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Sticks, stones and Facebook accounts: What violence outreach workers know about social media and urban-based gang violence in Chicago

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ABSTRACT

Recent research has identified a relatively new trend among youth (12–24) living in violent urban neighborhoods. These youth use social networking sites like Facebook, Twitter and Instagram to brag about violence, make threats, recruit gang members and to plan criminal activity known as *Internet banging*. Studies have typically examined youth communication by mining data on social media and surveying or interviewing youth about their social media behaviors. However, there is little to no empirical research that examines how adults who work directly with youth in violent, urban neighborhoods shape, conceptualize and intervene in urban-based youth violence facilitated by social media. Utilizing qualitative interviews with violence outreach workers, we asked outreach workers to describe how youth use social media and the extent to which they use social media to intervene in crisis that emerge in violent Chicago neighborhoods. Participants describe youth behavior that included taunting rival gangs, posturing and boasting about violent events. We also found evidence that social media enhanced crisis intervention work in violent neighborhoods when coupled with close, trusting relationships with youth.

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1. Introduction

In the month of January 2016, 42 people had been killed and 210 wounded in the city of Chicago, an almost 50% spike in violence since 2015 (Gorner, Nickeas, Dardick, 2016). For over two decades, some community-based organizations in Chicago have adopted a violence prevention model that treats violence like a disease and uses trained outreach workers to detect potentially violent conflicts, identify and treat high risk populations and mobilize community change resources (Ransford, Kane, Slutkin, 2012). However, rapid changes in technology, including the proliferation of social media platforms, have radically transformed society (Institutes of Medicine, 2012). Young people spend an enormous amount of time interacting and sharing personal information regarding

everyday life on social media (Boyd, 2014). But as social media meets the realities of everyday life – especially for young people growing up in violent, urban neighborhoods – threats and taunts that were once hurled on street corners are now also posted on Twitter, Facebook, and Instagram (Patton et al., 2016).

Interim superintendent of the Chicago Police Department believes that taunting on social media between rival gang members is a significant contributor to the rise in shootings in Chicago (Gorner et al., 2016). This behavior termed internet or cyberbanging (Patton, Eschmann, Butler, 2013) is a dangerous and yet complex form of computer mediated communication. Social media communication that is relatively anonymous and culturally nuanced with images and videos embedded in a local ecology of violence escalate and trigger violence offline in neighborhoods with high rates of gang violence. Within the last five years, researchers have begun studying the relationship between community and gang violence and social media. Recent research suggest gang involved individuals spend a lot of time online. In a study of over 600 current or former gang involved individuals in five major cities, researchers

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found that over 80% of participants maintained an online presence and used the internet in the same way as the rest of society, including sending emails, downloading music, and connecting with friends. However, the researchers also noted that the participants were more likely to engage in online crime and deviance like posting strong violent and graphic videos and images (Pyrooz, Decker, Moule, 2013). In another study, Patton et al. (2016) analyzed the twitter communication of a female gang-involved youth in Chicago during a two-week period following a period of two noted homicides. The researchers noted how street culture is translated on twitter and identified that scripts of reciprocal violence within a local network have real world consequences that mimic on the ground gang behavior. While these studies have informed our understanding of how young people use social media, and how this use impacts community violence, little to no studies have examined how those who work in violence prevention use social media to reduce violence in urban communities.

In this study, we interviewed violence outreach workers and managers at several violence prevention organizations in Chicago to better understand how young people's social media use impacts workers' violence prevention efforts and the extent to which workers use social media to reduce violence in Chicago. We enhance the crisis informatics and computer mediated communications literature by highlighting and describing key mechanisms and processes that influence how and why violence prevention workers use social media.

2. Literature review

2.1. Technology and violence prevention

Over the past decade, technology has proliferated and become mainstream. New digital tools can be used for good: to connect individuals, develop support systems, share important information and strengthen social ties. Conversely, technology can also facilitate harm, such as cyberbullying, internet banging, electronic aggression and trolling (Institute of Medicine, 2012). The computer mediated communications (CMC) literature has documented some negative aspects of social media use that include online and toxic disinhibition effect, in which the online environment lessens one's behavioral inhibitions, thus facilitating the proliferation of negative online interactions that challenge social norms and boundaries (Lapidot-Lefler & Barak, 2012).

Concomitantly, advances in technology have also created innovative opportunities to use data science to intervene and prevent violence. There are several digital tools that have been developed to understand, predict and prevent community-based violence. These tools include but are not limited to: (1) geographic hot spot prediction; (2) tracking population level demographics and geographic trends in risk behaviors; and (3) accessing third party companies to monitor social media communication. Use of these tools requires advanced computational knowledge and is often too expensive for the average community-based organization doing violence prevention work in urban areas (Bushman et al., 2016).

Digital tools have also been particularly effective in supporting political violence prevention efforts. For example, text messaging or (SMS) has been particularly useful in collating and disseminating safety information in countries under political direct. A widely cited case used text messaging to bring about awareness during the 2007 Kenyan presidential election. Incumbent president Mwai Kibaki was announced the winner of the election, which ignited six weeks of violence. The Ushahidi platform allowed individuals with cell phones to send texts to a specific number to report on human rights abuses and incidents that were mapped geographically on a website. The use of text messaging and digital tools allowed users to

report events in real time while mobilizing efforts to prevent future violent outbreaks (Harvard Humanitarian Initiative, 2011).

2.2. Crisis informatics and social media

Crisis informatics is a relatively nascent field of study that emerged as individuals began use technology to communicate critical information during mass emergencies (Anderson, Schram, Alzabarah, & Palen, 2013). The term, first coined by Christine Hager during the UK foot and mouth crisis and further developed by Leysia Palen sought to examine how myriad techniques, services and technologies could be useful, and particularly how the public could make use of them during massive public emergencies. The emerging field is also concerned with how "informal" responses to mass emergencies influence more formal responses from governmental agencies (Anderson et al. 2013).

The field is focused on developing end user tools: crisis dashboards or crisis mash ups that display critical information about specific events during times of mass emergencies. Others in the field are motivated to create an infrastructure that utilizes various software tools that can be used to monitor a variety of crisis events. These tools require a massive amount of data, better known as "big data," tracking millions of social media conversations during high stress/tense period surrounding a disaster or crisis. Researchers can then examine a variety of features and parameters (e.g., number of tweets and retweets, tweets with popular links and most influential users) to get a general sense of information flow during a crisis. Some researchers use more qualitative approaches, looking at a relatively small sample of social media communication to better understand how social media users coordinate information and services with each other and non profit organizations during times of crisis (Anderson et al. 2013).

However, the application of crisis informatics research and digital tools to issues of community and gang violence is in its infancy. The most notable work in this area is the PeaceTxt partnership between Cure Violence Chicago and informatics platforms Ushahidi, Medic: Movable and PopTech. Cure Violence is a community-based organization that treats community violence as a communicable disease and uses community members with street credibility to interrupt violence in high risk neighborhoods. Together, the organizations have developed science and street outreach to track where violence is high and to interrupt, using mediation strategies to quell a potentially violent situation (Institute of Medicine, 2012). However, to our knowledge there are no research studies that describe what violence outreach workers know about social media and how they use it in violent crisis intervention work.

2.3. Research aims of this study

While there is extensive knowledge regarding the use of social media in various crisis situations, there remains a dearth of research that examines the use of social media to intervene and prevent gang violence. The aim of this study is to broadly explore how violence outreach workers and their managers use social media in their violence intervention and prevention efforts. The following questions are examined in this study: what do violence outreach workers know about social media and how youth use it? How do outreach workers use social media to intervene and prevent crisis situations related to gang violence? We argue that although social media is an important and critical component of effective violence outreach worker, human-centered approaches remain key to interpreting social media communication and making accurate decisions about how to intervene and use social media as an additional data point.

3. Methods

The data for this study came from the Internet Banging study, a qualitative study that explored the relationship between community violence and social media with 34 Black and Latino boys and men and 17 male and female violence prevention outreach workers and mid-level executives. This study utilizes data from the adult, violence prevention staff interviews that were conducted from September 2014 and March 2015.

3.1. Sample

We used a snowball sampling strategy to identify participants. To be included in the study, individuals had to work in a violence prevention organization that worked or had worked directly with youth to intervene or prevent youth and gang violence. We excluded outreach workers who were not based in violence prevention programs or workers who were not working with individuals within our age cohort. We first conducted an interview with an executive director at a local violence prevention organization in Chicago. We asked him to recommend at least three other individuals in his network to participate in our study. We continued to interview violence prevention outreach workers and managers across Chicago until we stopped learning new information regarding how violence prevention outreach workers utilize social media in their prevention strategies. We conducted a total number of 17 interviews, including 14 violence outreach workers and 3 managers.

3.2. Data collection

Participants completed one audiotaped interview semi-structured interview. Each interview lasted between 45 and 90 min and was conducted by the first and second author. Interviews were conducted in the offices of the participants' organizations. Participants were compensated with a \$50 visa gift card. During the interview, participants shared their history of community violence related work. They described their perceptions of the root causes of community violence and talked about the impact social media has had on their work. Participants described their own social media use and gave in depth of examples of observations and experiences in which they used social media to intervene in a crisis situation or collected data from social media regarding situations that could lead to a crisis. Interviews concluded by asking participants to offer advice on next steps for managing community and gang related violence associated with social media.

3.3. Data analysis

This study utilized a grounded theory. Interviews were coded using "open coding," "axial coding," and "selective coding" (Glaser & Strauss, 1967). The first phase of data analysis utilized open coding within a three-person research team. Meetings were held after coding two transcripts to further refine codes. After exploring the meaning and patterns within the data, we established the final coding scheme. In this stage of analysis, we developed codes such as youth behavior, adult behavior, and social media crisis strategy. Research assistants coded transcripts using Dedoose (2014) qualitative data software. The second phase involved axial coding, comparing interactions embedded within the initial open codes, while simultaneously comparing interactions to the larger concepts that emerged. For example, within the youth code, we looked for variation in how participants described youth social media behaviors and identified conditions and factors that influence crisis related situations on social media.

During this phase, we noted in the adult code that personal relationships with youth built on trust and respect allowed the adult outreach workers to ascertain data about social media interactions when they were not personally connected to a youth's social media account. In fact, in some instances they were able to receive the same level of information had they been directly involved on social media. We interpreted this to mean that a human-centered approach remains important when utilizing social media in a crisis situation. In order to test our emerging theory, the adult code was further examined to identify rival cases or exceptions to the rules. During this process, we noted the complexity of social relationships between adults outreach workers who are from the same neighborhood as youth who maintain challenging relationships within the community. In the final phase of coding or selective coding, we integrated existing categories and themes in an effort to describe, the utility of social media in gang violence intervention and prevention work, to identify conditions and mechanisms that influence how and why outreach workers use social media, and to understand the reasons why some outreach workers are active on social media and others are not and evaluate the difference in approach.

4. Results

4.1. Youth behaviors on social media

Social media provided gang involved youth with a new and particularly public forum in the neighborhood to taunt and provoke other gang members in the neighborhood. Three outreach workers observed that youth taunted other gang members by posting material of themselves in rival gang's territory. Mario explains:

You know what's real, they'll go on the streets of the group and they'll take pictures or they'll take a video and they'll put it on YouTube or 'We're in your neighborhood.' And Facebook and they'll take pictures right in the neighborhood like saying, 'Ha ha,' laughing, taunting them. And that's part of a taunt too. Like provoking them, letting them know, you know what we got you're snoozing.

Here, Mario, a male outreach worker who worked as a violence interrupter for over ten years, observed that while gang members have long viewed trespassing in a rival gang's territory as a threat, social media offers a new forum to advertise these behaviors. By posting photos or videos in rival gang territories, youth were able to amplify the threat beyond those who might directly witness this act as it occurs. He notes that there are two parts to this threat: youth post pictures and videos to social media platforms documenting their presence in a rival neighborhood. Additionally, youth taunt rivals with words indicating to their rivals that they were "snoozing" – publicly suggesting a level of incompetence.

An additional means that providers saw gang members provoke each other through social media is by disrespecting a rival gang's symbols. Sara, a violence outreach worker who has worked with youth for five years, made the following observation:

Sara: One of my youth was posting pictures, like tagging pictures of himself throwing down the [gang sign], which is the symbol for the [gang] on the other side, and –

Interviewer: What do you mean throwing down?

Sara: So when you're throwing up a gang sign it's like you're promoting that gang, and when you're throwing it down you're kind of like disrespecting it, if you will And so he was doing that, posted a picture, and had a bat in his other hand and then

the youth from the other side was posting pictures as well, but he was throwing down the [gang sign] and he was throwing up the bunny.

Sara notes that publicly throwing down the rival gang's sign on social media provoked immediate and rapid commentary online, resulting in what she considered unnecessary conflict. When this occurred, Sara notes, the youth was over the border of a rival gang's territory, and a number of boys found him and beat him up within the hour. Sara's observation reveals a few important points. First, she has a relation close enough with the youth to know what is happening on his Facebook account; access to Facebook activity requires a level of trust – either by the youth friending her, or the youth choosing to share his social media activity. Sara's ability to monitor this youth's activity reflects her close, personal relationship with the youth she works with.

Additionally, this post provides insight into the type of social media activity that is threatening. Here, an image, rather than words, is threatening; however, the interpretation of this threat requires a level of insider knowledge about gangs. Sara is aware that "throwing down" a gang sign is interpreted as disrespectful; identification of this as a threat requires this insider knowledge.

Finally, Sara's observation underscores potentially unanticipated violent consequences from youth's social media behaviors. Behind the protection of social media, this youth posted an image of himself that was interpreted as threatening to a rival gang. This youth may not have anticipated that posting these tough images of himself would result in his becoming an immediate target of violence. This youth posted a picture of himself depicting himself as tough, but in doing so, he made himself a larger target for violence.

Both Sara and Mario's observations about the threatening nature of these posts also suggest a departure from traditional mechanisms of neighborhood violence. Without the platform of social media, a youth would need to throw down a gang sign directly in the presence of opposing gang members, or enter gang territory and mark their presence through graffiti, often at significant risk to oneself. With social media platforms, youth can enter into rival gang territory and disrespect rivals' gang symbols without being witnessed - but still advertise this action as a threat. Social media adds an ability to threaten rivals while also removing oneself from direct confrontation.

Four providers noted that a particularly provocative threat was when youth used social media to disrespect a recently killed gang member. Luis, a program administrator in a violence prevention program with many years of work in violence prevention, explains:

I noticed that when somebody gets shot and killed what they would do is disrespect that person to like their boys. To the opposite gang and that fueled a lot of drama. That fueled a lot of drama. When somebody is going through a loss, the last thing you want to hear is somebody, 'Hey you're boy was nothing. And he rots in hell.' So that stemmed a lot of the retaliation that happened in the community and it still happens today. So when somebody dies. It hasn't happened since leadership found out but when guys would die they would make a Facebook page 'Such and such Rots Page' instead of being like 'Jose Garcia's Page'. It was for instance, 'Speedy Rots' and then it would be pictures of him and then you know they would draw disrespectful symbols like penises in his mouth and blood stains all over and it will fuel some more stuff.

In this case, Luis observes, it is a combination of words and images that constitute a threat in response to a specific event – the death of a gang member. Rival gang members post disrespectful

words in addition to disrespectful images in response to the death of a gang member in the community. In addition, youth created a separate page on Facebook to collect the incendiary images and words, thereby drawing even more attention than posting individual images or phrases.

In all of these cases – posting photos of gang members in rival gang's territory, of disrespecting a rival gang's symbols, and of disrespecting a recently killed gang member – YouTube and Facebook provide an opportunity to advertise transgressions – one layer removed from those they are threatening. In these cases youth can post threats – whether as words, images, or videos – without confronting a rival in person. The public nature of these threats, providers noted, makes a response all but certain, because they threaten youth's reputations, one of youth's most valuable possessions. As David, a director of a violence prevention program, notes, "the backlash or the ripple effects it actually has in our communities is that, you know, some people take those very serious because as I mentioned, reputation is capital." The public nature of social media platforms provide to advertise these transgressions appears to amplify the threat to youth's reputation, thereby increasing the risk for violent retaliation.

While the outreach workers discussed examples where violence resulted from deliberate online provocation among gang members, they observed that targeted acts of violence resulting from social media did not always involve clear threats. Sometimes, violence resulted from a youth posting images suggesting he is in a gang. Sara, the female violence outreach worker who worked with youth for over ten years, explains:

Sara: A kid just got killed for having his face on Facebook and he wasn't even a bad guy. He wasn't a thug. He was a gang member but he wasn't thug material. He got shot on Christoph and 26th by the bank. A car went by and they remembered his face on Facebook and that's why they killed him. He was with his girlfriend.

Interviewer: It was just because they remembered his face. Was there something about the picture? Did he have gang signs?

Sara: He had his hat. He didn't have tattoos but he had his hat tilted to the side.

Interviewer: That meant you're in a gang.

Sara: Mm-hmm.

Here, Sara interprets a youth posting a photo of himself wearing a hat tilted to the side as his being gang involved. Her interpretation is based on her knowledge gained through years work with gang involved youth. Knowing that this image may make a youth the target of violence requires knowledge of these cues. While it is unclear whether the youth posting this image understood that he was communicating to others that he was gang-involved, Sara's example underscores a challenge for adults to prevent violence spurred through social media use. In this case, without inside knowledge of gang signs, it would be difficult for a parent, teacher or provider to identify this image as a risky use of social media.

4.1.1. Curation of identity

In many of the above examples, youth increase their risk for becoming a target of violence by posting images and words of themselves that appear tough or threatening. Four outreach workers noted that youth's behaviors on social media often appeared driven by a desire for attention and curation of a particular identity. Three outreach workers noted that youth sought attention from their peers in their online behaviors, in the form of

Facebook “likes” or comments. While one outreach worker attributed these behaviors to addiction to attention, two outreach workers indicated that youth’s online behaviors appeared to be motivated by something beyond just a desire for attention; rather, many youth were attempting to curate an identity that reflected a sense of power. Jasmine, an outreach worker in a violence prevention program, made the following observation:

And it’s like the youth have alter egos when they’re on it. It’s like this is not even the person that you see in a physical. This is their you know, unrealistic state. And so I would ask them why do you think that people hide behind social media, and why do you think that sometimes people are more tough on – like they get hard so to speak when they’re on social media. Some people pretend that they have more clothes. They have more women. More money. I think it’s just self-esteem issues. Issues that they’re not where they want to be, but even still I’m going to fake it ‘til I make it on Instagram because you don’t really know.

Here, Jasmine suggests that youth are using social media as a platform to portray an “unrealistic” identity to their peers. She sees youth portraying alter egos on social media where they are and have more of what they consider the most desirable qualities: tougher, more wealth, more material possessions, and more women. She sees the root of this behavior as low self-esteem; social media provides a platform to portray the identity that appears unattainable in real life.

While Jasmine attributes the portrayal of a larger than life identity on social media to low-self esteem, David connects these behaviors to the frustrations youth experience particular to living in urban areas of concentrated poverty. According to David – the director of a violence prevention program – youth saw social media as a platform to amplify their voice in a context where they had few opportunities to access power. David explains:

When you think about most of these youth were typically involved, their profile tends to be from single parents, immigrant families, low socio-economic backgrounds, low education. Then the question is, ‘What kind of capital do they really have?’ And what we’ve learned is that one of the capitals that they tend to really express or flex or capitalize on is really the capital around reputation. I think that at the end of the day, the type of capital they create, the type of sense of belonging that they try to create, it’s really among their peers, and those peers happen to be people who typically mirror them.

David contrasts youth’s resources with what is available to them on social media. David sees that these youth have low levels of capital in their lives, living in impoverished families, neighborhoods and schools. Social media, he observes, provides a terrain that can create capital exceeding the bounds of their circumstances. By creating an image that appears to have more power on social media, youth are increasing their capital among their peers – one of the few avenues that they are able to do this.

4.2. Violent consequences associated with social media use

Regardless of the motivation for their social media use, many outreach workers expressed concern that youth were not aware of the consequences of their use of social media. Two providers observed that youth do not use protections for their information online. One outreach worker said, “If you go on Facebook and just scroll, a lot of them don’t have it protected, private, a lot of them have it open, you can go on there and see a lot of things that they

put on there.” Without protected accounts, youth allow anyone else to see their online posts – whether it is rival gang members, police, teachers, or family.

Protecting the privacy of their profiles is important because youth often post data that has serious consequences. Six providers noted situations where youth were suspended from school or arrested due to threatening social media posts. These youth expressed surprise for the consequences of their social media activity. Carlos, a violence outreach worker who has worked in the field for 15 years, provides an example:

Unfortunately, you know, I feel like we’re kind of in a – I don’t know, like in the middle right now, because people are really realizing what social media is. And just like the young people that I’ve ran into that they don’t realize that this can also get them arrested. It’s like you could get arrested for this. You’re showing, you’re taking pictures with guns in your hands, and drugs. That can get you arrested. So I try to teach them that, but they don’t realize it because it’s so new and fresh, and everybody wants to be with the new thing.

Carlos sees youth as not understanding the consequences of their social media behavior. He describes youth behaviors on social media that he considers dangerous – posting photos with guns and drugs – but does not believe that youth understand that these behaviors can result in an arrest. While Carlos has attempted to teach youth that these behaviors can result in arrest, he does not see these efforts as effective. Rather, youth are interested in social media because it is new and popular with their peers; youth are not receptive to warnings from older mentors that these result in serious consequences.

According to two providers, while most gang-involved youth avoid traditional media outlets, they see social media as different. Many of the youth have a perception of anonymity online. Mario explains:

Like let’s say I have a youth and he wants to do interview with media. Exactly what you said, ‘Oh, I got to cover my face.’ I said, ‘But you’re on Facebook with guns.’ You know they’re you go, you hit it. You hit it right there. And I don’t know understand that. You think I’m going to turn you in. You got your face covered. You think they really can’t find out who you are. And you got showing guns guys that got caught here in Chicago shot AK47’s and they put it on YouTube, there you go boom. And then the feds come after them. Why would you want me to turn you in? You did that to yourself. So yeah, yeah. So it’s like you know you guys are contradicting yourself.

Mario observes here that youth understand that it is critical to remain anonymous in an interview with traditional media outlets such as television. However, he sees a contradiction in youth’s social media behaviors: here, he sees youth willing to post videos of themselves with guns. He observes that youth do not fully understand that this can also result in an arrest.

4.3. Violence prevention workers and online relationships

4.3.1. Direct engagement

While all of participants utilized social media in some form, less than one-third of the prevention workers reported being directly connected with their youth on online social networks. Some workers cannot befriend their youth online because of organizational stipulations. For example, one of the largest organizations in our sample does not allow employees to connect with their

students through online networks. Other organizations, however, allow or even encourage outreach workers to connect with students through online social networks. For example, Cesar, an administrative level violence outreach worker who has worked for and with a number of organizations says the following:

So for like our Outreach workers, I think it's totally appropriate and acceptable and I encourage them to be friends with their kids on Facebook. And there are exchanges. Like they'll send them a message, 'Hey, we got something going on. Come to our Safe Haven.' Or 'What are you doing?' And they see everything that these kids are posting, right? And Jesse is plugged in that way. He knows everything about like all the kids in the neighborhood. For Alicia, because she's a master's level social worker, she works in schools, there's a little bit more of a clear professional [boundary] between her and her clients. Like I think she's probably friends with her kids on Facebook, but like I don't think she would message them as frequently. And there wouldn't be as much exchange on Facebook. It would be much more like surveillance.

Maintaining online relationships with clients is a professional skill that organizations and workers use strategically. Even within organizations that encourage workers to be Facebook friends with youth, the appropriateness of online interactions is determined by the positions held by workers, as well as the type of relationships adults seek to curate with students. In the above example, Jesse stands out as an outreach worker who has successfully maintained an online presence that youth are comfortable with, giving him access to privileged client information. Cesar suggests that in contrast, if someone like Alicia, a social worker, were to maintain the same online presence, students might code it as "surveillance," or an adult encroaching on their personal space. Kiara suggests that his clients might not want to be friends with him online for this very reason:

Kiara: They don't want me to see them [on Facebook] in that sense in some cases.

Interviewer: Got it.

Kiara: I can get that vibe. 'Well you said you were in school but I noticed that you checked in over here,' or, 'what are you doing with a gun in a picture? With weed bags and stuff like that.' I believe that that's why I don't get a lot of information from them about Facebook unless something happens where they have to.

Kiara's organization does not allow her to be Facebook friends with her youth, and she insists that her youth prefer this professional boundary. She appears confident that youth will give her information about what happens online when they "have to." Here she is referring to the way Facebook is used in crisis prevention, something that will be discussed in detail in a later section. Workers who use online social media to connect with their youth must walk a fine line between being friends and being authority figures. As youth workers, they use the platform to have a positive impact on the youth, which could mean reproaching students for inappropriate behaviors or conversations. But they must also be careful to never make youth feel uncomfortable with their online presence. For example, Samuel discusses how he is careful to not overstep his bounds as an adult on youth Facebook pages:

You have to be careful with that 'cause then they'll kick you off so it's like trying to figure out how to have the right kind of conversation with them around inappropriate stuff on Facebook has been my challenge. You know, just trying to figure out how

to tell you this without you now not trusting me and thinking that you don't want me to see your stuff.

The importance of relationships was a recurrent theme in our interviews. Utilizing technology in youth work is not a substitute for developing trust between workers and youth. Both online and in-person interventions are most effective when they are couched in a trusting adult-child relationship. For workers who are not constrained by organization policies that limit their online relationships with clients, they may still choose to reject students as friends online in order to maintain personal and professional boundaries. Samuel makes the choice on whether to include students on her page on a case-by-case basis:

A couple of them I've let in only because they're a little bit more.

mature and I don't see them doing a lot of craziness on their page, like they're responsible young people so – very few though.

While being friends with youth online can provide insight youth workers with valuable insights, it also carries the risk of students posting embarrassing content on their own social media profiles. Outreach workers concerned with protecting their personal or professional reputations may therefore choose to not engage with youth directly online. An example of this took place with a YMCA worker, who was exposed as being connected to gang members online by the local news. It follows that larger organizations that rely on reputation for funding opportunities may be wary of the negative attention that could come from the wrong type of Internet connections with clients.

4.3.2. Key informants

We found that workers who are not directly connected to their clients online maintain access to knowledge of violent online messages through their close relationships with their clients. For example, note Cesar's response when asked if he had Facebook:

No, I don't. I don't personally. I don't believe in it. You know what I have guys, youth, my youth they're the ones that, they're the ones that, I may go on it here and there. I don't have it, but you know one of my guys might say, 'Look. Let me put you on. So you could see what's going on.'

Cesar uses social media to identify and respond to acts of violence, but does not have social media himself. Instead, key informants among his youth clients give him inside information about what is happening online, and sometimes even temporary access to their profiles. Similarly, Kiara doesn't use Facebook, but his work benefits from being around social media connected youth.

I like Facebook for so many different reasons and I dislike it for so many others but we can't ignore it, it's there. And I call up youth, they call up youth and sometimes they never answer the phone. But then I tell one of my youth, 'Facebook this guy,' [snap] they answer right there like ... Immediately.

Another worker, David, who is not friends with clients online, explains how he systematically keeps tabs on online activity that could be related to community violence:

So there's a couple things that I will look at. One is, I don't ask every kid every day about their Facebook, but if I knew there was a shooting or somebody in the neighborhood that I feel they might know, I will ask them, 'Hey, what's the word out there.'

And they might be like, 'Oh, I don't know.' And I'll be like, 'Hey, can you check on Facebook.' Because then they tell me, 'Hey, I heard this' or 'They're saying this group did it' or 'I heard he got shot nine times.' That's one starting point for me. And then I look at other people's profiles, so let's say I go to one of my youth. In his profile he's got all these different friends, and I know that this friend right here has a relationship with this kid who got shot, so I look at his profile and see what I can learn from him. And that's typically what I do.

There are three important points here. First, David limits the social media demands he makes of any particular client by having multiple sources from whom he can glean information. Second, he keeps a mental record of his youth's online social networks, so that he can strategically pick specific students to question about violence related messages online, based on when and where the trouble is taking place. Third, David sees the youth's social media network, and not just the youth's own activity, as vital to providing insight after a violent event.

James tells us about a time youth from his organization showed him online threats exchanged between two neighborhood students, and he used that information to attempt to stop these individuals from hurting each other.

So I had to get it off somebody else's post. They would be most kids like, Look at this, Joe ... Because we know him or we don't know him. They know us and they showing us all showing off what somebody else doing. Because a lot of kids telling on another kid don't even know him

Using information from key informants, James was able to identify both of the young persons that were making threatening messages. Regrettably, however, in this instance James was unable to reach either youth before they engaged in a violent conflict. Social media gives outreach workers important information but successful intervention requires timely and strategic responses to this information. In the next sections we will further explore the strategies used by workers to prevent violence using social media as a tool for detection and intervention.

4.3.3. Using social media in crisis response

Violence outreach workers in our sample used social media to identify problematic situations and guide in-person interventions. Luis talks about how his organization uses social media to identify potential conflicts before they happen:

The whole Facebook and YouTube has helped us identify situations and stop a lot of the situations from happening. Like mediating a lot of the conflicts between both the groups. Mediating conflicts between internal beefs that are happening within the groups. So it's been helpful in that degree, in that aspect.

Interviewer: Can you give me an example of when you use social media to do that?

Luis: Yes, definitely. So there's branches of Warrior Kings, there's branches of 26. Every branch is a street, right. So it's like Minerva and 14th might be a branch. Darren and 26th might be another branch. If those two groups are identified in the video, right. And we notice that there's going to be a conflict between both of the groups we go talk to somebody that we've built a relationship with in that group and will have somebody from this side talk to that group that they built a relationship with and try to avoid any conflicts from happening in the future. We use a lot of, 'You

guys are putting yourself out there. You guys are being watched by the police. You guys are starting drama that you don't need.' A lot of the times when we build relationships with these guys we'll use family members. Like, 'Hey you know you've got a sick mother and you need to take care of her' or 'You're a grown man and you have two children and you really need to be there for them, you know' ... So you get them to start reflecting on their actions that they might be thinking about in the future like retaliation or anything like that.

As noted in an earlier section, one of the ways gang members taunt rival gangs is by posting videos of themselves in rival gang territory. Posting these videos publicly not only places members seen in the video at risk of retaliation, but it also provides police and violence workers with live updates on gang activity. Violence workers who stay apprised of online gang activity are able to leverage these videos and posts in order to identify problem areas, and send workers in to mediate conflicts. Social media serves as a community violence thermostat that helps workers identify hot zones in real time, thereby increasing the effectiveness of their interventions.

Camila gives us examples of online threats of violence that were thwarted because she knew where the incidents were going to take place, and was able to stop them from happening.

Camila: All these kids have phones. It's this touch phone. I barely just got this. It's faster to get on there if something's going to happen. In the neighborhood if anything is ever going to kick off they always call me first. I'm always the first one to know before the job or the police. They're either texting me, calling me or the Facebook status so every little while I'll pop it up just to see if I got any messages, just to check it out.

Interviewer: Has there ever been an example of something was about to pop off? You got a message and you were able to handle it?

Camila: A kid had a gun and he was going to Wingate. I let everybody know that he was going so they could look out but I caught him before he got there. I told him, 'you need to not do that. Who am I going to pick on or who am I going to hit in the head if you're gone? You could be gone where they'll shoot you first or you could be gone because you're going to jail. I think you get ten years for every bullet.' He was like, 'you're right, you're right but I can't do it anymore.' I said, 'then go up to him and poke him out in front of the other people. Tell him let's do this man to man. Nobody's going to jump in.' He did. He went over there and the boy got scared and didn't want to fight with him. They became friends and now they hang together.

In the example above, Camila convinces an individual who had the means and motivation to engage in gun violence to instead settle for a one on one fistfight. While encouraging a fight might not seem like a responsible intervention style for a violence prevention worker, this strategy fits within the harm reduction tradition, usually used in health or addiction work. Harm reduction intervention strategies recognize that complete avoidance of risky behaviors may be unrealistic, and therefore aims to reduce, not remove, harm to the individual (Marlatt, 2011). Examples outside of violence prevention include providing clean syringes to drug addicts, or giving contraceptives to sex workers.

This intervention style gives Camila a unique insider position, as she constantly receives messages and online updates letting her know, before the police, when and where violence incidents are taking place. Her access to youth social media is based on their

relationship with her, and the trust they have for her to intervene without treating them like criminals or sub-human beings. This harm reduction intervention style, however, does not indicate that she is okay with violence in any form. In another example, she stops a group of high school students from getting in a fight:

They'll put in on Facebook, 'I'll meet you by CH23.' Everybody knows when they're going to fight; they're going to fight at Farragut. But they won't say Farragut because the fight will get there faster than you think so they'll just say CH23 and that's where they're going to meet. When kids put in on there, I go there. I walk there. When I get there the crowd is really frustrated waiting on the ones they're going to beat up. We're going to take them down. I said but nobody's jumping in. It's going to be a one on one fight. When the girl comes it's jabber, jabber. I let them talk. Then I'll jump in there. You're going to fight over a guy, really? A guy that you don't even have or you don't even have. I make up some jokes there and I'll make them laugh. Then they don't ever fight. I was on this side for the job for Farragut last year and I stopped so many fights.

Again in this example, Camila engages in harm reductive tactics by first stopping a group fight or brawl, and instead demanding a more fair one-on-one fight. This is just a ploy, however, as her next step is do further calm down the participants by discussing the irrational nature of their disagreement, and questioning whether even a one-on-one fight would be worthwhile. Because Camila has the reputation of being trustworthy and understanding – to the point that she is an authority figure who seemingly accepts that fighting is sometimes necessary – her input is more impactful than that of other adults. This intervention style may make some uncomfortable, but as Camila notes, not only has she stopped shootings and brawls, but her ability to get youth to calm down and reason with her stops even one-on-one fistfights on a regular basis. Furthermore, adults with more traditional ideas about fights and discipline may be less likely to receive Facebook messages alerting them to potentially violent situations. Access to privileged online information from key informants is only possible, therefore, because of the strong relationship Camila has built with her youth in the real world.

The workers in our sample were aware of the dangers that come with posting threatening messages online, as they can increase the chances that the posters are targeted for acts of violence. Some of their intervention strategies, therefore, involve encouraging youth to remove posts that could put them in the crosshairs of gangs or violent groups. Sara talked with us about a student who was beaten up after posting himself holding up gang signs and a bat, and how she responds to youth posting similar pictures that put themselves at risk:

Always safety planning with them, so I try to do as much prevention work as I can about talking to them about having that stuff on Facebook and what does it mean, and who can see it. So when I'm aware of a picture before there's even any conflict, I talk to them about taking it down.

In another example, Sara talks about how a gang war started as a result of disrespectful comments made on pictures of a slain gang member.

They were fighting each other for the comments that people were making on these Facebook messages, and the gangs were also cracking down on some of those guys like, "Hey, take this picture out. His mom doesn't want you to post those pictures up." Because they know that having this information, having

these pictures and these comments really instigates. So when I went to this prayer vigil and shared my comments, the first thing that I put out there is like, 'Take his pictures off your Facebook. Take any comments off your Facebook' because I already knew the consequence behind that. I knew what that was gonna start up, and sure enough it did. Even though some people removed it, some people kept it.

In the above examples, Sara starts by helping youth increase their understanding of the potential consequences of posts that can be interpreted as threatening by other parties. Next, she intervenes by encouraging posters to remove online content that could make them the victims of violence. The point here is to limit retaliation by eliminating online messages that invite violence. An alternative strategy for limiting violent retaliation based on social media messages is to direct intervention towards the offended parties. Mario gives us an example of how, after a violent act that is being discussed online, he seeks to prevent reactive violence:

A guy got killed two minutes ago. And somebody an already claiming who did it. Check that out. You guys are right on it. That's what they're doing now. Yeah, who did it. You know whatever and then boom they'll take it down. Real quick, two minutes. You know? You follow me? And then that could start up something right there. Right there just that fast like dynamite. So I have to that make it is harder for me. I have to go over there and say, anybody could claim that. Anybody could do that. It could be the enemy saying that they did it. You know one of their guys saying they did so you could go ahead and hit them. You follow me? So I'm trying to put sense. I'm trying to buy time ... And because of my word, and my respect they say, 'We'll honor that. We'll wait.' As you buy time then the truth comes out later.

In this quote, Mario makes it clear that while sometimes the person taking responsibility for violent incidents online may be the actual perpetrator, often the posts come from individuals simply attempting to boost their street credit. While some workers would reach out to the poster and convince them to delete the post in order to avoid being targeted for violence, Mario leverages this uncertainty into an opportunity for violence interruption, as gang members are given time to calm down and not retaliate immediately. Social media here is used to identify a potential crisis, identify the point of intervention, and direct the intervention style. Again, in this example the relationships between violence prevention workers and the youth they engage with is key, as trust is necessary in order for the request to wait before retaliation to be honored.

The online disinhibition effect, which suggests increased toxicity in online communications due to perceived social distancing (Lapidot-Lefler & Barak, 2012), explains why some of the youth these workers engage with may be more willing to act tough, make threats, or hurl insults online than in person. Part of the importance of having youth remove comments is the ambiguity that often accompanies online comments. For Tiana, this ambiguity means that online conflicts are best resolved with face-to-face interactions:

What the youth are doing on social media is just a hiccup of what's kind of happening in their everyday life. So if you're beefing with somebody. You know somebody looked at you funny in high school you're going to go online and you're going to say something about them or feel some type of way about what they post or whatever because you feel like they looked at you funny but you can't resolve that issue on social media. It has

to be in person. You have to tell that person how you feel and why you felt that way. And you have to figure out how they really feel. And the thing about social media or texting or any type of text thing that goes back and forth is that it's really hard to really read people's feelings. And things can be misinterpreted ... So I think to resolve those intimate issues, it has to be done in person because even like just 'LOL' can be taken out of context. Like, "what are you laughing at? What I said wasn't – I didn't mean it to be funny.

Outreach workers understand the potentially explosive dynamics of online communications, and have therefore developed strategies for deescalating online conflicts. Daniel told us a story about two teenagers who were killed by a fellow gang member over an online argument about a phone charger. The shooter was under the influence of drugs and/or alcohol, but Daniel saw this incident as an example of how online arguments could spiral out of control, even between friends. Given experiences like the above, where he was unable to intervene, he gives us an idea of how he thinks about intervening in similar situations before online spats turn into violence:

Just a simple little joke, or a nice comment, or something would have gotten in there to throw a monkey wrench in the game, so to speak. Now being that would have been my job to do is prevent violence, or prevent a possible shooting, prevent a possible fight that can turn in to a shooting, possibly a killing. I know them guys personally, I woulda said 'Hey man.' I would have got one of them, 'Hey man, where you at? Okay I'm over here. I'm a come get you right now. I'm a come see you.' That was my job, to go get in there, and get in the middle of that ... So now if you pluck one of that person from that argument, if you pluck him from that scene, okay? Going for a ride, simple ride, getting in his brain, talking to him, calming him down, getting him some food. You'd be surprised how that does work for some people.

The most important part of violence prevention work, and the way that workers use social media, is their relationships with students. David, in discussing the way social media is used in violence prevention notes,

At the end, it's really about how do you build rapport with kids? How do you build relationships with the youth so that when you do a crisis intervention or you do some mediation or you talk to them about specific things, like there's already a sense of trust there. And at the end of the day, I don't care how good programs are. I don't care about all these different things unless you have some type of relationship with people, it's basic fundamental one-on-one mentorship. You gotta have a relationship with a person.

5. Discussion

This study investigated how adults working directly with youth in violent, urban neighborhoods perceive the role of social media for urban-based youth violence. Specifically, based on in-depth, semi-structured interviews with 17 violence outreach workers and managers, we explored how providers conceptualize how youth in violent neighborhoods in Chicago navigate violence and social media, as well as identified themes in how workers intervene in youth violence that is facilitated by social media.

Our participants described observations and perceptions of

youth behaviors online (e.g. taunting, disrespect, posturing) that is consistent with recent research which directly examines youth social media behaviors (Patton et al., 2013; Patton, Sanchez, Fitch, Macbeth, & Leonard, 2015; 2016). However, an important departure from current research on social media and gang violence is the deeper interpretation and insight from the adult outreach workers who have layered, complex and trusting personal relationships with youth. For instance, the outreach workers understood that one of the reasons youth engage in tough conversations online is related to attention and power. First, adolescence is a time period in which young people actively seek and desire closer personal relationships with peers (Youniss, 1987). Today, the technical features of online environments – searchability, replicability and scalability (Boyd, 2007) reconfigure the context by which youth navigate peer relationships (Gardner & Davis, 2013). However, when those relationships are also embedded in an ecology of violence that dictates toughness and respect in order to maintain safety and protection, attention seeking behavior online is based on how tough one can communicate and present online (Lane, 2016; Patton et al., 2016). In addition, youth growing up in violent, impoverished neighborhoods may lack myriad supportive resources in their everyday life (Patton, Miller, Kornfeld, Gale, 2016). Outreach workers believe that youth's ability to communicate how they want and curate any identity online provides a sense of power that is hard to attain in everyday life. Lastly, another important contribution of the outreach workers is the insight into the social norms of online privacy for youth navigating ongoing gang violence in their neighborhoods. Conceptualizing privacy in a networked public is complex. Boyd and Marwick (2011) contend that teens often vacillate between notions of privacy and publicity, paying close attention to what they can control and have access to as they construct identities online.

The outreach workers in our sample suggest that the youth they work with often do not have their social media accounts protected or set as private but continue to post information that can be perceived as violent or criminal.

The crisis informatics literature shows that social media is an important and critical real-time data during large public emergencies (Anderson et al., 2013). The results of this study show that social media is also important when managing community and gang violence in urban neighborhoods, particularly as it relates to communicating important information that may intervene in or prevent a potentially violent event. This work extends the literature by emphasizing the important role of the crisis worker or in this case violence outreach workers as a conduit for interpreting, managing and utilizing social media in violent crisis situations. Similar to Public Information Officers (PIO), individuals responsible for communicating up-to-date information during major emergencies (Hughes and Paylen, 2012), violence outreach workers have had to evaluate the role of social media in their already burdensome list of activities that they engage in to interrupt violence. In both cases, the PIO and violence outreach worker have used social media as a guide for intervention and communicating crisis. Moreover, in contrast to studies that highlight the power and strengthen of social media data in large public emergencies (Dashti et al., 2014; Hughes et al., 2014; St. Denis et al., 2014), the current study shows that crises related to community and gang violence demand a human-centered approach utilizing social media as a tool. It was important for the violence outreach workers in our study to first assess the context and culture embedded in a social media communication in order to most accurately determine the level of threat and most appropriate crisis response. This level of detail and depth would be particularly challenging with crisis approaches that solely use 'big data.'

5.1. Limitations

Although our study provided an in-depth assessment of how crisis outreach workers in violent Chicago neighborhoods use social media, our research design is not without limitations. For example, our sample consists of 17 violence outreach workers working on Chicago's south and west sides. One limitation of small n qualitative studies is that, while we can be confident in the analytical inferences and internal validity of our findings, external validity is low. Our participants' use of social media is guided by their specific organizational and neighborhood contexts, as well as their relationship centric intervention styles. These results may not be generalizable to other contexts.

6. Conclusion

Social media plays an important role in intervening and preventing crisis related to community and gang violence. However, because of the complex nature of communication, a human-centered approach guided by strong personal ties is central to interpreting crisis situations in violent, urban neighborhoods. This work extends the crisis informatics literature by providing an in-depth perspective as to the strengths and pitfalls of social media in crisis outreach. Future research could focus on exploring the way violence outreach workers use social media to respond to crises across multiple contexts. We would be particularly interested in a multi-city survey that investigates the ways outreach workers use technology. This research would increase our ability to make policy recommendations and determine what resources on the ground workers need to best utilize online tools to effectively respond to potentially dangerous situations.

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¹ Asterisk refers to graduate student.