

Youth Advocacy in SNAs: Challenges for Addressing Health Disparities

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ABSTRACT

Social networking applications (SNAs) have been touted as promising platforms for activism: they provide a platform by which voices can be heard and collective action mobilized. Yet, little work has studied the suitability of existing SNAs for enabling youth advocacy efforts. We conducted an intensive 5-week qualitative study with 10th graders to understand how existing SNAs support and inhibit youth advocacy. We contribute to the field of Human-Computer Interaction (HCI) by explicating several themes regarding the barriers youth face when using SNAs for advocacy, features in existing SNAs that are not suitable for youth advocacy, and the peer pressure youth perceive when advocating for serious issues in these environments. We conclude with recommendations for how existing SNA features could be reformed to better support youth advocacy.

Author Keywords

Youth Advocacy; Social Networking; Health Disparities.

ACM Classification Keywords

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

INTRODUCTION & RELATED WORK

Two bodies of research motivate our research. The first is recent work in digital media studies examining how technology can support *youth advocacy*, that is, helping youth take an active role in addressing societal problems [18]. This work has shown the value of leveraging networked, social technology that youth already use to engage teens in new ways, for example, by giving them information about different issues, an authentic platform on

which their voice can be heard, a broader audience to share that voice with, connecting them to relevant organizations, and facilitating collective action [1,12,13,18]. However, there has been little work examining how these tools can support health promotion, the limitations of existing social networking applications (SNAs), and opportunities for design within the context of racial and ethnic minority and low-income populations. Such subpopulations are critical to engage with, as they disproportionately experience barriers to wellness and poor health outcomes [11,19].

The second body of research that motivates our work comes from the domain of public health. This work has examined how engaging youth in health activism can be an effective way of bringing about change in local communities, building collective efficacy amongst youth, and encouraging them to engage in healthier behaviors [2,14]. Yet, a systematic review showed that there is not yet sufficient evidence showing the efficacy of such interventions [14]. Furthermore, little work has examined how social technologies can be designed to expand the reach of youth health advocacy efforts, and how technology can provide more consistent scaffolding for these efforts.

There is great opportunity for Human-computer interaction (HCI) research to catalyze innovation in this space, by engaging youth in the design of digital tools that will help them be effective health advocates. As a first step, we conducted an intensive 5-week qualitative study to examine teens' perceptions of SNAs and their suitability for supporting youth *health advocacy* (*i.e.*, being a vocal and active proponent for change around a health topic [9]). Prior research has mostly reported on the promise of SNAs for supporting advocacy [4,5,7,21]. In contrast to this prevalent optimism, we reveal barriers that youth face in this context. We use our results to suggest design implications for tools that help youth to be advocates for health.

METHOD

We conducted a qualitative study over five weeks with eight teens. Activities focused on the domain of health disparities, that is, the inequitable and disproportionate barriers to wellness faced by low-income and ethnic minority populations. Given the demographic make-up of our participants (largely racial and ethnic minorities), we chose a broad domain of personal relevance to youth,

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within which they could identify specific topics of interest. Through several activities and focus group discussions, teens evaluated existing SNAs to convey opportunities and challenges for social computing-driven youth advocacy. Before conducting this study, we piloted our method with ten youth; this pilot helped us create engaging design activities and focus our group discussion topics.

We partnered with an organization that implements programs with the goal of encouraging youth to pursue careers in health. One initiative is a 5-week summer internship program (one day per week, 6 hours per day), to introduce teens to health careers. Our participants engaged in activities designed to meet both the educational goals for youth and our research goals. The program's educational goal was to introduce health technology careers to teens. We guided them through the stages of the UCD process, teaching them fundamental UCD principles. Our research goal was to examine opportunities for, and challenges with using SNAs as a platform for youth advocacy.

Eight 10th grade teens, aged 15-16 years old, participated in our study (1 boy, 7 girls). This sample size allowed us to gather in-depth data from each teen. We had one facilitator for every two participants; the extensive time spent with each teen enabled ample time for teens to share their ideas. Furthermore, as discussed below, we designed several activities that stimulated rich discussions amongst the teens. Youth were selected by the aforementioned partner organization. Teens in our study came from a mix of lower- and higher-income neighborhoods and most were from racial and ethnic minority groups (e.g., Black/African-American). Study sessions were lead by four research staff members. One staff member from our partner organization provided further support during each workshop session, helping to manage teens and build rapport between the research staff and the teens.

Workshop Activities

We developed several workshop activities to elicit participants' values around and attitudes towards SNAs, advocacy, and the intersection of these two topics. In this paper we report on a subset of these activities.

News Articles Activity: First, teens were asked to read and discuss news articles about health disparities in their local communities. The topics were chosen to highlight social determinants of health (the life conditions that impact wellness) [20]: Access to health resources, Access to healthy food, Housing, Transportation, Education, Environmental Safety, Income and Employment.

Love Letter to an SNA: Students wrote either a "love letter" or a "break-up letter" to their SNA of choice, expressing what they like or dislike about it.

Civic Engagement Game: We also distributed a survey that assessed how civically engaged participants were in their community [10]. We then designed a game based on this data, modeled after the Family Feud game. Teens were

grouped into two teams; their goal was to be the first team to correctly guess how most teens answered each survey question. This game helped them surface and discuss their perceptions of youth civic engagement.

Posting about Health Disparities: The teens were asked to post about the health disparity issue they were most concerned about on the SNA of their choice. Then, they were asked to discuss how they felt when posting those issues and the reactions they expected and received from their peers.

Affinity Diagramming: We then asked teens to use the Affinity Diagramming Method [3] to cluster relevant concepts in their data (their love and break-up letters and transcripts of discussions following the SNA Posting activity). This analysis helped them identify emergent themes. Students were then asked to present the themes and discuss potential reasons why those themes had emerged.

Data Collection & Analysis

We used a mix of audio- and video-recording to document workshop activities. The audio recordings were transcribed and each week the researchers compiled field notes based upon their session observations. We used open coding [6] to inductively characterize concepts represented in this qualitative data (transcripts, field notes, and the love and break-up letters). Two researchers separately analyzed a subset of the data and met repeatedly to discuss and refine emergent codes. One researcher open-coded the remaining data, meeting with the research team to discuss the emergent analytical concepts. The resulting codes were iteratively clustered to arrive at higher-level themes across the aforementioned data sources.

FINDINGS

We first contextualize our findings by discussing the teens' sense of empowerment and the extent to which they felt they had a voice in their community. We then discuss their perception of how SNAs can be empowering tools for youth advocacy. All participant names have been changed to preserve their anonymity.

Most teens in our study felt they had the power to effect change in their neighborhoods. They felt that they are influential people in their community and can make changes by setting a good example for other community members. For example, Faith said:

We have a power to make a difference in our community because we reach out to people in our community. We do have influences on people in our community and also influence people that are older than us, sometimes.

They also felt that participating in the community, for example through volunteering, can be empowering by engendering a feeling that they can actually help others. For example, Sarah said that:

Even when the work itself isn't that enjoyable the fact that you are putting yourself out there and doing something for other people, and I agree that it makes you feel more

privilege that you can be in the role of helping other people that need help.

After analyzing the survey data, we found that some teens were satisfied with the level of influence they have over decisions in their community. Our participants went through a rigorous selection process, in which our partner organization specifically sought teens that exhibit high levels of responsibility. We suspect that such teens are more likely to have been entrusted with youth leadership roles in their schools and communities. Such experience could have impacted participants' belief that they can contribute to the betterment of their community. However, their discussions revealed their concern about not having a real voice in some policies, such as discipline rules at school. They mentioned that their impact on policies is not transparent and they are not being given a real chance to make their voice heard. Previous studies have suggested that SNAs are promising tools to enable youth advocacy and help teens' voice to be heard [1]. However, as we discuss next, our findings reveal the potential barriers to youth advocacy on such platforms.

Unsuitability of Social Networking Applications

Teens in our study discussed why they do not find the design of some SNAs appropriate for health advocacy. They communicated that some SNAs, such as Snapchat and Twitter, encourage brief and quick interactions that are not suitable for elaborating on health issues. They thought that, in this form of interaction, users flip through stories without paying attention to them. Twitter's character limitations are one characteristic that they found restricting for the task. For example, Sarah said:

Twitter had like a character limitation. And when you're writing something about like, a health disparity, you might want to elaborate more than just like tweeting out like, a ten-word sentence.

Another concern was that teens wanted to see the impact they had on their audience. They pointed out that while some SNA features help them realize that their voice is being heard, other characteristics made it hard for them to assess their impact. For example, they found the Snapchat feature that helps them view who has seen their posts helpful. However, they thought that the design of the same SNA makes it difficult to get reactions from people. For example, Sarah mentioned that:

I think that it's like harder to get reactions from people from Snapchat. Because I know Snapchat is usually like you just post it there and people like, just flip through it but they don't really think much about it. So I think it might be more difficult for like, when you're posting about something that like, has a huge impact on society or like your city or your neighborhood, you want to know what other people think, rather than people just like, tapping through it on your story.

Another characteristic of Snapchat that counteracts their need to see their impact is the ephemerality of posts. For example, speaking about a Snapchat post, Clarice said:

It also only stays for twenty-four hours so, they can't like, once they see it they just, that's it, that's the only time they're ever gonna see it.

These challenges convey that while many teens use SNAs and some have characteristics that make them popular among teens, the same characteristics may also limit their usefulness for youth advocacy.

Expectation for Entertainment

Our teens described peer expectations as one challenge to posting about health-related issues. They expressed that youth perceive SNAs as a space for recreation and entertainment. They do not expect to see distressing and serious content. For them, posting about health disparities contradicted the content they felt youth want to see on SNAs. For example, Clarice expressed the following:

[Youth] don't think that it's exciting because a lot of, um, content that's posted on SNAs is just for it to be exciting for you to see something like, 'oh, cool', but if you see, um, if you're not interested in a topic like health, then you might not think it's that cool and you might be bored by it.

When they were organizing their thoughts in the affinity diagram activity, Emily presented three emergent themes:

"Social media is for entertainment and should keep people laughing", "Social media should make people happy", and "Social media is there to please the individuals that use it" because people were talking about how they need like, funny things on their feeds and stuff. Posting about a health disparity [...] defeats [youth] expectations of social media.

Relevance, Affirmation, & Judgment

Previous research has studied challenges youth face when engaging in political discourse online [17]. Youth in that study mentioned fears of misunderstanding and conflict as some of the reasons for not engaging in these activities. Our study participants raised a different set of peer-related concerns: the relevance of content, issues of affirmation, and fear of being judged.

First, when choosing what to post online, teens in our study described needing to satisfy their audience by posting topics that are relatable to them. This concern arose from worries about the response they might get from their audience. For example, when discussing teens in our study, Sarah said:

Some people, like even if [topics about health disparities] related to themselves, they were worrying that their peers wouldn't relate to it and therefore their response wouldn't be as positive.

Participants' concerns about the response they might get from posting about health disparities was further explained as they discussed 1) the importance of affirmation on SNAs and 2) their fear of being judged by their peers.

Importance of Affirmation: Teens in our study viewed affirmation on SNAs as coming through the number of likes and followers they receive. They expressed that getting likes and followers are important and that teens are cautious about "messing" with their feeds. Therefore, they felt

reluctant to post about health disparities on SNAs because they would get less affirmation. For example, Emily said:

Somebody [in our study] was talking about how they didn't *wanna* post on the Instagram because they didn't *wanna* like, mess with their feed.

Teens said that having a consistent theme in their posts is important to keep their followers. For example, Sarah said:

So if you have like, people following you cause you only post, like, a certain thing and then you're posting something else [...] different from what you normally post, they might like, not be happy with you or like, unfollow you.

Fear of Being Judged: As mentioned earlier, participants also feared being judged by their audience. Posting about societal issues was a sensitive endeavor because they felt it is an unusual topic for teens to talk about. For example, when discussing teens in our study being asked to post on SNAs about health disparity issues, Dan said:

They [teens in our study who were asked to post about health disparities] were scared of like, negative feedback from certain people, or like their, their friends looking at them differently, or like they're afraid of being judged by their friends, cause it's not a, it's not a topic that comes up in a normal conversation usually. So for you to just put it out there randomly would just like, they wouldn't understand.

Overall, teens seemed to follow what is normative amongst their peers and did not want to stand out by bringing up atypical topics. Teens felt that when peers view a post, they focus on the reason why someone posts, rather than just the content of the message. For example, Dan said:

They would look at it, but [...] they wouldn't think about that. They would think about more why you chose to post it.

Another participant said that she wanted to post about teen pregnancy. However, she changed her mind because she worried that her friends would assume she is pregnant.

As prior work has established, teens often seek to maintain a well-received online identity and to follow norms imposed by peers in the online world. The contribution of our work is that we begin to unpack these themes in the context of youth advocacy. Our findings reveal challenges some youth face when pursuing civic engagement in SNAs, such as sharing and discussing societal issues [5].

DISCUSSION

Our finding suggests that youth face barriers to advocacy because of the design of current SNAs and peer pressure. One strategy is to design separate SNAs focused on advocacy. However, our suggestion is to improve the design of popular SNAs to leverage existing online networks. As 76% of teens use current SNAs [15], there is opportunity to build upon already-high levels of participation in these tools. We will discuss how current SNAs could be redesigned to facilitate youth advocacy.

Progressive Identification in SNAs. Our findings highlight how posting topics related to health disparities did

not appear to be something teens felt completely comfortable with. From their discussions about their fear of judgment and importance of getting positive affirmation we suggest future work to explore a new approach to online identification. This approach could potentially enable users to anonymously post and progressively become identifiable if their posts are well-received. Progressive identification might help youth find their audience and have their contributions disseminated while limiting the pressure of assessing what their followers expect of them. Future research could explore how such an approach could be implemented and what challenges it could introduce. For example, critics of existing applications such as Secret, which lets users anonymously post, state that it might enhance bullying issues among youth [16]. Could progressive identification keep youth accountable for their online attitude and alleviate the potential negative outcome of online anonymity?

Impact: Beyond Likes and Followers. Teens in our study expressed that it was important to them to see how their activities can impact their audience. Current SNAs offer features such as likes, followers, number of retweets, sharing, and comments as ways of helping users understand how their content is being received. While these features can partially convey whether a post is being seen and how much it is broadcasted, one cannot clearly judge the real influence of their posts on their audience. We argue that researchers who are interested in online advocacy should consider redesigning features to be more reflective of the impact of online activism. One direction could be to examine how emotions and factors which can drive activism, can be integrated in feedback that youth advocates receive. For example, Facebook has recently redesigned the "like" button by including alternative emotions to better express empathy [8]. Compared to a simple "like" button, this redesign could potentially better accommodate youth advocates' desire for a tool that reflects how their audience is engaged with a specific issue. Future study could explore how such changes might impact youth's willingness to be civically engaged.

Another important area for future work is designing SNAs that visualize the extent to which teens' advocacy efforts are having an impact. For example, there is much work to be done examining how social network visualizations can show youth the reach of their efforts. One direction would be to explore visualizations showing the propagation of ideas (*e.g.*, seeing how one's post about the health impact of housing conditions is spread throughout the social graph and the evolving discourse that occurs).

In conclusion, the goals of this study were to identify obstacles youth face when using SNAs for advocacy and provide design implications for new tools. As another direction for future work, we suggest that helping youth explore alternative uses of existing SNAs may also be a beneficial means of overcoming our documented obstacles.

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