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# Vulnerable or Susceptible? Designing for and with Homeless Young People

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## Abstract

Since all human beings are vulnerable, *susceptibility* may be useful in HCI research that engages homeless young people. This position paper begins with a discussion of *vulnerability* and *susceptibility*. Then, experiences from over five years of HCI research, service and design projects with homeless young people are presented in order to explore how *susceptibility* may be applied by HCI researchers.

## Author Keywords

Homeless young people; vulnerability; susceptibility; precaution

## ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

## General Terms

Design

## Introduction

The New York Times recently reported on an upsurge in unemployment and subsequent homelessness in the United States among young people, aged 18-24. According to the article, the upsurge in homelessness is associated with the worldwide economic downturn dating from 2008. The implication is that due to

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economic forces well outside of their control, young people aged 18-24 in the US may experience lower life expectations, severe economic consequences, and even the lasting stigma of homelessness. Given this we might ask, are all young people in the US aged 18-24 vulnerable? Apparently not, since the article also points out that many people in the 18-24 age group receive support and are, for instance, provided with housing by family members and friends [10].

This simplistic example illustrates issues that arise when vulnerability is too broadly applied to a group of people. Yet, as writers in bioethics and philosophy have noted, the principle of vulnerability has been broadly applied in regulations and guidance documents that provide the context for the treatment of human subjects in research in the US and the world [6,7]. As HCI researchers who are interested in engaging with homeless young people and others who fall under these prescriptions of vulnerability, how do we proceed?

In order to make some progress on this question, first *vulnerability* and *susceptibility* are discussed. Then, experiences from over five years of HCI research, service and design projects with homeless young people are presented in order to explore how *susceptibility* may be applied by HCI researchers.

### **Vulnerability or Susceptibility?**

Vulnerability has been used as a principle in the consideration of protections for human research subjects at least since the Belmont Report was published in 1979 [6,7,8]. Yet, some scholars have questioned the usefulness of vulnerability as a principle for protecting research subjects on the grounds that vulnerability has been too broadly applied and that

vulnerability is not a principle at all but rather a description of the human condition.

Taking the first view, where vulnerability is said to have been applied too broadly, Levine and colleagues argue that “so many groups are considered vulnerable in the context of research... that the concept has lost its force” [7, p. 44]. Indeed, the sheer number of groups that have been described as vulnerable is overwhelming. For example, in US government and international organization documents prescriptions of vulnerability are assigned to groups as diverse as pregnant women, children, prisoners, students, employees, members of the armed forces or police, nursing home residents, people receiving welfare benefits or social assistance, other poor people, the unemployed, patients, some ethnic and racial minority groups, homeless persons, nomads, refugees, politically powerless individuals, and people unfamiliar with modern medical concepts [2,9]. Identifying all these groups as vulnerable may help to frame research that is less likely to cause harm to participants. However, it also gives rise to the question, is everyone vulnerable?

In the second view, the supposed over application of vulnerability has occurred because vulnerability has been treated as a moral principle which can be applied to a researcher’s behavior vis-à-vis a particular group of people. This treatment of vulnerability as a moral principle is inherently incorrect since vulnerability is not a principle but a description of the human condition, applicable to all human beings. Representing this view, Kottow argues that since all human beings are vulnerable, groups of people labeled as *vulnerable* may in fact be *susceptible*. The difference between vulnerability and susceptibility is subtle but important.

On the one hand, vulnerability arises since all human beings are “poorly equipped with instinct and their nature is incomplete, wherein lies their potential flourishing but also their vulnerability.... perils also lurk in the aggressive behavior of fellowmen and the violation of socially accepted rights” [6, p.282]. Thus, vulnerability describes a state – where harm is possible but has not already occurred – that applies to all. On the other hand, susceptible people are those who are no longer in a state of unharmed vulnerability – since they have already been harmed in a way that leaves them open to further harm. Thus, susceptibility arises for people who “having become the victims of harm and deficiencies ...are now in a vulnerated state of susceptibility that...indicates ...increased liability to additional harm” [6, p. 283].

To illustrate the difference between vulnerability and susceptibility, I return to the example of young people and homelessness given at the beginning of this paper. Following Kottow, all people are vulnerable. Therefore, the vulnerability of young people does not arise from age or economic circumstances but is inherent to them as human beings. Accordingly, all young people whether living at home or homeless are vulnerable.

However, there do seem to be important differences between young people still living at home or supported by families and young people who are experiencing homelessness. How might we differentiate between these two groups? Again following Kottow, we say that the young people experiencing homelessness have already been harmed and so are *susceptible* to further harm. This leads to two questions: From where did this previous harm arise for homeless young people? And How might homeless young people be further harmed?

Regarding previous harms, extensive research has demonstrated that young people who become homeless have often experienced abuse or neglect in early childhood leading to a higher likelihood of mental illness and substance abuse. Additionally, young people who become homeless have often had negative experiences with institutions such as schools, foster care and other social services. Due to these harms, homeless young people do not generally trust strangers, adults and institutions. This in turn affects a young person's ability to take part in formal education programs, find work, and participate in mainstream society leading to a general lack of life skills that may lead to instability and homelessness [5,11].

Once homeless, a young person may be further harmed by persistent negative experiences with institutions such as police and the court system, by violence or by the situational exacerbation of mental illness or substance abuse, and so on [11,15,16]. Homeless young people may also be further harmed by societal factors such as stigmatization and stereotyping [10]. Finally, and importantly for our purposes, the potential exists that further harm may come to homeless young people if they participate in research [3]. For instance, since homelessness carries stigma in the US, homeless young people may be harmed if their confidentiality is not maintained by researchers and their status as a homeless young person becomes common knowledge. Or, in another example, since many homeless young people attend programs at service agencies especially designed to meet their needs, homeless young people may be further harmed if researchers intervene in the operation of these service agencies in ways that interfere with services and weaken systems of support [5].

Thus, previously harmed and at risk of further harm, homeless young people, unlike their housed peers, are susceptible – even to harm arising from the actions of well-meaning researchers. However, homeless young people are not a monolithic group but a heterogeneous mix of youth and young adults with a wide variety of experiences [3,11]. Thus, susceptibility of homeless young people is not fixed and invariable but may range over a wide spectrum, differing substantially from one homeless young person to the next. Additionally, homeless young people, like anyone their age, are navigating the terrain between youth and young adulthood and have ordinary developmental desires for autonomy and independence [1]. Accordingly, researchers who engage with homeless young people need to respect the dignity of homeless young people while also paying attention to the particular needs brought on by their extraordinary circumstances.

### **Homeless Young People and HCI Research**

Homeless young people are keenly interested in and have experiences with information systems and technologies such as Facebook, mobile phones and music players [13,15,16]. Since homeless young people are susceptible, if we seek to investigate the experiences that homeless young people have with information systems and technologies, how should we engage homeless young people in HCI research?

I have explored this question in over five years of HCI research, service and design projects with homeless young people, aged up to 30. To provide a summary, I will discuss my HCI research experiences with homeless young people in relation to four themes: long-term commitment, participation, precaution, and method.

*Long-term commitment.* In 2007, little was known about homeless young people and their experiences with information systems and technologies. So, it was best to start with the question of “what’s here?” Taking up this question, it was important for me to know what homeless young people were already doing with information systems and technologies. Additionally, given the susceptibility of homeless young people and the potential for further harm, it was important to proceed with my investigations in a way that allowed me to gain skill and knowledge for working with homeless young people. One way to build skill and knowledge is to proceed slowly, allowing time to reflect on prior experiences, refine approaches and re-examine purposes. Subsequently, my research has been framed as a long-term commitment to HCI research with homeless young people, now extending over 5 years.

*Participation.* Another way to proceed in research with homeless young people while remaining mindful of their susceptibility, heterogeneity and autonomy is to engage in participatory processes. Thus my work with homeless young people also includes service and design as well as research projects. For example, I co-created a community technology center for homeless young people. There, I was a volunteer instructor and worked with over 100 homeless young people in 18 months. Homeless young people were, on average the same age as US undergraduate students, but their circumstances and past experiences left them largely unprepared for finding work. Thus, classes focused on practical computer-mediated activities related to finding a job, such as applying online, etc. However, unlike other courses that homeless young people had routinely encountered, the classes in the community technology center used techniques employed in design studios.



### Music Blanket Testimonial

I am so excited to have received this "Musical Blanket" for free! I got to stay warm for a whole week, before it rained. Now I have only my memories of lavender, massages, warmth and music chosen to reflect my mood. Next time I will buy a rain protector. Good thing my "Musical Blanket" was also edible. Sadly, it tasted awful [sic], and was made of flannel and wool.

**Figure 1.** The "Musical Blanket" drawing and story.

Thus, homeless young people were invited into learning activities oriented toward acquiring life skills while also enhancing their capacity for self-reflection [5]. Homeless young people responded very positively to the community technology center classes. Furthermore, staff at the service agency that houses the community technology center have built on the curriculum, and continue to use it to engage homeless young people.

*Precaution.* Information systems necessarily intervene in people's lives, changing conditions and bringing both benefits and risks. Accordingly, I consider the question of benefit versus risk by asking, "Am I doing more harm or more good?" This question is vitally important when working with homeless young people, who are susceptible yet autonomous and deserve respect rather than paternalism.

Considering this question, in one example, I have written value scenarios, which take the long-term effects of information systems and technologies into account. In writing these scenarios, I reflected on my values as a designer, specifically how I might adopt a stance of precaution for working with homeless young people while also finding a way forward in designing new systems or making changes to those that already exist [14]. In a second example, I have reflected on the community technology center along with service agency staff and a young person transitioning out of homelessness. In this reflection we considered how digital media had been introduced into a service agency setting without negatively impacting vital relationships between homeless young people and service agency staff [5].

*Method.* In order to take susceptibility into account while remaining attentive to the wide range of experiences and skills among homeless young people, I have purposefully employed numerous methods in my research. For example, in order to remove barriers to participation, I have applied techniques tailored for people with different levels of comfort or ability such as group discussions and interviews which emphasized verbal expression in conjunction with design activities which emphasized non-verbal expression [12,16].

Additionally, in order to bring the voices of homeless young people to the larger community, while also recognizing the susceptibility of homeless young people, I have investigated method as a means for collecting data for research purposes that can also be used in community settings. For example, my dissertation research has engaged over 200 homeless young people in an exploratory study of the role of music in their lives [12]. Data in the study is anonymous, including data from a design activity which has yielded 129 drawings and stories where homeless young people envisioned music devices that could help someone experiencing homelessness (see example in Fig. 1). The design activity was planned so that the output of drawings and stories could become the subject of public exhibits. One such exhibit is scheduled to be installed from May-August 2013 and may be viewed by up to 4,000 people. In order to increase the likelihood that the exhibit will meet the goals and needs of homeless young people and the larger community, the exhibit is being planned by a team including homeless young people, staff, faculty and students at the University of Washington, business people, service agency staff and other neighbors [4].

## Conclusion

This paper has distinguished between *vulnerability* and *susceptibility*, providing examples of the application of *susceptibility* as a working concept in HCI research with homeless young people. Looking forward, the possibility exists that considerations of long-term commitment, participation, precaution and method may be useful to HCI researchers who wish to engage with groups typically described as being vulnerable.

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