Homeless Young People on Social Network Sites

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ABSTRACT

This paper reports on the use of social network sites (MySpace and Facebook) by homeless young people, an extraordinary user population, made so in part by its vulnerability. Twenty-three participants of diverse ethnicities, 11 women and 12 men (mean age, 21.7 years), were interviewed in same-sex discussion groups of four participants each. The interviews consisted of questions about the uses, benefits, and harms of social network sites and how people present themselves online. Qualitative analysis of the discussion group transcripts shows how young people explore their identities, cultivate and exploit social ties, experience interpersonal tensions, manage incompatible audiences, and respond to shifting affiliations and transitions. From this analysis, implications for social intervention and technical design are presented, focused on maintaining ties with pro-social family and friends and with maintaining separation between communication spheres of incompatible audiences. This work contributes to the growing literature on vital, deeply human experiences that have become associated with social network sites.

Author Keywords

Homeless young people; vulnerability; social network sites; Facebook; MySpace; social and technical design

ACM Classification Keywords

K.4.2 Social Issues: Miscellaneous

General Terms

Design

INTRODUCTION

By late 2010 about half of all American adults, age 18 and over, used social network sites, almost doubling the 2008 estimate [7]. Empirical work has shown social network sites to be associated with many vital human experiences, including, for example: adolescent socialization and parentteen conflict [10], identity exploration and formation among emerging adults [10,19,1], intimacy and life relationships

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CHI'12, May 5–10, 2012, Austin, Texas, USA. Copyright 2012 ACM 978-1-4503-1015-4/12/05...\$10.00. [8], and major life transitions in American society such as moving from high school to college [10,13], and college to the workplace [4,25]. Impression management, that is, how one negotiates the representation of self for different audiences – some distinct and separate – is one major theme of much of this work [3,6,14,15,16,26]. While the specific platforms, cultural practices, and the particular meanings of social network sites may change [3], their use today may be of enduring significance, and, with great current potential for individual development and social improvement.

In this paper we add to this literature by reporting findings on the use of social network sites by a population with extraordinary needs, namely homeless young people. Our prior work has shown that homeless young people use social network sites and, like college students who transition into the workforce, face challenges with impression management [28]. For example, in one telling report a MySpace profile was "used simultaneously to advertise sexual services and to communicate with drop-in staff" [9, p. 775]. Without moral interpretation, we note that the profile served two "conflicting social spheres" [2], a systemic challenge with social network sites [6].

Relatedly, recent HCI research and design has investigated the use of technology by homeless adults living in urban environments [17,18,24]. In one landmark study it was found that technology, especially the mobile phone, was used by homeless adults to stay connected with friends and family and with members of service-based organizations such as caseworkers [18]. A second field study of homeless adults similarly found technology to be an important but non-obvious tool for creating and tapping into social networks, for obtaining resources for survival and for social involvement [24]. In contrast to these studies, which have largely focused on older homeless adults aged 40-60 [17, 24] or homeless mothers aged 20-53 [18], in this paper we focus on homeless young people, aged 18-30, a group at a markedly different developmental stage than older adults.

Perhaps like anyone who is homeless, homeless young people have extraordinary needs, arising at least in part from their vulnerability, needs that may lead to extraordinary experiences with social network sites. Nevertheless, we shall also see that homeless young people garner ordinary benefits from and encounter ordinary challenges with social network sites. We shall see, moreover, that the idea that "extra-ordinary needs are only exaggerated ordinary needs" [21, p. 8] may very well apply to this population of users.

BACKGROUND

Homeless Young People

Homelessness among youth, aged up to 30, is a pressing problem with lasting social and economic consequences. By one estimate, as much as 1% of the U.S. population, that is, about 3 million people, is both young and homeless at some point in the year [27]. As such, the psycho-social factors of homeless young people have been studied extensively in the social sciences [e.g., 11]. This research reveals that homeless young people are a heterogeneous mix of ages, genders, races and ethnicities, and many suffer mentally and physically from the long term effects of abuse, neglect and chronic stress.

Many homeless young people come from poverty and dysfunctional family backgrounds. Youth have likely experienced many problematic encounters with adults, such as school personnel and police officers, and institutions, such as foster care. These encounters, in turn, leave homeless young people wary of adults and institutions. Moreover, youth often lack basic life skills: cooking and healthy eating, knowing when to seek out health care, how to reduce stress, and so forth. Managing mental health, substance abuse, or chronic health issues can be extremely difficult when alone and on the streets. Individual and structural features of homelessness have profound effects on the process of emerging adulthood [27], the very time that social network sites may be of particular benefit [19].

Homeless Young People and Social Network Sites

We can expect to see features of these homeless life circumstances surface in the use of social network sites; for example, tensions related to family. At the same time, like college students, the use of social network sites might impact a homeless young person's future opportunities, which are often limited as time on the street increases.

The analysis of social networks, both face-to-face and mediated, is a key research tool for discovering knowledge about homeless young people [27,22]. One finding, important for the methodological framing below, is that when young people enter homelessness they may either, one, rapidly loose connections with home and take on connections with risk-taking street youth; or, two, maintain connections with home and never fully embrace street life. In the first case, face-to-face social networks can increase long-term risks when, for example, an individual joins the street economy and begins selling drugs - the potential for physical harm, substance abuse or incarceration increase. On the other hand, in the second case, mediated social networks can provide protective, pro-social support when, for example, a homeless young person receives emotional support from a caring teacher from high school. In brief, social network sites might help youth, on the move and away from home, sustain or re-establish home-based. protective ties. Yet, in tension with this protective role, social network sites, by their convenience for representing ties, for following people, and so forth, might speed the transition into street life or deepen entrenchment.

This picture, however, is overly simple because street-based networks, either face-to-face or mediated, might have prosocial effects (e.g., emotional support) while, on the other hand, some ties to home-based networks might bring about risk-taking behaviors (e.g., substance abusing parents). Accordingly, studies have been conducted that seek to identify correlations between particular self-reported ties on social network sites and drug and sex-related risk-taking behaviors [22,23]. Findings have shown that, on the one hand, positive correlations were found between homebased, pro-social ties and reductions in sexual and drugrelated risk-taking behaviors. Here, pro-social ties were defined as communicating with such roles as family member or friends that young people knew before becoming homeless that were also substance-non-using. On the other hand, a positive correlation was also found between certain "friends" roles and increases in sexual and drug-related risk-taking behaviors. Here, "friends" roles include friends from the street or friends who young people have met online who are substance-using [22]. These findings suggest that the availability and utilization of certain kinds of ties, the essential feature of social network sites, may go some substantial way toward improving the welfare of homeless young people – a result of great potential importance.

Research Framing and Questions

From this background, we make three framing propositions. First, homeless young people, like most young people in America, use social network sites. Second, as an extraordinary group of users, homeless young people are likely to exhibit extreme needs for social network sites, yet needs with possible relevance to all users. Finally, social network sites, when used to promote and engage protective, pro-social ties, might be a crucial tool for improving the welfare of homeless young people and for helping them to escape homelessness. Accordingly, in this research we investigated the experiences that homeless young people have with MySpace and Facebook, seeking to identify opportunities for social and technical design. Specifically, we ask: With whom and how do homeless young people communicate within social network sites? How might social network sites influence the quality of relationships?

METHOD Procedure

The procedure was based on a 2008 study of identity development, emerging adults, and MySpace, where samesex discussion groups were employed [19]. In the present study, we followed the interview protocol from the 2008 study closely. One exception was that we adjusted the discussion questions so that participants could respond to their use of both MySpace and Facebook.

The procedure consisted of two main phases. In the first phase, participants were asked to complete a background questionnaire, consisting of demographic questions, how access to the Internet is obtained, use of social network sites, circumstances of homelessness, how homelessness might be ended, and similar things. The demographic and technology-related questions were largely drawn from Rice [22]. Then, the group discussion proceeded, with the discussion structured around 12 thematic questions, with specific sub-questions [19, Appendix 1].

One male and one female moderator, the authors, respectively moderated the discussion of same-sex groups of four participants. Following [19], the main rationale for this procedure was to promote free discussion consistent with the exploratory nature of the research. Additionally, since some questions explored impression management and other gender-related topics, we expected same-sex groups to position participants to speak frankly and expansively. To equalize participation, a well-known problem of group interviews, the moderators sought to follow up with all individual participants. Indeed, we found the discussions to be generally lively and inclusive, with participants building upon and contrasting each other's points and stories.

In February–April 2011, participants were recruited by familiar and trusted agency staff during a drop-in for homeless young people at our collaborating organization in the University District (U-District), a few miles north of downtown Seattle. Youth attending the drop-in were invited to participate in a research study and once four youth volunteered, staff brought them to a quiet nearby room where the group discussion took place. In order to protect participants' identities, and following approved human subjects protocols, all participants gave verbal assent only of their willingness to take part in the research. All participants received a gift card worth \$15.

The interviews ranged in length from 53–84 minutes. The interviews were audio-recorded and the audiotapes were transcribed resulting in a corpus of 71,007 words.

Participants

Twenty-four homeless young people, twelve women and twelve men, aged between 18 and 30 years participated in this study. One woman did not complete the group interview and her data was not analyzed, leaving 23 participants. See Table 1 for the distributions of ages (M=21.7 years), ethnicities, and educational achievement. In summary, this sample comprises emerging adults, generally beyond the 11th grade, who are or have recently been homeless, and who use social network sites.

Concerning homeless status, even with attending a drop-in for homeless youth, six participants indicated they were *not* homeless. Of these, four had recently moved into housing; the two others indicated: "have places to stay," and "couch surfin'." Two participants indicated they had jobs, which were: "the streets, panhandler" and "state unemployment."

Two participants used MySpace only, eight participants used both MySpace and Facebook, and 13 participants used Facebook only. The majority of participants (69.5%) used MySpace or Facebook at least once every couple of days, for a range of topics, with music and media being the most common. Seven participants indicated that they had more

D			146		
DEMOGRAPHICS		<u>%</u>	WHAT DO YOU TALK ABOUT NETWORK SITES?		<u>%</u>
Age	<u>n</u>	70		<u>n</u>	_
•	8	34.8	Music	19	82.6
18-20 21-23	12	52.2	Movies or television	15	65.2
	2	8.7	Videos	14	60.9
24-26	0	0.7	Drinking/drugs/partying	13	56.5
26-28 29-30	1	4.4	Work	13	56.5
29-30 Gender	ı	4.4	Love/relationships	12	52.2
	12	52.2	Place to stay	12	52.2
Male Female	11	47.8	School	11	47.8
	11	47.0	Sex	9	39.1
Ethnicity	10	43.5	Nothing	1	4.4
Mixed Race	8	34.8	CIRCUMSTANCES		
White Amer, Indian	1	4.4	Consider self homeless?		
	1	4.4	Yes	17	73.9
Asian	1	4.4	No	6	26.1
Black	1	4.4	Currently have a job?		
Latino	1	4.4	Yes	2	8.7
Pac. Islander	ı	4.4	No	21	91.3
Education			WHERE DO YOU GET ONLINE?		
8^{th} grade or <	1	4.4	Public library	17	73.9
9-10 th grade	2	8.7	Youth service agency	9	39.1
11-12 th grade	16	69.6	Where you are staying	7	30.4
13-14 th grade	3	13.0	Friend/associate's home	7	30.4
No response	1	4.4	Internet café	6	26.1
SNS USE			My cell phone	4	17.4
MySpace	10	43.5	School	2	8.7
Facebook	21	91.3	Nowhere	1	4.4
Both	8	34.8	Work	0	0.0
HOW OFTEN DO V	OIL HEE COC	IAL NET		U	0.0
How often do you use social network sites? Several times a day				7	30.4
Once a day				2	8.7
Once every couple of days				7	30.4
About once a week				3	13.0
Less than once a week				3	13.0
				1	4.4
Never WHO DO YOU COMMUNICATE WITH USING SOCIAL NETWORK SITES?				ļ	4.4
Parents (including foster or step family)				11	47.8
Brothers, sisters, cousins or other family members				17	73.9
Friends or associates you know from home				19	82.6
Case workers, social workers or staff at youth agencies				7	30.4
Friends or associates you know from the streets				20	87.0
Friends or associates you met online				20 10	43.5
Boss or employer at your job				2	43.3 8.7
Potential employers, looking for work				3	13.0
Others				9	39.1
Ouicis				ð	Jy.1

Table 1. Self-reported participant characteristics.

than one profile on MySpace, Facebook, or both. One participant responded that he "never" used social network sites, contradicting his other responses on the questionnaire and statements during the group interview. For obtaining access to the Internet, as might be expected, public libraries and youth service agencies were most common.

Concerning network sizes, participants indicated that they ranged from less than 10 to 1,000. This data should be interpreted cautiously since it is self-reported and many participants hedged their estimates as uncertain. Moreover, since about 1/3 of the participants had both MySpace and Facebook profiles or maintained multiple profiles, inaccuracies may have compounded. That said, removing five responses which were vaguely stated (e.g., "less than 37") and taking the lower number in ranges (e.g., "400-450"), the mean of the 11 remaining responses was 240 friends (Range = 14-1,000).

Data Analysis and Reporting

For interpretive analysis and reporting, which departs significantly from the 2008 study [19], we established an analytic stance that would allow us to show both the extraordinariness and ordinariness of homeless young people and social network sites. This stance was shaped by two over-arching principles. First, to appreciate the extraordinariness of experience, we decided to present relatively rich and coherent portraits of the participants, a method of reporting used in prior work [29]. We did this to emphasize the individual as a whole, and to work with a reporting style that allowed us to bring forward something of the ambiguity, nuance, and tensions that arise through the use of social network sites by this population of users. Second, to characterize the ordinariness of experience, we decided to connect the portraits to accounts of uses of social network sites by emerging adults in college or the workplace. We did this to show how the accounts in the portraits relate, either by commonality or by difference, to accounts published in the literature.

From this analytic stance, we followed a four-step process, iteratively and synthetically.

Step # 1 – Selection criteria. We decided on three criteria for selecting participants' accounts. First, we sought accounts which covered the space of communications between the participants and roles within the home-based and street-based categories. Recall that these categories came from prior work [22]. Second, we sought accounts which showed the double-edged nature of the home-based and street-based categories; that is, we selected accounts that appear to be pro-social and risk-related within each of these categories. Third, for representativeness across all 23 participants, we sought accounts that covered the diversity of participants' ethnicities, circumstances, and activities.

Step #2 – Read transcripts. The two authors independently read the transcripts from all six discussion groups. One author generally sought to find accounts related to prosocial and risk-related ties. The other author generally sought to uncover accounts that fit into themes from the social network literature. The accounts were extensively discussed and the transcripts were read repeatedly.

Step #3 – Write portraits. Portraits, using pseudonyms, were drafted and extensively revised. For writing style, we sought to convey a little about the participants' appearance and background. Lengthy quotations were used, partly to allow readers to judge our interpretations. Portraits were examined for satisfying the selection criteria, and eight portraits were selected and edited for concise reporting.

Step #4 – Identify themes from the social network literature. Five themes from the literature were identified. Then, the portraits were connected to those themes and the correspondences between the portraits and the themes were characterized, thus providing a means to illuminate and examine the extraordinary and the ordinary.

THE PORTRAITS

Bernie: Family, Tech Savvy and Survival

Bernie, aged 21, reported being homeless on and off since age 15. Yet, she was the first girl in her family to attend college and wanted to continue her studies. Like many young homeless women, Bernie wore oversized clothes, hiding her frame, and making her seem physically larger. Bernie described growing up in a:

[H]obo crack grubby town [where] like girls were constantly getting on MySpace and meeting dudes online. And you know bad sh*t would happen to them.... [My family was] a military old school Hispanic family.... I was raised where the cooks [women] would cook, my dad and the dudes would go and sit down and eat, and when they were done eating...the kids and [women] ate last.... And then I [turned 15] like screw this.

A "MySpace fanatic" at 15, she enjoyed meeting up with friends in chat rooms. However, her independent spirit led to conflict with her parents, especially her father.

They just thought I was going to explode with all these bad things when I was 15...because when you are 15 you are a woman.... And I remember...this girl got raped in the woods by my house because she met someone off the Internet, but I mean keep in mind the girl was like 15 and the dude was 48.... my mom...was getting really, really paranoid and my parents would panic because I would go on the computer and then they would assume I am going out and doing drugs and whoring it up.... And so...my dad took my computer out of my room and put it outside on the porch.

Bernie retaliated by way of her father's computer.

...I ended up taking my father's computer and I hacked it. And I changed all his passwords and everything.... I remember when I found out [my father's password]...I found out my dad is so stupid, so ridiculously stupid. I mean the worst he could ever do was: One, have one password for everything; or two, have that password also be the same password to all [his] credit card numbers.... And then it takes like 5 minutes to get on the computer, download a key log app...and anything you type I will know everything.

Having moved to Facebook, Bernie still enjoyed social network sites. However, she noted that spending too much time on the computer was a problem.

I think the computer can be really time-consuming and I feel like it can really inhibit...someone...from developing their social skills...having interactions...getting more knowledge. Like you know I get more knowledge on the streets.... And you know I can be academically smart, because Thank God I was a nerd, but at the same time like I am thrusted [sic] outside with nothing but the clothes on my back I can survive because Thank God I got off of the f*cking computer.

Lulu: Facebook for Friends and Life

Lulu, aged 25, had a young son. She did not consider herself homeless because she was not sleeping outside at the time of the group interview. However, like Bernie, Lulu was also from a Hispanic family and had been "homeless off and on since [she] was 15." Seemingly fun-loving and confident, Lulu gave other participants "high-fives" and self-reported that she was popular. Multi-tasking, she used her mobile phone to text throughout the group interview.

Lulu resisted moving from MySpace to Facebook, but made the switch once all her friends had switched.

I don't see a lot of my friends everyday because some of them are downtown, some of them live like in [the] surrounding [area] and like I'm here [in the U-District] everyday.... It's just to me it [Facebook; mobile phone] brings us closer because we don't see each other all the time and we get to talk to each other and make jokes and you know really find out how and what each other is doing on a daily basis. Even though we are not together all the time we know what each other is doing all the time, and it makes us closer you know. That's how I feel.

When asked if Facebook had changed anything about her life. Lulu said:

Facebook is life-changing. I found my birth mom on Facebook last week.... Facebook is amazing. I owe about 21 years of my life's search to Facebook..... I went down and saw her.... two days later.... There wasn't any disappointment [meeting my mom] because I mean when you look for somebody that long, no matter the fact that they are alive, you know, is really what it was for me is that she was alive, you know, yeah I got to see her, and I have two brothers and a sister too that I met....

This revelation prompted a response from Mary.

Oh that is amazing dude. I wish I knew...but like I have no idea who my parents were. I would never be able to, but I think it's really neat when people can actually find their true kin because I have never met my real family. And I was like abandoned when I was a baby...and like I grew up in a city orphanage...but if I could find my parents I think that Facebook would be a cool way to meet them, because you could like ask them a bunch of questions...and not have that terrifying staring at your parents kind of judgment look, like whoa what kind of person did you grow up to be.

To which Lulu, who was also abandoned, said:

I think that's the best part about my thing was there was no way she could look at me and judge me for anything, because, you know, because of what she did...she made her own choices.

Finally, Lulu summed up her experience.

I love Facebook. ...you know, if there was a person that I could write and say 'Thank you for making Facebook' I would.... I almost called Oprah.... I mean like it's crazy to find somebody you searched for your whole life on Facebook. You know, like it doesn't happen to everybody.

Jazz: Multiple Selves

Jazz was 21 and had just found housing after being homeless for three and a half years. Jazz told us she is attracted to girls and reported her race as White. She is tall and thin with short hair, an affable grin, and a gift for training animals, such as cats and rats. Jazz, like Bernie, was fluent with technology, and had used PageRage to change the background of her Facebook profile to "a half-naked elf lady leaning up against this snow tiger."

Jazz had a mobile phone in her pocket that she checked throughout the discussion. She had four unique Facebook pages for herself, one that she had created for her cat. She had one page just to communicate with her parents "who kept messaging [her] and stuff and [she] didn't want to be in contact with them." Jazz created the other pages after her

phone was stolen and during a recent stay in the hospital, recovering after being badly beaten on the street.

And other ones [Facebook pages] are just because like my phone got stolen, and one of my accounts was lined up with my phone, and I tried to access it using someone else's phone. And I was trying to get in touch with somebody while I was in the hospital and it ended up locking me out of Facebook. So I had to make a new one to get in touch with everybody again.... So now I have got three Facebooks. And then recently I decided to make one for my cat.

On Facebook, Jazz had friended both case workers and family. These ties, in combination, were life-changing.

Like [service agency and staff names] are all on my site. ...and thanks to them being on my Facebook they were able to get a hold of my sister when I was in the hospital which is how my family found me and why I am no longer homeless.

Connecting with her sister was important for Jazz who had a rocky relationship with other members of her family, particularly her parents. Recounting events prior to leaving home and her hospitalization, she said:

My dad unfriended me.... He pissed me off, so I put a comment on my Facebook. It was nothing horrible, but I wanted to see what was going to happen. And I put on my Facebook – this really kind of sucks, I want to move out, and I blocked both my parents and my little brother from that comment. I didn't realize that by blocking that comment I would block them from my whole page.... And so a week later he [Jazz's father] was all like 'Oh, did you notice that I unfriended you?' And I was like all 'Dude, I didn't realize that by blocking one comment that it would completely block them.'

Although Jazz apologized, her father refused her recent friend request. Indeed, lately she had been focusing her efforts on her cat's Facebook site, which her good friends knew was the best way to contact her.

Mary: Street Friends

Mary, aged 19 and Asian, described herself as being into the rave scene when she was in high school. She said that, in the past, her activities on social network sites had "caused a lot of problems" for her since she had made friends with strangers and had been incautious when giving out personal information. Mary is currently trying to transition off the street, and when responding to a question about posting negative comments, she said:

You know like saying 'You suck.'...I hate people who say that, but a lot of my friends are like 'You suck [Mary]'...because I'm not like kickin' it like I used to, because I'm just like I am trying to stay out of trouble now.

However, Mary noted that through these interactions, Facebook helped her determine which friends to keep close and which ones to hold at arms-length.

So...like it just kind of helps you realize who is your friend and who is really not your friend.... You know, based by people's comments and how they interact with you on Facebook.... [S]o then I know not to hang out with them on [the main street in the U-District] really. I'm like I don't need to hang out with you anymore, but yeah sure you can still be on my Facebook.

Sheri: Multiple Profiles for Different Audiences

Sheri was 18, and self-reported as Mixed Race. Like six other participants, Sheri reported having more than one profile on either Facebook or MySpace.

Well, I do it because I have different audiences of people, like my family is very, very straight edged, like it is ridiculous. My family is huge and kind of my aunts and uncles and my grandma and grandpa and everything. Everyone is like military, except for me and my one cousin. The rest of them are like straight edged, they go to church every day, on time every day, they are over in the military doing their little military stuff, they come back, their house is perfect. Me and my cousin are the only black sheeps [sic], so there are a lot of things that go on in my day to day that would give my grandmother a heart attack and kill her, like no joke. She would just freak out. So I have my family page, which is where I keep track of all my family and my relatives and stuff, and then I have my friend page, which is where you actually get to see more real stuff, because my friends actually know everything, well most everything.

Sheri was wearing a black leather jacket, and a collar around her neck with a leash attached. She said that multiple profiles might help people "express themselves in a way that they feel is safe," saying of her own life experience:

Okay well so I am a pagan and most of my family is Christian. So I have my Christian profile, which not really Christian but my family profile, which is really tame laid back. I mean I do have a sweet softie side of me, I just don't put it out there that much, and so it has got like a fairy for the background, this really awesome heart music that I've never listened to around any of my friends because they would laugh at me. And then there is like my street profile,...it has got like angry hard rock on it, this like vampire leg it is like half torn apart – it is pretty awesome, pretty sick, pretty wicked – and it is like because I feel safe because they [my friends] all don't really care.

Along with the different profiles that Sheri had created for family and friends, Sheri could also see that multiple profiles could be useful for communicating with employers.

Oh and my family page is also my business page.... So if like a business like looks me up my actual legal name is on my family page, where my street name is on my friend page.

Marvin: Friends with Everyone and a Better Life

Marvin was 23. He reported that he was Mixed Race. In response to whether he considered himself homeless, he wrote: "I have been homeless since the age of six, in the streets of [major Midwestern US city], and I've honestly never had a place of my own." Marvin, neat in appearance and matter of fact in conversation, said that he had also spent time in a Midwestern state.

Unlike the majority of participants, who tried to limit their Facebook friends to people they had met in person, Marvin was open to being friends with anyone who asked. In response to another participant's statement about limiting friends, Marvin said:

I can't do that.... I try to be a person who tries to keep everybody as friends, everybody.... I try not to bump nobody or anything. I try to be friends with everyone.... If somebody like offers to add me as their friend I am like 'OK, so who are you

and where are you from and what is your name?' Important.... Even if I don't recognize who they are...I will always try to get to know them....I try to talk....I don't grade nobody.

In contrast to Jazz and others, Marvin was unaware that it was possible to have more than one Facebook page. In any case, he said that he did not want to maintain separate pages in order to partition friends and family. Among his Facebook friends were his mother who lived in another state on the west coast, his father, his brother in a southern state, his sister and other family members, as well as local case workers and service agencies. He had also recently found an old girlfriend.

There is this girl I know in [a Midwestern state].... I actually consider her my best friend besides my mom.

The emotional support provided by all these people and the ability to easily communicate with them were part of Marvin's plan for transitioning out of homelessness.

I am trying to change my life and get myself off the street so I can have a better life.... Most of the case managers that I have like that are on my Facebook...I like them and I like keeping in contact with them to let them know how I am doing and how I have been or what I am doing and what I am up to.

Roger: Facebook is like Crack

Roger was 23 and reported his race as White, and "slept in shelters, churches, and in doorways, under bridges in a tent and some nights I just stay up." Roger considered social network sites to be "crazy, mind-blowing, [and] time-consuming," and somewhat of a distraction, but also a good way to connect to others.

Roger had one MySpace account for friends and two Facebook accounts, one for friends and a second for family. He knew his niece and nephew only through his family account on Facebook. He thought that the separation was important to the way that he was perceived by others, and in opening up future opportunities. Roger could envision the positive and negative uses of social network sites.

Like say if you're on the streets and you meet a bunch of street people and 'Boom!' you have all these street people hitting you up [i.e., wanting to be friends on your Facebook page] and you're like, 'Oh, this does not look good.' But like if you're in the communication world... You know like resources that you could probably use like, 'Oh, this guy's a geologist. Oh, I'm going to do something with geology one day.' 'Boom!' that day comes and I'm like 'Hey, contact him.'... You know, that if you already know somebody or he can help you network with somebody else that knows. So there's like a little system going on there. So I think that's really cool...

Similarly, in another example, Roger was using Facebook to stay in touch with his grandmother, who might provide a bus ticket to her home. On the other hand, while being drunk, Roger had angered both his mother and father by confronting his parents' mutual male friend, Tom, after seeing Tom on his mother's Facebook page. Roger asked Tom for his phone number, called, and belligerently told him to stay away from his mother, "a married woman."

Learning about the confrontation from Tom, Roger's mother urged Roger to "get help" with his drinking.

Roger was so concerned about eradicating traces of his homeless life that he had recently tried to delete his Facebook profile, as he worried that it gave the wrong impression of his character. However, he had found that:

I realized you can't actually delete your Facebook account.... I deleted one, set up another one to just add family and that was gonna be it. And then one day, I just like typed in the old address, and it brought up my whole old account.... They never actually deleted it. It never gets deleted. It's always there...it just deletes it from your friends being able to see it. But like it stays in the system, so you can just log back on.

When another participant remarked that he knew how to permanently get rid of a Facebook account, Roger said:

Oh, you gotta show me that. I want to do the permanent [delete], 'cause I keep going back on. And it's like crack. It's like I keep going back. I need to get rid of it [my friend Facebook page] altogether. No going back.

Chip: Skateboarding and Couchsurfing

Chip, 21, reported that he was White. Although he participated in service agency programs for homeless youth, he did not see himself as homeless. Rather, Chip was "couchsurfin' from house to house and week to week," meaning that he was intermittently sleeping at different friends' and associates' places. He was very interested in skateboarding, in composing music and lyrics, and in working as an emcee (i.e., a master of ceremonies who selects and mixes recordings live at dance clubs).

He said that in November 2010 he created a Facebook account because a beta release of MySpace, which he had used in high school, performed poorly. Like several other participants, Chip liked to keep up with the music community on MySpace and felt that Facebook was less suited to this pursuit. Chip communicated with over 400 friends – some he had known since kindergarten – through MySpace and Facebook. However, of all his family members, he had friended only one of his brothers.

Chip would think carefully about each one of his posts and wanted to avoid work-related repercussions.

I'm pretty professional on the Internet, honestly. You can put anything on the Internet, but employers are starting to investigate more on their employees' personal life [sic].

Having acquired and maintained a large network of people who shared his interests, Chip imagined that he might draw on his network to facilitate a skateboarding trip.

You can set up a really good network if you're couchsurfing, or if you are trying to cross down from the high Northwest corner of the United States and go all the way down...to Southern California. You could send out, 'Hey, I'm looking for a couch [to sleep on tonight] and I'm in so-and-so'.... You have certain friends that live along the route, you know, it could help.

Chip had engaged in discussions and worked on his musical compositions via Facebook.

I talk a lot [on Facebook].... I've edited three or four songs just on Facebook. So it's kind of, it makes foot traffic non-existent anymore. You don't have to take it [a song] over to somebody, 'Hey, listen to this tape or listen to this.' It's like all you have to do is you type your lyrics and it's saved, and...you can send it wherever. So it's all kind of like a storage place....

Chip, however, could see a downside to online storage.

I just don't feel it's secure enough.... You're able to type whatever you want. But when it takes you a month to write a decent song, you don't want it jacked [stolen] in like two seconds. 'Copy, Paste, Boom!' How are you supposed to protect yourself? 'Cause...you're trying to let your scene or your community around you know what's going on, but you're not wanting to leave yourself vulnerable.

DISCUSSION

With the eight portraits now presented, the next step is to position them in the literature. Given the exploratory goals of this study, the reporting style of the portraits, and the small sample, we cannot report on the generalizability of the portraits. That said, the aim here is to show how the extraordinary and ordinary aspects of experience in these portraits relate to the uses, benefits, and concerns which are experienced at least to some degree by most if not all users of social network sites. The following five themes come from our reading of the literature on social network sites.

Exploring Identity

Like emerging adults in general, homeless young people are in a period of change, exploration, and experimentation with various roles [27,19], some of which play out online. Chip, for example, had built a social network that might support him as a couchsurfer and was using Facebook to explore his interests in skateboarding and music. However, identity explorations can also potentially lead to family conflict, a particularly salient issue for homeless young people [11]. We saw that Bernie's conflict with her family was associated with her use of social network sites, partly motivated by her rejection of the traditional female role that her family expected. Finally, Sheri provides an example of the balance that can be struck when identity is explored online. By maintaining two profiles, Sheri felt that she could safely explore the darker side of her identity with like-minded friends while also portraying herself elsewhere in a manner expected to be favorable to her family and to potential employers.

Cultivating and Exploiting Social Ties

Like a college graduate who uses social ties to cultivate and identify opportunities for dating or jobs [12,13], the social networks of homeless young people can be exploited for opportunity but, even more, for human well-being. Jazz, for example, was re-united with her family because of two unrelated ties. When Jazz was hospitalized, a caring case manager, the first tie, happened to find Jazz's sister, the second tie, which allowed the case manager to reach Jazz's mother. This contact, in turn, led to some kind of reconciliation and shelter for Jazz. In a different vein, but still related to social ties, Lulu used Facebook to find her

birth mother after being abandoned as a child, saying "Facebook is life-changing." These are deeply human events, suggesting high stakes indeed. At the same time, many of the participants in the study reported ordinary uses of Facebook. Chip, for example, kept in touch with friends from grade school, posted music, and found couches. And, Lulu kept her friends in touch with things in her life.

Interpersonal Tensions, Brought Online and Amplified

As social network sites are used to maintain existing social ties [13,4] and as a means for achieving offline ends [3], we would expect that pre-existing social tensions, and accords, would be reified online. We see Marvin, for example, tapping into a harmonious relationship with a past girlfriend and supportive relationships with case managers. At the same time, many of the participants spoke of interpersonal tensions that can arise with the use of social network sites -"drama" was a common term for it, which, incidentally, has been recently analyzed as an emic, youth-centered concept [20]. Roger, for example, illustrated how impulsive use, in his case while drunk, can lead to communication failures. Additionally, by trying to control access to content, Jazz inadvertently offended her father, which appeared to lead to an escalating communication failure or at least exacerbated existing tensions. The usability of privacy controls, a notoriously difficult technical problem [5], would appear to be implicated in this breakdown. Finally, the conflict around computers, and specifically social network sites in Bernie's family, is noteworthy. In this study no claim, of course, can be made that social network sites cause interpersonal tensions. Nevertheless, it may be the case that at times they provide a catalyst that amplifies pre-existing tensions [10]. Moreover, the need to repair communication breakdowns, or resolve drama, appears to be a very common challenge for participants of this study.

Managing Audiences, Adjusting Profiles

Like college graduates transitioning into employment and seeking to manage their audiences [4,25], or a college athlete who will be publically scrutinized [14], we have seen that homeless young people come to adjust their profiles and structure their online identities. Perhaps for reasons similar to Sheri, discussed above, seven of the participants had reported that they had multiple profiles. One participant used the term "decoy" for her profile that was meant for family and employers. Jazz achieved similar ends by using a cat, that is, her pet to veil her identity from her family. One likely account is that these participants, like many people, have faceted, incompatible, identities [6] and are seeking a means to achieve *pseudonymity*, a phenomena documented in a study of relatively older users (aged 24-57) with multiple profiles [26]. For homeless young people, "real" and "street" names (cf. nom de plume) may provide a particular opportunity for online pseudonymity and thereby avoid the undesirable convergence of multiple social groups [2,15]. It should be noted, however, that the use of multiple profiles is a violation of Facebook's terms of service. In a different vein, to avoid an undesirable imputation of a

social identity, young people adjusted their profiles by deleting friends that portrayed undesirable ideas and activities, a strategy that has been reported among new employees just out of college [4]. Finally, in responses to the questions "who do you communicate with when using [social network sites | email]," participants indicated that they would more often communicate with employers by email than social network sites (48% vs. 13%), suggesting tactical awareness for impression management, consistent with other conceptual and empirical work [6].

Shifting Affiliations and Transitions

For many homeless young people, breaking face-to-face and online ties with street friends is a key component of transitioning off the street into mainstream society [27]. When this transitional process occurs it is both emotionally and practically difficult, as can be seen in Mary's portrait, where she is drawn to make excuses for not "kickin' it" and trying to stay out of trouble. Perhaps indicative of this process is Roger's belief that his ties to street friends will undermine his future prospects; thus, prompting him to delete his Facebook page. In another kind of example, a participant told of warning off "old friends," saying she would broadcast messages such as "so I'm going to be in town the next couple of days and just if you see me please, please try to turn the other cheek...." Here, Facebook is being used as a "virtual-physical" tool [see 3] to create social distance, a striking contrast to its use for arranging offline social gatherings [1]. The literature contains reports on the social awkwardness of unfriending and declining friend requests and of the anxiety of unwelcomed messages from past lovers [3]. However, the social transitions undertaken as homeless youth struggle to rejoin mainstream society are radical. Perhaps similar to a divorcee who separates from former in-laws or a recovering alcoholic who separates from drinking buddies, a homeless young person must separate from an entire group, once looked to for pleasure, for support, and even for survival.

SOCIAL INTERVENTION AT LIBRARIES AND DROP-INS

This study suggests implications for social intervention that apply particularly to homeless young people. To begin, consistent with theory and supporting the largely quantitative studies cited in the background [22,23], this qualitative study shows the potential harms as well as the potential opportunities for improved welfare. Clearly, the character and meaning of social network site ties are crucial, as are the planned and opportunistic purposes to which they are put. Given this over-arching point, namely the double-edged nature of social network sites, we now draw out the following three opportunities for social design.

Encourage young people to seek out and to keep ties with pro-social family and friends (Jazz, Marvin, Roger). While serious interpersonal tensions may exist between a young person and family members or a long break in contact may seem to be a daunting obstacle, life experiences of either party may lead to the possibility for some degree of

reconciliation. At that point, the existence of social ties may become critical. Thus, people invited to be friends by a homeless youth might be encouraged to accept those requests, to be there, in case a youth reaches out for understanding, forgiveness, or help. This, of course, may be easier said than done. One participant, for example, sadly reported that his grandparents declined his friend request, possibly because they did not want their social ties to see his social ties and activities. This illustrates the challenge that young people face when family and friends come together [2]. For these kinds of cases, opening a one-to-one communication channel may be a practical approach [6].

Encourage young people to reflect upon their ties and the impressions that are created through social identity (Bernie, Lulu, Mary, Chip, Roger). Homeless young people, in general, can be expected to maintain ties with street youth because those ties may be important for survival or be socially desirable [24]. At the same time, when transitioning off the street, those ties may come to reflect a dissonance between a desired, future identity and a current, but unwanted, identity. To resolve such dissonance, these ties may need to be broken and put aside. For youth that are ready, librarians or case managers might create a "terms of use agreement," similar to what a college athlete might agree to [14], and a mentor might work with youth to check for conformance as part of the process for leaving the street. This process, of course, is likely to be fraught with difficulties as young people reconsider who to keep close and who to keep at arms-length. In brief, the difficult work that must be done offline must also be done online.

Encourage young people to consider how their audiences can be separated and engaged independently (Jazz, Sheri). This study has shown something of how some young people manage evidently faceted, incompatible, identities [6]. We have seen attempts at pseudonymity, by the use of multiple, unlinked profiles. Given that any effort to keep facets of one's identity separate comes with the threat of disclosure, we are unsure of the effectiveness of multiple profiles. In this study several participants spoke about family members, including younger siblings, finding out more about them than desired. Given the stigma associated with homelessness and life on the street, one might expect some youth to experience a good deal of anxiety about unwelcomed access to social ties. Accordingly, there is a need to help young people use social computing tools to keep incompatible, or at least different, audiences separate. This is all the more important given the potential benefits of keeping in touch with pro-social family. Strategies for regulating boundaries between the private and the public [16], appropriately adapted, appear highly applicable.

Social practice and technology (tools and infrastructure) interpenetrate and reciprocally interact; if this interaction stance is granted, these social interventions should also raise challenges for technical design. We present three: (1) *Tenuous connections* – When a person is not connected

with everyday institutions (e.g., home, school, workplace) has a group identification which is stigmatized, yet lives spatially, in the built world, and makes contact with service agencies, how might the person's living circumstances be represented in social network sites? (2) *Radical transitions* – How might social media be designed to support the distancing and breaking of social ties that were once trusted and intimate but which have come to hold the possibility for emotional or physical harm? (3) *Pseudonymity* – How might social media be designed to support unlinked, incompatible identities, and how might subsequent risks of information leakage and disclosure be mitigated?

CONCLUSION

What is at stake when youth or emerging adults who are experiencing homelessness use social network sites? We know from our collaborating organization that a pressing concern is developing policy that addresses this question. That said, the key to this question is that life is very difficult when a good deal of one's time is spent securing safety, food, and shelter, under conditions of chronic stress, often without basic life-skills for interacting with society's institutions, and when physical and mental health and substance abuse problems are common. Taken all together, and in general, these psycho-social factors make homeless young people vulnerable [11,27]. A violation of a civility law, an indiscretion, a communication failure, or an unlucky setback can have serious consequences, often far more severe than would be experienced by a young person with stable family, or family-like, relations [28].

The stakes may indeed be similarly high when homeless young people use social network sites because this condition of vulnerability stays with the individual. Yet, we do not think that too much needs to be made of this admittedly somewhat paternalistic point. No matter what one's age or socio-economic standing, whether middle school student or politician, social network sites can lead to an embarrassment, a damaged relationship, or a lost job.

Nevertheless, in American society homeless young people are more vulnerable than most people. Indeed, this vulnerability makes homeless young people an extraordinary user group, as the elderly are in some circumstances [21]. The opportunities for social intervention and the questions for technical design show how the specific needs for homeless young people might be addressed and, in turn, potentially benefit many people. Given this, and our current findings, further work is needed to investigate the design of policies and social interventions for supporting homeless young people's access to and use of social computing technologies.

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