer to maintain privacy of their situation.

Mobile devices: As expected most of the subjects had access to cell phone, which was considered the main instrument for maintaining social relationships. They use it every day to maintain contact with family, friends, social workers, and health care providers.

Internet: some subjects use the computer labs in the shelter where they received instructions for required and useful tasks, specially writing resumes and job applications. Many were not aware of services that public libraries provide not only offering physical access but also providing information and technology literacy.

Social network sites: their active use, reading and posting, was more common in younger people; some others had a more reactive attitude by reading only postings of their close family. A large number do not use social for reasons that include not having access but also because of privacy concerns.

Connectedness needs: consistent with other research, our subjects need and make use of social networks offline & online. It is part of their daily activity and strategy for finding resources to satisfy their needs of health, education, work, housing, and emotional support.

5. IMPLICATIONS / RESEARCH AGENDA

Our work agrees with related research suggesting the possibilities of ICTs resources to support connectedness as a way to empower homeless populations. As example, our subjects show a rich variety not only in demographics but in situations and contexts.

This offers opportunities for research on user modeling, semantic technologies and personalized information services based on individual profiling, personal ontologies (Quiroga, 2009). Another needed research relates to the role of information agencies such as public libraries and community centers designing Informational digital literacy instruction programs which make homeless aware of benefits and precautions when using social media technologies.

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