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Gui, Xinning
Forbat, Julien
Nardi, Bonnie
et al.

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Use of information and communication technology among street drifters in Los Angeles

by Xinning Gui, Julien Forbat, Bonnie Nardi, and Dan Stokols

Abstract

We report a qualitative study of ICT (information and communication technology) use among a group of homeless people on Skid Row, Los Angeles. Participants in our ethnographic study frequently used mobile phones and computers, but not for the purposes documented in other studies such as managing friendships, enlisting family support, finding housing, and seeking employment. They were instead seeking respite to escape their stressful daily lives. We argue that urban communities should adopt a multi-agency approach and provide support centers offering homeless people access to computers and Wi-Fi. Increased access to ICT would both facilitate homeless people's capability to cope with their difficult environment.

Contents

[Introduction](#)
[Related work](#)
[Methods](#)
[Findings](#)
[Discussion](#)
[Conclusion](#)

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- [By Issue](#)
- [By Author](#)
- [By Title](#)
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RSS	2.0
RSS	1.0

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ABOUT THE AUTHORS

Xinning Gui

Department of Informatics
University of California,
Irvine
United States

Xinning Gui is a Ph.D. candidate from the Department of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine. She studies the use of technologies for sustainability and health.

Julien Forbat

School of Social Ecology
University of California,
Irvine
United States

Julien Forbat obtained his PhD at the University of Geneva, studying environmental health policies in Europe. He is now a visiting scholar in the School of Social Ecology at the University of California, Irvine. He studies environmental health policies, as well as inter- and transdisciplinary issues.

Bonnie Nardi

Department of Informatics
University of California,



Introduction

The homeless population of Los Angeles, Calif. is steadily increasing (Nagourney, 2015; Keyes, 2015). Many inhabit the 54-block downtown Skid Row area. During our field research in the summer of 2015 we encountered some of the most desperate homeless. They lived in shabby tents and dilapidated cardboard shelters amidst curbs overflowing with rotting trash. Some lay in filth amongst their few possessions, and others stumbled and ranted.

As part of our research, we volunteered at the Hospitality Kitchen, a Catholic Worker facility offering homeless people free meals three mornings a week. Most of the clients we met lived on the streets and slept unsheltered. Researchers have a variety of terms for those who live on the streets, including "street homeless" (Jencks, 1994; Eyrich-Garg, 2011), "unsheltered homeless" (Jost, et al., 2010), "non-shelter-using homeless" (Larsen, et al., 2004), and "roofless people" (Ravenhill, 2008). These terms emphasize outdoor life and lack of shelter. However, we found that homeless people living on the streets often also lack friends and family networks — a condition as serious, or even more serious, than lack of shelter. These homeless frequently move from one place to another. We thus use the term *street drifter* to encompass outdoor living conditions, lack of social bonds, and nomadic movement.

Figure 1: A homeless man holds his meal and a flip phone in the garden of the Hospitality Kitchen.

A strong body of research has emphasized ICTs' role in promoting social inclusion for the homeless (Woelfer and Hendry, 2011; Guadagno, *et al.*, 2013; Pollio, *et al.*, 2013; Rice, *et al.*, 2011; Le Dantec and Edwards, 2008; Woelfer and Hendry, 2010). Social inclusion refers to "the extent that individuals, families, and communities are able to fully participate in society and control their own destinies, taking into account a variety of factors related to economic resources, employment, health, education, housing, recreation, culture, and civic engagement" (Warschauer, 2003). This research has shown that ICTs can improve homeless people's communication with friends, families, shelter staff, and health care providers.

In our study of ICT use among street drifters, however, we found that while street drifters used cell phones (see [Figure 1](#)), technology use did not enhance social inclusion. Unsafe living conditions, difficulties in socializing with other homeless people, and survival needs led them to look for physical and digital "havens," that is, safe spaces where they could relax and recharge.

Related work

The frequency of ICT use among homeless is related to technical and computer skills, as well as financial capability (Hersberger, 2003). ICTs help homeless young adults stay connected with friends and family, conduct business, contact social workers and employers, develop resumes, and search for employment and housing (Rice and Barman-Adhikari, 2014; Karabanow and Naylor, 2010; Guadagno, *et al.*, 2013; Rice, *et al.*, 2011). Homeless people use ICTs to seek healthcare services (Rice, Kurzban, *et al.*, 2012; Rice, Tulbert, *et al.*, 2012). ICTs can facilitate the formation of social ties between homeless people and local neighborhood (Roberson and Nardi, 2010).

Methods

We visited Los Angeles' Skid Row from May–July 2015 as participant observers, volunteering in the Hospitality Kitchen. We conducted in-depth, semi-structured face-to-face interviews with fourteen street drifters, aged 27 to 70, who came to the Hospitality Kitchen for meals. We audiotaped eight interviews, and photographed participants. We retain original orthography and punctuation in interview quotes.

Our participants included U.S. citizens and undocumented immigrants from India and Bolivia. We asked participants whether they owned digital devices such as computers and phones, when and how they used ICTs, and how ICT use influenced their life. We also interviewed Ms. Catherine Morris, one of the Hospitality Kitchen founders.

Findings

We found that safety, socializing, and survival were the three most important themes that our participants struggled with in their homeless lives.

Irvine
United States

Bonnie Nardi is Professor in the Department of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine. She has a forthcoming book, co-authored with Professor Hamid Ekbia at Indiana University, *Heteromation and Other Stories of Computing and Capitalism* (MIT Press).

Dan Stokols
School of Social Ecology
University of California,
Irvine
United States

Dan Stokols is Chancellor's Professor Emeritus in Psychology and Social Behavior and Planning, Policy, and Design at the University of California, Irvine. Dr. Stokols served as Director and founding Dean of the School of Social Ecology at UC Irvine between 1988–98. He is co-author of *Behavior, Health, and Environmental Stress* (1986), the National Academy of Sciences report on *Enhancing the Effectiveness of Team Science* (2015), and co-editor of the *Handbook of Environmental Psychology* (1987), *Environmental Simulation* (1993) and *Promoting Human Wellness* (2002).

Safety concerns

Living on the streets, our participants needed to pay attention to potential physical violence from other homeless people. One participant told us that he tried to "keep away from others" because he had been beaten on multiple occasions. Participants sought safety through distance. They called this phenomenon the "downtown mentality." It included avoidance of physical contact such as hugs or handshakes.

Access to shelters often did not offer a good alternative to street drifting. A study participant who used to stay in temporary shelters before living on the streets described them as often just as harsh and dangerous as the streets:

Also shelters have been found to be very violent and unsafe, some people have shared that when they come out of jail, they don't see the difference between the violence in jail and in the shelters . . . My experience was a lot of violence, I got brutally beaten down repeatedly on my head in front of 200 guests, and security told me: "Oh we didn't hear you." I was screaming. I was scared because they hit me so hard.

Street drifters repeatedly experienced violent incidents. They often moved from one location to another for safety reasons. They avoided befriending other homeless people.

Our study participants enjoyed safety at the soup kitchen and in public libraries. When we asked why they came to the Hospitality Kitchen, most mentioned the "the peaceful atmosphere" and the respect they received from the staff members. One participant called the soup kitchen "a Zen place" and "an oasis." Another appreciated that staff members put a bouquet of flowers on each table and cleaned the tables frequently, which made him feel like he was "sitting in a peaceful restaurant." Our participants noted staff members' kindness and humility. One participant said, "I very much respect what they do for the community. I feel like they should have the Nobel Prize for that, because they do it with humility, they do it week after week." The soup kitchen provided participants a place where they did not need to worry about their safety.

Libraries provided similar oases. When sitting in a public library and reading books or surfing the Internet, participants enjoyed peace and quiet. They mentioned that public libraries allowed them to temporarily "escape from" homelessness. One participant explained that spending time in libraries was "a way to get away from all these negative things."

Problems of socializing

Our participants avoided interactions with other homeless. They emphasized ways in which they were different from other homeless individuals, such as race, lack of addiction, or holding an academic degree. For example, one participant said, "I don't do drugs. Not at all. I'm cleaner than others." A Caucasian participant told us: "I was stabbed and beaten because of the color of my skin," insisting on his race as a distinctive feature.

One participant used the term "cultural shock" to refer to the experience of interacting with other homeless people. In his view, other homeless were mostly drug addicts or mentally ill persons. Another differentiated himself by his sense of "self-esteem." He said:

Unfortunately, I can't work for now. But, like I told you, the system corrupts, the mind, the people . . . They get used to it. They don't love themselves. I do, I do. People are abusing the system. People are abusing themselves. They don't have self-esteem, but I do.

This person drew a sharp distinction between himself and other homeless people, whom he considered disreputable and shiftless. This distinction echoes Sarbin's categorization of "the

respectable poor" and "the degraded poor" (Sarbin, 1970). He suggested that both "poor" and "homeless" categories should not only be defined by material conditions, such as socio-economic status or living on the street, but also by values people belonging to those categories use to act upon their environment. In this regard, acting "respectably" becomes a strong social marker.

Participants were estranged from their family and friends. One participant's mother lived only about 20 miles from Skid Row. However, because of his alcoholism, his family had rejected him. He said, "They thought I had real problems. They wanted me to leave." Another participant explained how homelessness harmed his friendships:

I have one or two people that if I needed something I could go to them, but not in terms of true friendship. Before, when I wasn't homeless, I had true friends, but when you're in this kind of situation

...

Participants found friendship at the Hospitality Kitchen. Since most staff members had been working at the kitchen for years, they provided stable social connections. Participants cherished staff members' kindness and respect. For instance, one participant appreciated that staff members invited him to a book release event.

Survival needs

To survive the homeless life, our participants developed strategies to cope with food, mental health, and employment.

They were familiar with many places that provided free food, and had developed a routine of visiting certain places, including the soup kitchen, at certain times. One participant said:

It's great. This is the healthiest food in Skid Row. ... Because other places are giving processed food or leftovers from different places. But this is fresh, this is prepared just for here. And it's always good, there's always salad, beans, macaroni, some kind of meat, they have a vegetarian meal and they give you little side stuff, like sweet cake ...

Street drifters were unemployed most of the time. They stressed the importance of managing their abundant free time for maintaining mental health. One participant deliberately completed only one task per day because otherwise he would have "too much free time." Another often walked 15 miles from Skid Row to the beach at Santa Monica. He explained, "I go to Santa Monica, walking, walking, to see the ocean." Walking a long distance was his daily routine for keeping busy.

Participants cited entertainment as an important way to manage mental health. They often used public libraries' computers to inform themselves about their interests, and to check for free events in local areas. One participant explained:

I seek religious information [...] . And I also use [the computer] to find out what's going on in the community for free, like entertainment, Shakespeare in the Park [...] .

Street drifters took advantage of public libraries' computers or they used their mobile phones to connect to the free Wi-Fi at restaurants and cafes such as McDonald's and Starbucks. One participant said:

Homeless people on the streets have mental issues, everybody, even me, especially depression Keeping my mind away from problems, I relax and listen to music about two hours a day, sometimes more. I

use the Internet to watch movies, to have fun, which I love very much.

Our study participants consumed online content such as videos, music, news, and local information. They used smartphones and computers to access online resources for entertainment and to keep their spirits up. Studies have shown that after prolonged exposure to a monotonous environment, mental health declines (Heron, 1957; Kawachi and Berkman, 2001). The street drifters attempted to forestall mental problems by keeping as active and mentally engaged as they could under difficult circumstances.

Participants desired employment opportunities. However, they found online job search particularly daunting. Online job applications often require a physical address, which participants lacked. Some could not perform ordinary work due to chronic conditions such as Parkinson's disease, untreated diabetes, or mental illness. Those who were undocumented immigrants desired low-profile jobs that did not attract attention from others and did not wish to use online sources. For example, one participant wanted a dishwashing job, and he walked around to find employment information.

Discussion

Libraries and the soup kitchen served as physical havens where the street drifters we studied could escape their stressful daily lives. Hersberger (2005) discussed libraries as "social institutions of inclusion" in which homeless should not be discriminated against by staff members. Mitchell (2003) noted that "by claiming space in public, by creating public spaces, social groups themselves become public. In certain public spaces homeless people can represent themselves as a legitimate part of the public." Hodgetts, et al. (2008) discussed how homeless people visited public libraries to "experience belonging, and to move out from marginal spaces."

ICTs were used as virtual havens, a way to cope with stressful mental and physical circumstances. Publicly available services such as free Wi-Fi and public libraries' computers were essential in this respect. However, the small number of Wi-Fi locations and the libraries' limited hours imposed severe limits on participants' ability to make use of digital resources. Participants did not, and were unable to, regularly access what we consider basic, everyday 24/7 information sources, such as social media, search, and e-mail. Since digital resources helped street drifters cope with their difficult circumstances, lowering barriers to ICT infrastructure is an important step in addressing problems of homelessness. Urban communities with a high density of homeless people, such as Skid Row, should strive to provide support centers offering access to computers and Wi-Fi. Some might be merged with publicly run soup kitchens or be equipped with their own meal facility. (We do not believe that private charities such as the Hospitality Kitchen should be expected to take on this additional role as they simply do not have the resources to do so.)

Fostering other uses of ICTs, for instance job and housing seeking activities, is not necessarily a priority for the population we studied. Our study shows that many street drifters may not be able to engage in the process of social rehabilitation. Focusing on helping them manage their chronic homelessness might prove to be more just and effective in the long run. Homelessness is the result of a lifetime of complex factors, and those of us who have led easier lives should not assume that homelessness is to be solved with jobs or shelters. We have seen that street drifters are socially isolated in the extreme, that they may suffer mental illness, that they are afraid of shelters with their violence. Given their circumstances, we are humbled in the face of homeless who find ways to ease their burdens, whether it is walking 15 miles or going to Shakespeare in the Park, or spending quiet time in the library. Until society decides to invest in the specific problems (such as alcoholism or drug addiction) homeless face, probably the best we can do now is to support the everyday solutions homeless themselves are devising.

No systematic help exists for bridging street drifters and domiciled people. Participants relied on themselves to seek limited stable social connections from social spaces such as the soup kitchen, which is only open three days a week. Public support centers might ease chronic homelessness if they can offer safe spaces for socializing among the homeless community and with domiciled people.

Dealing with the complex issue of homelessness indicates the need for a multi-agency approach. Soup kitchens, public libraries, and shelters all played a role in the lives of the people we studied, but these groups had little interaction with each other. Ideally, public authorities and private charities can foster horizontal cooperation amongst themselves. A key obstacle is the cost of such collaboration for local actors in terms of time and resources. We think this kind of cooperation is important because local actors tend to possess a better knowledge of homeless issues than central agencies. Distribution of relevant information to local actors, financial incentives, and new legislation and organizational measures, such as the creation of support centers, could be implemented to promote more integrated action. This conclusion emphasizes the absence of a "simple" solution to homelessness.

Conclusion

We reported a study of a specific type of homeless people, whom we call street drifters. We discussed the safety, socializing, and survival issues they faced, and how they coped with these issues. Digital technologies were most valuable in helping this group maintain their mental health. We argued that urban communities should adopt a multi-agency approach and provide support centers offering homeless people access to computers and Wi-Fi since these are resources street drifters are already using to help themselves. 

About the authors

Xinning Gui is a Ph.D. candidate from the Department of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine. She studies the use of technologies for sustainability and health.
E-mail: guix [at] uci [dot] edu

Julien Forbat obtained his Ph.D. at the University of Geneva, studying environmental health policies in Europe. He is now a visiting scholar in the School of Social Ecology at the University of California, Irvine. He studies environmental health policies, as well as inter- and transdisciplinary issues.
E-mail: julien [dot] forbat [at] uci [dot] edu

Bonnie Nardi is Professor in the Department of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine. She has a forthcoming book, co-authored with Professor Hamid Ekbja at Indiana University, *Heteromation and other stories of computing and capitalism* (Cambridge, Mass.: MIT Press).
E-mail: nardi [at] uci [dot] edu

Dan Stokols is Chancellor's Professor Emeritus in Psychology and Social Behavior and Planning, Policy, and Design at the University of California, Irvine. Dr. Stokols served as Director and founding Dean of the School of Social Ecology at UC Irvine between 1988–1998. He is co-author of *Behavior, health, and environmental stress* (New York: Plenum Press, 1986), the National Academy of Sciences report on *Enhancing the effectiveness of team science* (Washington, D.C.: National Academies Press, 2015), and co-editor of the *Handbook of environmental psychology* (New York: Wiley, 1987), *Environmental simulation* (New York: Plenum Press, 1993) and *Promoting human wellness* (Berkeley:

References

- Karin M. Eyrich-Garg, 2011. "Sheltered in cyberspace? Computer use among the unsheltered 'street' homeless," *Computers in Human Behavior*, volume 27, number 1, pp. 296–303.
doi: <http://dx.doi.org/10.1016/j.chb.2010.08.007>, accessed 1 May 2015.
- Rosanna E. Guadagno, Nicole L. Muscanell and David E. Pollio, 2013. "The homeless use Facebook?! Similarities of social network use between college students and homeless young adults," *Computers in Human Behavior*, volume 29, number 1, pp. 86–89.
doi: <http://dx.doi.org/10.1016/j.chb.2012.07.019>, accessed 30 June 2015.
- Woodburn Heron, 1957. "The pathology of boredom," *Scientific American*, volume 196, number 1, pp. 52–56.
doi: <http://dx.doi.org/10.1038/scientificamerican0157-52>, accessed 22 August 2016.
- Julie Hersberger, 2005. "The homeless and information needs and services," *Reference and User Services Quarterly*, volume 44, number 3, pp. 199–202.
- Julia Hersberger, 2003. "Are the economically poor information poor? Does the digital divide affect the homeless and access to information?" *Canadian Journal of Information and Library Science*, volume 27, number 3, pp. 44–63.
- Darrin Hodgetts, Otilie Stolte, Kerry Chamberlain, Alan Radley, Linda Nikora, Eci Nabalarua and Shiloh Groot, 2008. "A trip to the library: Homelessness and social inclusion," *Social & Cultural Geography*, volume 9, number 8, pp. 933–953.
doi: <http://dx.doi.org/10.1080/14649360802441432>, accessed 28 October 2015.
- Christopher Jencks, 1994. *The homeless*. Cambridge, Mass.: Harvard University Press.
- John J. Jost, Aaron J. Levitt and Leide Porcu, 2010. "Street to home: The experiences of long-term unsheltered homeless individuals in an outreach and housing placement program," *Qualitative Social Work*, volume 10, number 2, pp. 244–263.
doi: <http://dx.doi.org/10.1177/1473325010369025>, accessed 21 October 2015.
- Jeff Karabanow and Ted D. Naylor, 2010. "'Being hooked up': Exploring the experiences of street youth and information technologies," In: E. Dianne Looker and Ted D. Naylor (editors). *Digital diversity: Youth, equity, and information technology*. Waterloo, Ontario: Wilfrid Laurier University Press, pp. 161–178.
- Ichiro Kawachi and Lisa F. Berkman, 2001. "Social ties and mental health," *Journal of Urban Health*, volume 78, number 3, pp. 458–467.
doi: <http://dx.doi.org/10.1093/jurban/78.3.458>, accessed 21 October 2015.
- Scott Keyes, 2015. "Hawaii follows Los Angeles in declaring state of emergency over homelessness," *Guardian* (20 October), at <http://www.theguardian.com/us-news/2015/oct/20/hawaii-declares-state-of-emergency-homelessness>, accessed 22 October 2015.
- Larissa Larsen, Ernie Poortinga and Donna E. Hurdle, 2004. "Sleeping rough: Exploring the differences between shelter-using and non-shelter-using homeless individuals," *Environment & Behavior*, volume 36, number 4, pp. 578–591.
doi: <http://dx.doi.org/10.1177/0013916503261385>, accessed 10 October 2015.

Christopher A. Le Dantec and W. Keith Edwards, 2008. "Designs on dignity: Perceptions of technology among the homeless," *CHI '08: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 627–636.
doi: <http://dx.doi.org/10.1145/1357054.1357155>, accessed 22 August 2016.

Don Mitchell, 2003. *The right to the city: Social justice and the fight for public space*. New York: Guilford Press.

Adam Nagourney, 2015. "Los Angeles confronts a spike in homelessness amid prosperity," *New York Times* (12 June), at <http://www.nytimes.com/2015/06/14/us/los-angeles-confronts-a-spike-in-homelessness-amid-prosperity.html>, accessed 22 October 2015.

David E. Pollio, D. Scott Batey, Kimberly Bender, Kristin Ferguson and Sanna Thompson, 2013. "Technology use among emerging adult homeless in two U.S. cities," *Social Work*, volume 58, number 2, pp. 173–175.
doi: <http://dx.doi.org/10.1093/sw/swt006>, accessed 3 October 2015.

Megan Ravenhill, 2008. *The culture of homelessness*. Burlington, Vt.: Ashgate.

Eric Rice and Anamika Barman-Adhikari, 2014. "Internet and social media use as a resource among homeless youth," *Journal of Computer-Mediated Communication*, volume 19, number 2, pp. 232–247.
doi: <http://dx.doi.org/10.1111/jcc4.12038>, accessed 14 October 2015.

Eric Rice, Seth Kurzban and Diana Ray, 2012. "Homeless but connected: The role of heterogeneous social network ties and social networking technology in the mental health outcomes of street-living adolescents," *Community Mental Health Journal*, volume 48, number 6, pp. 692–698.
doi: <http://dx.doi.org/10.1007/s10597-011-9462-1>, accessed 13 October 2015.

Eric Rice, Alex Lee and Sean Taitt, 2011. "Cell phone use among homeless youth: Potential for new health interventions and research," *Journal of Urban Health*, volume 88, number 6, pp. 1,175–1,182.
doi: <http://dx.doi.org/10.1007/s11524-011-9624-z>, accessed 3 October 2015.

Eric Rice, Eve Tulbert, Julie Cederbaum, Anamika Barman Adhikari and Norweeta G. Milburn, 2012. "Mobilizing homeless youth for HIV prevention: A social network analysis of the acceptability of a face-to-face and online social networking intervention," *Health Education Research*, volume 27, number 2, pp. 226–236.
doi: <http://dx.doi.org/10.1093/her/cyr113>, accessed 14 October 2015.

Jahmeilah Roberson and Bonnie Nardi, 2010. "Survival needs and social inclusion: Technology use among the homeless," *CSCW '10: Proceedings of the 2010 ACM Conference on Computer Supported Cooperative Work*, pp. 445–448.
doi: <http://dx.doi.org/10.1145/1718918.1718993>, accessed 14 October 2015.

Theodore R. Sarbin, 1970. "The culture of poverty, social identity, and cognitive outcomes," In: Vernon L. Allen (editor). *Psychological factors in poverty*. Chicago: Markham Publishing, pp. 29–47.

Mark Warschauer, 2003. *Technology and social inclusion: Rethinking the digital divide*. Cambridge, Mass.: MIT Press.

Jill Palzkill Woelfer and David G. Hendry, 2011. "Homeless young people and living with personal digital artifacts," *CHI '11: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pp. 1,697–1,706.
doi: <http://dx.doi.org/10.1145/1978942.1979190>, accessed 3 October 2015.

Jill Palzkill Woelfer and David G. Hendry, 2010. "Designing ubiquitous information systems for a community of homeless young people: precaution and a way forward," *Personal and Ubiquitous*

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