

Drama and danger: The opportunities and challenges of promoting youth sexual health through online social networks

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Abstract

Social networks affect both exposure to sexually transmitted infections (STIs) and associated risk behavior. Networks may also play a role in disparities in STI/HIV rates among African American youth. Accordingly, there is growing interest in the potential of social network-based interventions to reduce STI/HIV incidence in this group. However, any youth-focused network intervention must grapple with the role of technologies in the social lives of young people. We report results of 12 focus groups with 94 youth from one economically depressed city with a high STI/HIV prevalence. We examined how youth use information and communication technologies (ICTs) in order to socialize with others, and how this aligns with their communication about sexuality and HIV/STIs. The study resulted in the generation of five themes: distraction, diversification, dramatization, danger management and dialogue. We consider implications of these findings for future development of online, social network-based HIV/STI prevention interventions for youth.

Introduction

The sexual health of young people is an issue of public health importance in the United States. Among 15-24 year olds, there are 9.1 million new cases of sexually transmitted infections (STIs), such as HPV and Chlamydia, per year. People in this age group represent 48% of new STI cases, despite being only 25% of the sexually experienced population¹. Furthermore, there were some 7,000 new cases of HIV in this age group in 2009², and 757,000 American women under 20 become pregnant each year³. Eighty-two percent of these pregnancies are unplanned⁴. Negative sexual health outcomes do not affect all young people equally, however. African American youth are more likely to have had an STI than their white counterparts⁵, and they comprise 85% of teens diagnosed with HIV in Michigan⁶. These differences are not accounted for by sexual behavior or demographics alone⁵. Instead, they may be explained in part by the higher rates of STIs and HIV/AIDS among adult African Americans^{2, 7}, and higher concentrations of STIs in the neighborhoods in which these adolescents live⁸. Thus, a young person's odds of acquiring an STI are linked to the prevalence of STIs in the social networks from which they draw their partners⁹.

In addition to disease transmission effects, social networks also influence STI/HIV-related risk behavior. Perceptions of peer condom use may influence a young person's decisions to engage in high-risk sexual behavior¹⁰.¹¹ Additionally, peer deviance has been associated with early sexual initiation among urban youth¹². Recognition of such importance of social networks has led to advocacy for increased social network-based STI/HIV prevention research and interventions^{13, 14}. However, any intervention approach that leverages the social networks of youth must grapple with the increasing role of technologies in these networks. Accordingly, we report the results of a series of focus groups undertaken to inform the future development of an online, social network-based HIV/STI prevention intervention for young adults in a socio-economically disadvantaged urban community.

Young people and social technologies

The social lives of young people in the US are increasingly technologically mediated. As of 2009, 93% of teenagers and young adults went online, and 73% of them used social networking utilities such as Facebook and MySpace¹⁵. Moreover, 75% of teens and 93% of young adults owned a cell phone¹⁵. Nevertheless, researchers have documented differences in adoption and use of such technologies. African Americans and English-speaking Latinos are especially high users of mobile technologies, such as cell phones, and have more positive attitudes about social networking sites than others¹⁶. Different groups also gravitate to different social networking sites. For example, MySpace is most popular with African Americans, and Facebook and LinkedIn are most popular with Whites¹⁵. On these sites, people are more likely to interact with people of their same race, religion, sexual orientation and age¹⁷.

Linked to the similarity of online friends, young people most commonly use these technologies to reinforce their existing relationships. So when they meet new people online, it often takes place through introductions from existing friends¹⁸⁻²¹. Social media are also used to learn more about new people that young people meet offline^{19, 20}.

Although this prior research has shown how young people incorporate technologies into their relationships, this work has rarely considered the practices adopted specifically by socio-economically marginalized young people. This is significant because, as the research cited above makes clear, marginalized young people may view and use social networking technology differently. They also tend to frequent different online locations and interact with different people than their more privileged counterparts. Accordingly, we investigate the following research question in the context of a socio-economically disadvantaged community:

RQ1: How do young people use information and communication technologies (ICTs) to socialize with others?

Young people, social technologies and sexuality

Social technologies are also incorporated into the romantic and sexual relationships of young people, who may use them to flirt, date, maintain ongoing contact with partners, and obtain public validation of their relationship status^{18, 22, 23}. This is important since the majority of adolescents’ sexual behavior takes place in the context of romantic relationships²⁴. Young people may also use the Internet to meet casual sexual partners—a practice that has been associated with increased high-risk sexual behavior^{25, 26}. Young people may also display their sexual behavior through their profiles on social networking sites²⁷, potentially placing themselves at risk for unwanted solicitation²⁸.

Young people may also use the anonymity afforded by the Internet to learn about sexuality or other topics that may be difficult to ask people they know offline^{15, 29}. Moreover, for lesbian, gay and bisexual (LGB) youth, the Internet may be one of the only ways for them to gain personally relevant sexual health information³⁰. Such information may be gained from content-oriented web sites or social technologies such as discussion boards. Young people may also be receptive to receiving sexual health information on social networking sites or “friending” sexual health clinics³¹.

Hence, although previous research has explored the use of technologies to initiate or maintain romantic and sexual relationships or find information on the web, there has been minimal attention accorded to young people’s online communication patterns regarding sexuality and HIV/STIs. Thus, we also posed the following research question:

RQ2: How do young people’s social uses of ICTs interact with their communication about sexuality and HIV/STIs?

Methods

Study Participants

This research was conducted in a mid-sized urban area in a Midwestern state. Young people who live in this county experience disproportionate rates of HIV/STIs^{32, 33}. The county has unemployment and poverty rates that exceed the state average^{34, 35}. The city’s population is over 50% African American³⁴.

Study participants included 94 participants who were 18.3 years on average (see Table 1). More than half (66%) were female. Eighty percent of participants were African American, and 18% were white or Hispanic/Latino. The majority of participants (82%) were heterosexual, and 18% were lesbian, gay, or bisexual. Given the age of participants, it is unsurprising that approximately half of the participants had not completed high school and about a quarter had completed some college. The majority (67%) were currently unemployed or a student.

Table 1. Characteristics of study participants.

Characteristics	Number	Percent
Gender		
Male	32	34%
Female	62	66%
Age		
Mean / Median	18.3 / 19	
Range	14-24	
Race/ethnicity		
African American	75	80%
White	14	15%
Hispanic/Latino	3	3%
No response	2	2%
Sexual Orientation		
Heterosexual	77	82%
Gay/lesbian/bisexual	17	18%

Education		
Grade 8 or less	3	3%
Grades 9-12, no diploma	42	45%
High school graduate or Equivalent	15	16%
Some college	24	26%
Associate degree	5	5%
Bachelor's degree	4	4%
No response	2	2%
Employment		
Full-time	3	3%
Part-time	19	20%
Unemployed or student	63	67%
No response/other	9	10%

Research Design

Between 2009 and 2010, we conducted 12 semi-structured focus group interviews with adolescents and young adults, including three with lesbian, gay, bisexual, or transgendered (LGBT) participants. The focus group method was chosen since it is useful in eliciting group-level assessments, meanings, and norms and processes³⁶. The interviews, which lasted from 90 minutes to two hours, addressed young people's perceptions of healthy sexuality, their use of technologies, and their perceptions about current or potential sexual health promotion programs.

The focus groups were facilitated by two people and included an average of 9 participants each (range: 3-14 participants). Participants included a mixture of people who did and did not know one another prior to the groups. Participants were recruited as collaborative activity involving community organizations, the local Public Health Department, churches and historically black fraternities and sororities. These groups disseminated flyers, held community forums and participated in local radio talk shows to raise the community's awareness of the focus groups and other project activities. Youth were actively involved in the design of the flyers and disseminated them at public venues that they frequent. To ensure socioeconomic diversity, two LGBT student groups at local post-secondary educational institutions sponsored focus groups involving their members, as did a local training program for people who face significant barriers to employment. Participants completed a brief demographic survey prior to the beginning of the groups and received a \$20 gift card as a thank you for their participation.

Focus groups were audio recorded and transcribed to facilitate analyses. Transcripts were analyzed inductively using a qualitative content analytic approach³⁷ with the aid of NVivo software. Initially, three sample focus group transcripts, selected for their demographic diversity, were reviewed and discussed by three research team members. During this discussion, emergent themes concerning the research questions were identified and were used to construct a preliminary code book. Using this codebook, data were then coded by two research team members, and any disagreements were discussed and resolved by consensus. In the process of coding, some additional themes were identified. These were discussed by the research team and were also incorporated into the codebook as appropriate. Following this, coded data were discussed in depth and the research team collaboratively constructed memos to summarize identified patterns. The study received ethical approval from the Health Sciences and Behavioral Sciences Institutional Review Board at the University of Michigan.

Findings

When youth were asked about their general use of social technologies and how they used them to communicate about sexuality and HIV/STIs, five major themes emerged (Table 2).

Distraction

Young people in this community felt that they had been let down by adults and institutions—the social and built environments in their city had deteriorated, and there was a lack of employment opportunities, community activities, or school-based programs for teenagers and young adults. The lack of school-based activities was related to school closures, funding losses, and a general social disinvestment in their city. High levels of unemployment also gave them a sense of hopelessness. As these young people complained,

“This city is depressing...you don’t have nobody there for you. It’s depressing, you don’t have no jobs. There’s nothing to do for kids in [this city].”

“We want to go out and have a nice time, but we don’t have nothing to do. They have shut down everything that we possibly can do... practically my whole childhood was lame.”

Similarly, lesbian, gay and bisexual (LGB) young people complained that they had unsatisfactory social lives, in part due to their status as a minority in a small community. As this young gay man said, *“we don’t have nothing to do.”* In an environment in which there were few social activities and employment prospects, young people used technologies such as social networking websites as a way of **fighting boredom**. As these young people explained,

“We ain’t got nothing else to do. Just stay home bored. Just be on MySpace.”

“Bored around then. Went on the internet, we wanted something to do.”

“You don’t just go on there...when you’ve got something else to be doing.”

According to participants, a sure way to combat boredom was to use social networking sites that people they knew belonged to. Most commonly, the social networking sites that participants joined were MySpace and Facebook. As one young man said, *“...everyone has [Facebook]...I can’t think of one person that I don’t have as a friend.”* Hence, these young people predominately used these technologies to **maintain relationships**. Some also used them to keep in touch with old friends, as this young woman said, *“I check on MySpace...to talk to my friends that I haven’t talked to in forever.”* Several also used social networking sites to find social events to attend with others.

Table 2. Social technologies: general use and specific use for communication about sexuality and HIV/STIs

Themes	Sub-themes
Distraction	Fighting boredom Maintaining relationships Social monitoring
Diversification	Embedded introductions Online dating Developing community
Dramatization	Fighting Gossip Over-sharing
Danger management	Boundaries Cautionary tales Positive influence
Dialogue	Self-expression Credible information Positive influence

Participants also used these technologies for **social monitoring**. Online, they observed the lives of their friends and acquaintances by following their status updates and visiting their profile pages. This was useful as a way to combat boredom and to be entertained, as this young woman said, *“It’s funny. How you learn stuff by people’s status.”* A few people also described specifically following certain people’s statuses in order to stay in touch with them. This was often ongoing in real time, since many young people accessed social networking sites through mobile devices.

Social monitoring overlapped with young people’s communication about sexuality and relationships. At its most basic level, people monitored the relationship status and sex lives of others out of curiosity, as this young woman said, *“...we all nosy. And we’re snoopin’ up about who sleeping with who...”* This kind of curiosity about the sex lives of others was particularly facilitated by social technologies, as expressed by this young woman, who said that she looks online to see *“...who pregnant, who not?...Because they gonna put it on there.”*

Diversification

Although participants primarily used social technologies to connect with people they already knew, they did use these technologies to meet new people, which increased the size and diversity of their social networks. Often, these new connections were made as a part of socio-technically **embedded introductions**. People introduced by others

got to know one another by texting or by becoming friends on a social networking site. Similarly, when people met at social events, Facebook or other sites offered an opportunity to get to know one another after the fact.

Social networking site features also provided embedded introductions. For example, Facebook's "People You May Know" feature and its display of mutual friends increased the likelihood that participants would add unknown people, or accept their friend requests. However, few participants used the social networking features of file sharing sites such as Flickr or Youtube to meet others. "*Youtube is just for videos*", one young woman said.

With regard to **online dating**, opinions and experiences differed by age and sexuality. Many younger and non-LGB participants expressed fear at the idea of meeting strangers online, either as friends or dates. But those older and/or LGB participants who dated online said that it helped them to meet others despite a lack of suitable dating candidates in their social circles. For example, African American LGB people frequently used dating sites geared towards them, such as BGCLive and DowneLink, to meet others—and several described having met partners through these sites. One young man linked his use of such sites to knowing few people like him.

"...in my community ...and it's gay people out there, but I wasn't interested in a white gay person...I don't want no white gay person to be my friend...So, I had a BGC account and just talked to boys on there."

As well, heterosexual participants occasionally mentioned using the Internet to deliberately reach beyond their current social lives or neighborhoods to find people to date. As this young woman explained,

"I need you to tell me you're at work or you at school. I don't need you to tell me you're chilling, smoking a butt. I'm tired of hearing that...Moco Space is just a new way to meet somebody that's ...not in my hood. Because they not nothing in my hood."

However, even those who dated online expressed concerns about it. Participants complained that people did not look like their pictures or lied about themselves in other ways. Indeed, young people's own experiences of misrepresenting themselves online left them suspicious of others. As one young man said, "*My whole profile was a lie.*" One participant also said that she researched people whom she met online prior to dating them because, "*...the last two people I talk to are convicted sex offenders, so I always Google everyone pretty intensely.*"

Beyond dating, participants also used social media in order to **develop community**—a behavior described in most depth by LGB youth who found it difficult to meet peers locally. Two young gay men, for example, had accumulated more than 1,000 gay friends on Facebook. One described his network building strategy as follows,

"All you need to do is just, like, make the page, then you can search friends and stuff like that. If you want gay people, like gay boys or gay girls, you just, like, search or whatever. And then, nine times out of ten...the mutual friends aren't gonna be gay...."

African American LGB young people also used social networking sites to facilitate their extensive socialization with members of their community in nearby cities. Another young gay man said that he would post his plans to attend events on Twitter, so as to encourage acquaintances from his school to attend,

"...I post group meetings for our Gay/Straight Alliance on Twitter...so that if there's people that I'm friends with that may be on campus, or who go on this campus that I don't know go on this campus, they may feel, "OK, well, I know him, so I can go to that meeting and learn some stuff or feel accepted."

Dramatization

Many participants complained about the "drama" engendered by use of social technologies among their peers—a drama often fuelled by discussion about sexuality and HIV/STIs. The most common forms of drama included fighting, negative gossip, and over-sharing. For some young people, drama permeated social networking sites to such a degree that they avoided these sites entirely, such as this young woman who complained:

"It's trouble...people that I know they're on MySpace, they always beefing with somebody because somebody said something on MySpace...or they're talking about who's sleeping with who's man."

Participants noted that people were emboldened by communicating via social media, often saying things that they would never say in person. Frequently, online arguments related to accusations of promiscuity or infidelity and occasionally homophobic ranting. Different features of social technologies were appropriated when people were **fighting** with one another. For example, people started fights by, "*...post[ing] stupid stuff*" or writing snarky replies to another person's Facebook status. Others noted that people would start fights by writing negative things on their Facebook wall, as this young man complained, "*...people try to write on your wall, try to get beastly.*" Additionally,

people used site features, such as the ability to tag other people in photographs, to heighten ongoing arguments. The drama was further fueled by the large audience for said disagreements, often because they played out in semi-public site locations. For example, the young man noted that his relatives were privy to his online arguments.

“...my auntie and some people from my church, they friends with me on Facebook. So, I’ll be embarrassed when they be asking me stuff like why this, this, and this been going on.”

Youth also noted that the fact that fights had audiences meant other people could participate in conflicts they were not originally a part of, thus widening the fight’s intensity and lifespan. As this young woman explained,

“My sister and her friend had a fight, and someone we didn’t even know got involved and posted a thing saying that we were the whores at the house on the corner. And it just went on. It was ridiculous.”

Furthermore, young people noted the preponderance of negative **gossip** and rumors that were transmitted through technologies such as texting and social networking websites. Frequently, this gossip related to speculation about people who might have HIV or other STIs, who had transmitted STIs to others, and who one needed to “stay away from.” Such rumors were often accompanied by judgments or admonishments about the cruelty and irresponsibility of people who had HIV or STIs, who were believed to deliberately spread infections. As this participant said,

“...there was going around a picture of a guy in [name of city] passing around AIDS. Of course, I passed it on to everybody, because, he don’t care. You out here doin’ this to other people, because you don’t care.”

Social technologies also gave people the opportunity to publicly exact revenge upon others, such as ex-partners, by posting STI transmission allegations about them via texts, MySpace pages, or Facebook groups. Subsequently, these allegations were shared with others in a way that heightened the drama. As these young people described,

“...my sister, her homegirl called her, ‘I messed with such and such.’ And we’d be like, ‘uh-uh, girl. You’ll need to get tested because his baby’s mamma put on MySpace that she caught AIDS from him’...and so she spoke to the girl, ‘why you put that on there?’ She was like, ‘I was mad at him...’”

The spread of gossip about STIs was facilitated by the speed and ease with which messages and photographs could be forwarded via text. The small size of the community in which participants lived meant that rumors were especially salient, since everyone already knew one another. As this young gay man said,

“...once we hear, like, somebody got HIV, it’s usually, like, you’ll hear, like, fast. Like real fast. Because [name of city] is real small....everywhere I go, everybody talking about the same thing.”

Some young people were also fascinated by the **over-sharing** about sexuality that their peers engaged in online. However, they also considered most personal sharing online to be ill-advised—such as when they complained that young people put themselves at risk when they did things like appear nude on webcams. *“A lot of people been on there flashing and doing all this, which they incriminating themselves.”* However, some admitted to being unable to divert their attention from the spectacle created by people’s decisions to broadcast intimate details of their lives.

Danger management

Participants felt a great deal of fear in their daily lives, which they often attached to a feeling that people in their community just didn’t care about themselves or others—and therefore, did not hesitate to cause damage. For example, young people were afraid of getting shot if they went to house parties, or even when they walked in their neighborhoods. As this young man said, *“You see kids getting shot on the corner for little stupid stuff.”* Some also expressed concerns about the sexual exploitation of young people in their community.

Participants’ general, deeply-felt concerns about their own safety in their immediate environments were further reflected in their concerns about meeting strangers online. In particular, few heterosexual young women discussed meeting new people on the Internet, and the possibility of doing so was viewed with disdain. To manage their concerns about dangerous strangers online, participants described methods of establishing **boundaries** to protect themselves. One young woman, for example, dismissed online dating as very unsafe and shared her system for deciding whom to trust. *“I just look at a person then, I think that person looks crazy to me, he’s crazy.”* Some young women said that they were approached by others online, but they refused to respond, *“I’ll get on my MySpace, and I’ll have friend requests from people I don’t even know. And they’ll be, ‘hey you’re fine’...I completely deny them and don’t talk to them at all.”* Some young gay men also complained about the “poking” feature on Facebook being used incessantly by persistent men. Again, privacy settings on sites offered boundary-maintaining strategies, along with flagging, de-friending or blocking people as needed.

For participants, an important element regarding lack of safety in their communities related to the high prevalence of STIs. Indeed, many participants expressed considerable fear about the possibility of acquiring an STI, as this young woman said, *"I feel kinda scared...when guys try to talk to me... I wonder what kind of STD he's got."* And as this young man said, *"I'm afraid for my life."* Participants adopted various positive strategies for handling their fears, from limiting their number sexual partners to using condoms to insisting that potential sexual partners get tested for STIs. Some participants also appeared to use the aforementioned gossip about who had a given disease to choose whom to avoid—which gave them a sense of security, however illusory it might be.

From the point of view of participants, use of the Internet also posed particular dangers with regard to sexuality and HIV/STIs. For younger adolescents, this could mean meeting older sexual partners online—a risk that they believed was increased by lax parental supervision and the frequency with which young people lied about their age. Sexual partners acquired online also seemed to pose a particular risk for transmitting STIs, as expressed by participants' **cautionary tales**, such as this one, *"I have a friend, she met some guy off the internet and got pregnant by him—and now she's got a sexually transmitted disease."* These cautionary tales, as shared among youth, seemed to serve as important guidelines for sexual behavior as people navigated a social environment that they found frightening.

Dialogue

Young people's online discussions about sexuality and HIV/STIs are best understood in the context of the offline education that they received on these topics. Experiences with school-based sex education were variable. Some youth had good experiences with it, such as when Planned Parenthood staff attended their classes, or school nurses were involved. But some felt embarrassed or were actively humiliated by their peers when they asked questions and were taught by adults who were not comfortable themselves with the material. There was also a rigid observance of curricular requirements that stifled participants' ability to **express themselves** and ask questions.

As for parents, a few youth said that their parents had educated them about sex and given them helpful messages on the topic, such as this participant, *"When I was about 11, she sat me down, and she said, 'you know, this is the real world. This is what's up here.'"* However, participants were more vocal about parental failures to speak openly about sexuality. Parents and other adults were also seen as sources of judgment, rules, and admonishments as often as they were sources of help, and many complained that their parents avoided talking to them about sex.

These challenges in discussing sexuality and HIV/STIs with adults made some participants more comfortable talking to their peers about the topic, and many felt that they could talk to their peers about their thoughts and feelings. However, this openness was characterized more by the aforementioned gossip, as well as bravado, than actual information or assistance. As one young person said, *"We can talk about who is sleeping with who, but not about safe sex."* Some young people also felt that STIs were an awkward topic to discuss with friends. As this young man said, *"I just can't sit there and have a conversation about that...because if they do got a thing going there..."* Despite this, many young people longed for opportunities to have positive, informative conversations about these topics, especially ones that gave them an opportunity to safely express themselves.

Young people felt that they could not trust their friends as sources of information because they didn't know any more than they did. Thus, asking questions of other youth could be a frustrating experience, as this youth said *"...people ask their peers about sex, but they don't know anything about it."* Indeed, many participants referred to misinformation that they had received about HIV and STI transmission. As a result, young people expressed a hunger for **credible information** about these topics. Moreover, youth wanted information that they felt was missing in their education, including emotional and relational aspects of sexuality and details about how to have safer sex.

Many young people expressed a desire to be supported in their sexual health and to be a **positive influence** on the sexual health of others. For example, some youth challenged their friends about behavior that they believed put them at risk for STIs, such as two gay young men who called each other on *"being a ho"* or *"doing childish things."* Several also expressed a wish to be a positive role model for others, as this young woman asked, *"Why can't we have some positive peer pressure within the community?"*

Following this desire, some youth felt that the Internet gave them an opportunity to positively influence one another. For example, several expressed a willingness to be identified as a user of a Web site about healthy sexuality and HIV/STIs. Young people also expressed a wish to use social media channels to spread positive messages and credible information about sexuality and HIV/STIs. Several also stated an interest in being engaged in activities such as outreach to their peers, and in trying to create a more positive climate in their communities.

Discussion

This study took a qualitative approach to understanding young people's use of ICTs to socialize with others, and the ways in which this aligned with their communication about sexuality and HIV/STIs. The sample size was large for a qualitative cohort and included a large proportion of young people who are often not represented in health informatics research, including African American and LGB young people living in an economically depressed American city. The study resulted in the generation of several themes from this group. However, a limitation of this qualitative study is that it is difficult to generalize results to a wider population.

Young people in this community shared many online practices that have been observed in other settings. For example, youth used social technologies to maintain relationships with existing friends, to monitor the lives of others, and to expand their social lives through existing networks¹⁸⁻²¹. Similar to others, we also observed use of privacy settings and limiting of friends in order to promote privacy and security^{38,39}. However, this study extends prior research by focusing on a group of young people living in one city, thus permitting the development of a community-oriented perspective on technology use. For example, this study showed the influence of living in a city with few activities and job prospects on young people's technology use. Additionally, this study showed that in the context of young people's fears of HIV/STIs, borne of the high rates of disease in their community, several technology-mediated practices emerged. These included fighting, gossip, and sharing cautionary tales through which people aired their concerns about sexuality and the potential for HIV/STI transmission. This documentation of technologically-oriented practices among young people in one city therefore contributes to scholarship regarding the dynamic ways in which technologies may be appropriated by, and assigned meaning within, communities⁴⁰.

Results of this study reveal potential opportunities for youth sexual health promotion through online social networks. However, because data reported here do not specifically probe youth preferences regarding sexual health promotion online, design recommendations emerging from this study should be regarded as suggestive rather than conclusive. Nevertheless, it is clear that young people in this community are using social technologies, often for entertainment. And as has been found elsewhere¹⁵, use was often facilitated by mobile devices. Research documenting higher use of mobile than stationary technologies to search for STI/HIV information⁴¹ reinforces the importance of using mobile platforms and applications to reach young people on these topics.

Youth in this community are hungry for credible information about sexuality and HIV/STIs, and for opportunities to express themselves about these issues. Young people also expressed a strong desire for positive messages and role models regarding healthy sexuality, with some stating a wish to play a positive role in reducing HIV/STI rates in their community. Together, these findings suggest that social networking sites may offer a viable strategy for reaching out to, and engaging, youth in sexual health promotion. Findings suggest that such strategies should offer opportunities for personal expression and information sharing. And with their enthusiasm for helping others, young people themselves may be among the greatest potential assets to online sexual health promotion initiatives. Accordingly, online, peer-based sexual health education appears to hold promise in this community.

Despite these opportunities, findings also suggest challenges for youth sexual health promotion via online social networks. Young people's concerns about online safety and privacy could raise fears about using a website where they might be identified, and they may be hesitant to interact with anyone other than known people when discussing sexual health. Accordingly, it seems that an online "safe space" should offer flexibility regarding personal identification and connecting with others. Moreover, if a goal of online sexual health promotion is to generate broad discussion of these issues, it would be important to provide opportunities for such conversations to take place outside of personal profiles, while offering opportunities for previously unknown participants to develop mutual trust. Our findings suggest that such mutual trust may not emerge easily, and its development may necessitate particular design attention.

Additionally, the current preponderance of negative interactions related to sexuality and HIV/STIs online suggests that intervention designers should carefully plan how to establish norms for positive interactions, as well as ways of handling gossip, fighting, and misinformation. This is a line to walk with care in online environments that aim to give people the opportunity to express their thoughts and feelings. Moreover, it may be advisable to limit adult intervention in online environments so as to develop youths' critical thinking and problem solving capacities⁴². Therefore, online sexual health promotion efforts might be helpfully accompanied by a social infrastructure of training and support that facilitates youth leadership within a positive online space.

A further challenge for online sexual health promotion lies in careful consideration of the appeal of fighting, gossip, misinformation sharing and cautionary tales for young people in this community. While negative in nature, one can

argue that these online practices engage the interest and participation of young people. Why is this the case? Our findings suggest that, in the study community, it may be due to the boredom that young people experience, their curiosity about the love and sex lives of others, and their fear and anger about the prevalence of HIV/STIs in their community. Gossip and cautionary tales may also help to make abstract information about sexuality and HIV/STIs personally and situationally relevant. For example, through gossip, statistics about STI transmission are given the depth of experience and emotion. While online sexual health promotion initiatives should avoid perpetuating negative responses to HIV/STIs, it is important to grapple with how to design online sexual health promotion efforts that will truly engage young people such as our participants—youth who are bored, frightened, and angry. How to do so is an issue that we will address in our future research.

This paper began with the observation that social networks offer important explanations for HIV/STI risk, as well as channels for influencing sexual health-related behavior. It has been proposed that network-based interventions may offer leverage for addressing the disparate prevalence and outcomes of HIV/STIs in the United States. The present study shows that online social networks are indeed places in which young people communicate extensively about STIs/HIV, as well as meet romantic and sexual partners. Accordingly, social network interventions aimed at youth might wisely leverage the dynamics of online, as well as offline, interactions in order to promote youth sexual health. However, it is important to understand the unique contribution of online networks to network interventions as a whole—a question that we also intend to address in our future research.

Conclusion

We examined the technology-oriented practices of a group of young people aged 14-24 in an urban area of the United States. The study generated five descriptive themes regarding young people's social and sexuality-specific technology uses. These themes suggest that young people in this community use technology in ways that are similar to young people in other settings, but that their uses also exhibit unique traits arising from the characteristics of their local communities—including the relatively high prevalence of HIV and STIs where they live. These uses reveal several potential challenges and opportunities for promotion of youth sexual health online. Notably, our research suggests a need for online interventions that address young people's need for safety, while creating online experiences that are as interesting as the "drama" that both engages and repels them.

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