I know God's Got a Day 4 Me: Violence, Trauma and Coping Among Gang-involved Twitter Users

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I Know God's Got a Day 4 Me: Violence, Trauma, and Coping Among Gang-Involved Twitter Users

⑤SAGE

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Abstract

Trauma-based interventions are common in mental health practice, and yet there is a gap in services because social media has created new ways of managing trauma. Practitioners identify treatments for traumatic experiences and are trained to implement evidence-based practices, but there is limited research that uses social media as a data source. We use a case study to explore over 400 Twitter communications of a gang member in Chicago's Southside, Gakirah Barnes, who mourned the death of her friend on Twitter. We further explore how, following her own death, members of her Twitter network mourn her. We describe expressions of trauma that are difficult to uncover in traditional trauma-based services. We discuss practice and research implications regarding using Twitter to address trauma among gang-involved youth.

Trauma is characterized by considerable and persistent cognitive, emotional, and behavioral problems in response to a traumatic event (Cohen et al., 2010). Definitions of trauma vary but usually include reference to shocking, unexpected, and terrifying experiences resulting from traumatic events such as child abuse and neglect, sexual abuse and/or witnessed domestic violence, community violence, medical trauma, traumatic loss, and natural disasters (Alderfer, Navsaria, & Kazak, 2009; Clettenberg, Gentry, Held, & Mock, 2011; Cohen et al., 2010; Fowler, Tompsett, Braciszewski, Jacques-Tiura, & Baltes, 2009; Moylan et al., 2010). In the United States, there is a critical need to enhance access to trauma-informed services for youth, families, and communities exposed to

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traumatic events, in order to ameliorate the adverse effects trauma can have on health and well-being (Pynoos et al., 2008).

While trauma-based interventions are common in mental health practice, there is a severe gap in effective services because technology and in particular social media have created new and expedient ways of coping with—and being exposed to—traumatic experiences both online and off-line, particularly for African American youth living in violent urban communities (Lingel, 2013; Patton, Eschmann, & Butler, 2013; Patton et al., 2014; Walter, Hourizi, Moncur, & Pitsillides, 2011). Researchers have found strong associations between neighborhood violence, trauma, and symptoms of posttraumatic stress disorder (PTSD) among youth (Breslau, Wilcox, Storr, Lucia, & Anthony, 2004; Jenkins, Wang, & Turner, 2009; Paxton, Robinson, Shah, & Schoeny, 2004; Rich & Grey, 2005). African American youth living in low-income, urban communities are at increased risk of exposure to traumatic events including a murdered family member or friend and attacks with a gun, knife, or weapon. PTSD is often undiagnosed and untreated in these populations due to limited transportation and financial resources, and unfamiliarity with treatment access, among other barriers (Davis, Ressler, Schwartz, Stephens, & Bradley, 2008). However, we were unable to identify any studies that examine how African American youth communicate traumatic experiences on social media platforms, specifically Twitter. African American youth have a strong presence on social media. For instance, data from the Pew Research Center suggest that 73% of African American Internet users and 96% of those aged 18–29 years use some type of social media platform. Twitter is particularly popular among African American youth with 22% of online Black users using Twitter compared to 16% of online White users (A. Smith, 2014). Understanding how African American youth living in violent urban communities communicate trauma on social media can help inform collaborative and innovative intervention and prevention strategies for youth experiencing trauma that involve human-centered computing, mental health practitioners, community organizers, and educators.

Trauma and Community Violence

A number of nationally representative studies of youth in the United States estimate that 38% of youth aged 12–17 years witness violence (Zinzow et al., 2009). About 26% of African American adolescents 15 years of age report being victims of or witnesses of at least one shooting or stabbing in a 1-year period (Chen, 2010). Chronic community violence and perceived threats associated with witnessing, hearing about, and being a victim of violence can create an environment in which youth experience constant danger and approach a broad range of social situations with fear and anxiety (Horowitz, McKay, & Marshall, 2005; Patton, Woolley, & Hong, 2012).

Addressing trauma at an early age is particularly important as research with primarily African American adult trauma survivors living in an urban area suggests that socioeconomically disadvantaged individuals (e.g., lower income and unemployment) with extensive history of trauma (e.g., greater number of traumatic events), and few social resources (e.g., lower perceptions of neighborhood quality) are susceptible to consistently elevated posttraumatic stress and potentially severe, chronic PTSD (Lowe, Galea, Uddin, & Koenen, 2014).

One particularly hard-to-reach population susceptible to trauma as a result of exposure to community violence is gang-involved youth. Gangs tend to have three or more members typically between 12 and 24 years of age, share an identity linked to a name or other symbols, have some degree of organization, and engage in criminal activity (National Gang Center, 2014). Despite joining gangs for safety, gang-involved youth are more likely to be victimized than their nongang peers (Glessmann, Krisberg, & Marchionna, 2009). Those who join more violent social networks—meaning gangs with a history of assaultive, violent behavior—are at greater risk of victimization. For example, research by Papachristos, Braga, and Hureau (2012) found that having a shooting victim

in your social network greatly increases the odds of becoming a gunshot victim yourself. In fact, the closer the shooting victim is to one's peer group, the greater the likelihood of victimization.

Researchers have likened the experiences of gang-involved youth in the United States to those of child soldiers in countries such as Colombia and Africa. While gang-involved youth may not be abducted the way child soldiers tend to be, youth in violent urban neighborhoods have immense pressure to affiliate with a gang and then become exposed to violent experiences as victims and perpetrators by witnessing violence in the community and online, being victimized by gang members, and participating in violent crimes. Trauma and PTSD associated with these experiences including a heightened sensitivity to surroundings are both risk factors and effects of gang-related activities (Kerig, Wainryb, Twali, & Chaplo, 2013). Trauma is also associated with symptoms of depression, aggression, and antisocial behavior among gang-involved youth; yet, these youth may be unwilling to display their grief or engage with traditional forms of mental health treatment (Allen, 2013).

. In Chicago's Southside, African American youth report exposure to physical attacks, fighting, and incidents involving police, gun violence, and murders. For instance, semistructured, one-on-one interviews with African American youth between the ages of 14 and 17 years suggest boys are more likely to be victims and witnesses of violence and girls more likely to hear about violent acts (Voisin, Bird, Hardestry, & Shiu, 2011). Reports from the Chicago Police Department confirm that the largest percentage of homicide victims tend to be between 17 and 25 years of age and disproportionately Black males (Chicago Police Department, 2011). Similarly, nationwide, youth violence differs across neighborhoods and subgroups of youth, with the highest prevalence of homicide among males and non-Hispanic African American youth (David-Ferdon & Simon, 2014).

Despite a drop in crime in Chicago over the past four decades, disparities in crime persist across communities in socially and economically disadvantaged areas with predominantly racial and ethnic minorities. For instance, the highest rates of homicide and violence tend to be in Chicago's West and South sides where there are a large proportion of African American residents (Papachristos, 2013). In these communities, many homicides have resulted from long-standing conflicts and altercations between gangs over turf, sale and distribution of drugs, and the shooting of gang members by rival groups.

Grief and Social Media

Social media provide online communal spaces in which mourners can communicate with each other and express their thoughts about the deceased (Hutchings, 2012; Lingel, 2013; Walter et al., 2011). Social networking sites such as Facebook can adversely affect users who unexpectedly learn about the deceased during normal Facebook use, experience shock about the loss, and feel uncomfortable observing other users' public expressions of grief (Brubaker, Hayes, & Dourish, 2013). However, the Internet can also strengthen group bonds by allowing users to share experiences of mourning (e.g., prayers and hymns; Hutchings, 2012) and memorialize the deceased with the use of text, photographs, music (Walter et al., 2011), background wallpaper, themes, graphics, and audio on social media (Mitchell, Stephenson, Cadell, & Macdonald, 2012). Social interactions among mourners can facilitate both communal grief (Walter et al., 2011) and coping (Lingel, 2013). Communication with other mourners, those likely to understand one's experiences of grief, can create a sense of community among mourners (Mitchell, Stephenson, Cadell, & Macdonald, 2012). In some cases, these communities share their experiences with death and grief to promote social action. For instance, Mitchell and colleagues (2012) found that parents who created virtual or online memorials of their deceased children, including memorials on MySpace and Facebook, transformed a child's death into forms of social action. Users might also continue sending messages directly to the diseased as if the messages will be seen or received by the deceased (Hutchings, 2012). Such messages

may comfort users who are grieving (Hutchings, 2012) and sustain long-term relationships with the deceased (Lingel, 2013).

Gangs and Social Media

Gang activity is a common expression of violence among 12- to 21-year-olds using such social media outlets as Facebook, Twitter, and MySpace (Patton et al., 2014). Some gangs use social media for "Internet banging," a term used to describe the behavior of gang-involved youth on social media. Internet banging refers to youth promoting gang affiliation and/or communicating interest in gang activity, gaining notoriety by reporting participation in a violent act or communicating a threat, and sharing information about rival gangs or networking with gang members nationwide (Patton et al., 2013).

Gangs' Twitter presence, in particular, suggests that Twitter is a fitting medium in which to examine online gang communication. For instance, Décary-Hétu and Morselli's (2011) research of gangs and criminal organizations, including gangs based in Montreal, Canada, found that in 2011, 11 gangs had Twitter profiles (with some overlap on Facebook), and most profiles had hundreds and thousands of followers. Gangs tweeted about gang lifestyle and boasted about money, women, guns, parties, drugs, and alcohol. Further, both men and women promoted gangs by declaring allegiance to the gang or praising its achievements (Décary-Hétu & Morselli, 2011).

People using technology create perceptions of and engagement with content and often alter and modify the original intent of software to fulfill a need or desire, a process described by Adaptive Structuration Theory (Desanctis & Poole, 1994). Although social networking sites were designed to connect and strengthen relationships with others, researchers have argued that these platforms increase the prevalence of cyber aggression and victimization (Runions, Shapka, Dooley, & Modecki, 2013). Unlike traditional forms of aggression and victimization, cyber aggression and victimization can provide anonymity, facilitate initiation and sharing of victimization with virtual bystanders, facilitate rumination due to the permanence of digital data, and maximize the risk of shame and embarrassment due to the pervasiveness of shared content (Runions et al., 2013).

In this study, we use an inductive qualitative approach to examine how African American youth communicate their traumatic experiences on Twitter. We examine the communications of Gakirah Barnes—a recently deceased gang member from Chicago who is very well known on Twitter and in her community as a "hitta" or assassin—and individuals in her Twitter network, from March 29 to April 17, 2014. During this period, Gakirah's best friend, 20-year-old Raason Shaw, was killed by a Chicago police officer, and then 2 weeks later Gakirah was killed, allegedly by rival gang members (Swaine, 2014). The lead researcher of this study saw Gakirah's Twitter feed as an opportunity to explore the expression of trauma through communication on Twitter. He hired research assistants who had lived in or had extensive experience in what they deemed violent urban neighborhoods. Working with a data scientist and contributing author who mined the Twitter data, we developed a coding scheme, coded individual results, and checked the accuracy of one another's coding (Ford, 2014). This study contributes to our understanding of the relationships between social media behavior and trauma, particularly among Twitter users.

Inquiry into this unexplored topic is important as technology and media can mediate our understanding of traumatic experiences and events (Meek, 2010) and can inform responses to youth trauma in the digital age. For instance, Twitter is event driven in that it allows users, including everyday people, to determine which events are important and how they will contribute to an event. Twitter is more than "mere web chatter," and it is a platform for users to communicate about experiences and events they deem to be important to certain groups of people and society (Murthy, 2013, p. 34). Twitter can provide insight into traumatic events and experiences and elucidate how youth view the

world, self, and others from the perspective of youth tweeting about social events and experiences they deem significant and important in their lives.

Media coverage of Gakirah Barnes' death portrayed her as a prominent Chicago gang member with a robust Twitter following. Her 2,585 follower account placed her in the 98th percentile for Twitter users (Bruner, 2013). Reports allege that rival gang members murdered Gakirah and that her life was characterized by significant trauma from losing three friends in 3 years to gang violence. Given her active presence on Twitter and traumatic life course, we analyzed Gakirah's tweets to examine the relationship between trauma and social media behavior.

Research questions. The following research questions guide this study:

1. How was Twitter used by Gakirah Barnes to mourn the death of her friend Lib B? How did members of Gakirah's Twitter network mourn her own death?
2. How were expressions of trauma communicated on Twitter?
3. Can expressions of trauma be used by practitioners to better understand a traumatic event, including when it was encountered and how it was communicated via social media?

Method

In this study, we engage in a close-read, textual analysis of 408 tweets by Gakirah Barnes and several of her most frequent communicators on Twitter. The tweets were collected during a 2-week period beginning with the death of Gakirah's friend, Raason Shaw, and ending a week following her own death. We depart from traditional Twitter studies that typically analyze millions of data points and instead use an inductive qualitative approach for several reasons. First, Garkiah is a female gang member who assumes assassin or hitta status. Female gang membership is not uncommon, but Gakirah's self-proclaimed status as an assassin challenges assumptions about the role of females in gangs, which are often organized by a patriarchal social system. As such, we engaged in a close read of her tweets following the death of her friend and fellow gang member, to gain deeper insight into her unique position within her gang, particularly as it relates to how she communicates trauma. Second, the language represented in these tweets conveyed significant sociolinguistic variation from "standard" English, the use of which represents a key part of how urban youth construct their identity (Alim, 2004). The Twitter posts contained culturally specific words, phrases, and grammatical constructions and also reference neighborhood identities, rival gangs, and local music. Given the linguistic variation by city regions and gang factions, these tweets would be challenging to decipher using automated scripts, network analysis tools, or crowdsourcing. Indeed, a computational approach to such analysis has been deemed inadequate by law enforcement agencies critically studying online communications of urban youth and gang members (Geofeedia, 2012).

To increase our chances of correctly interpreting the tweets, we assembled a multidisciplinary team of researchers who have experience conducting research in large metropolitan cities with youth of color. The research team collectively has over a decade of experience conducting research in Chicago, Detroit, and St. Louis. We included a data scientist with expertise in cyberbullying and two graduate-level research assistants, all of whom were born and raised in large metropolitan cities and have experience working with youth from violent urban neighborhoods. We took a creative interdisciplinary approach in which we (the data scientists and social science researchers) contributed to the development of the coding scheme, coded individual results, and checked the accuracy of one another's coding (Ford, 2014). The data scientist developed and executed automated computer tools for gathering and filtering data sets from Twitter, analyzing communication patterns, and presenting the tweets in a suitable form for inductive analysis by the

qualitative researchers. This was a bidirectional learning process for the research team, wherein social science researchers gained a more informed perspective as to how participants on Twitter interact, and the data scientist benefited from deeper qualitative insights into how gang-involved youth respond to trauma on Twitter.

Given the nature of the Twitter content, we submitted an application to the University of Michigan Health and Behavioral Sciences institutional review board (IRB); our study was exempt from a full IRB review because the study activity is limited to analysis of secondary, identifiable data.

Procedure

Step 1. We used Radian6 (http://www.salesforcemarketingcloud.com), a social media tracking service, to obtain a collection of Tweets for our study. Radian6 tracks Twitter, Facebook, and other social media sites for posts and conversations about organizations, brands, products, and other discussion topics in real time. Radian6 also records and archives data it obtains and provides a convenient interface for researchers to search for and collect posts by particular users or posts made over a particular time range. Data on each post included the text of the post, the username of the author, the date and time the post was made, and a link to the post on Twitter's website.

We obtained all tweets posted by Gakirah using her @tyquanassassin account between March 29 (the day her friend Raason "Lil B" Shaw was allegedly killed by a Chicago police officer) and Gakirah's own death on April 11, 2014. This provided us with tweets to code and analyze that were related to Gakirah's response to the trauma of Lil B's death ($n = 112$). We also obtained all tweets posted by other Twitter users who were "directed" toward Gakirah or were "mentions" of Gakirah between March 29 and her death on April 11, 2014. This gave us a sample of how other Twitter users interacted with Gakirah as she responded to Lil B's death ($n = 48$). Finally, we obtained all tweets posted by other Twitter users directed toward Gakirah or were mentions of Gakirah from after her death on April 11 to April 17, 2014. This gave us a sample of how Twitter users responded to the trauma of Gakirah's death ($n = 248$).

This provided us a total of 408 tweets posted by 177 unique Twitter users for analysis. Tweets directed toward Gakirah included her Twitter handle, @tyquanassassin, at the start of the tweet, while tweets that "mentioned" Gakirah included @tyquanassassin elsewhere in the text of the tweet.

Step 2. Three coders conducted a textual analysis using an inductive qualitative approach to coding, including an initial open coding of tweets to determine primary content areas the data exhibited. They developed a codebook representing major content areas. Two coders separately used the codebook to code all 408 tweets. The coders met 3 times to evaluate each other's codes. Coders held weekly peer debriefing sessions wherein they discussed their reasoning for selecting a code and critically discussed and reconciled codes when there was disagreement. Following this further, coders at times disagreed on the interpretations of the Twitter content related to identifying "violent" or "grief" codes. We addressed differences in interpretation in two ways. First, the coders reviewed the author's Twitter page to identify any biographical information or reread posts to gain an in-depth understanding of how the Twitter author communicates. In addition, a third coder, with substantial experience with Chicago youth, was brought in to reconcile the codes when there was disagreement.

In this study, we focus on several code categories: aggression, sadness, grief, pride, neighborhood identity, and authority that were developed after the first initial round of open coding. We selected these codes for further investigation to better understand the complexity of trauma Gakirah evidences as she responds to Lil B's death and as her friends' respond to her death.

Table 1. Selected Tweets Associated With Grief, Sadness, and Aggression.

User	Theme	Tweets
Gakira's response to Lil B's death	Grief	damn man wat a L 2 take
		Rip cuzo raason
		Remember wen we played 2 da left n we stayed out of trouble cuz we stayed 2 our self yea dem was da times my brother rip Lil b
		LilBubba Think You Know How We Coming On These Fuck Niggas This Summer 🚗🏎️ #RipTyquan @TyquanAssassin
	Sadness	My pain ain't never been told
		Shyt Dnt always happen how u plan it *100*
	Aggression	I Knew Dat nigga was a Bitch should of killed his ass wen we went on dat lick
		If u pussy's ever push me ima 💦 me a nigga
		U Niggaz Ain't Ready Fo Wat We Got up our Sleeves #w.a.r
Gakirah's followers' response to her death	Grief	Imma talk to you n talk about you EVERYDAY @TyquanAssassin
		I don't care, I don't care. Like old times baby
		Sittin Here Cryin & Laughin Ina Inside Thinkin Abt When You T'd Up On Me In Front Of Jimmys @TyquanAssassin, Whyyyyy?
		#RESTUP @TyquanAssassin I A Never Forget About U Big Homie *100*
		Watch Ova Me Ki && Keep Me Safe #RestUpBro
		"@TyquanAssassin: @SaKBoyMexico copo"
		Rip now u wit yo shorty tyquan in heaven #Stl063 @TyquanAssassin
	Sadness	@TyquanAssassin Damn My Head Lost Ima Miss You #NoLie
		@TyquanAssassin Why TF You Leave Us 🙁 Why Man I Swear This Ain't Really Happening. I'm Finna T'UP Shit O V A

This sample of @tyquanassassin-related tweets allowed comprehensive, detailed analysis of the unique language, symbols, and online communication style used by urban youth and gang members, whose vocabulary, phrases, gestures, and symbols vary by region and gang faction. Specifically, Twitter's 140 character per tweet limit has encouraged user communities to use text and symbol acronyms, shorthand, slang, and special picture symbols called emojis or ideograms. Tweets in this linguistic style—with unusual grammatical constructions and references to neighborhood identity, violence, rival gangs, and local rap music—may be challenging for and open to misinterpretation by practitioners unfamiliar with urban youth and gang culture.

Results

Twitter: A Space to Cope and Make Meaning of Trauma

We coded instances of grief, sadness, and aggression (see Table 1). Analysis of tweets provided insight into youths' accounts of trauma, including physical, psychological, cognitive, emotional, and behavioral responses to trauma.

Grief and praise. Posts coded *grief* described loss (death or incarceration) of friends, family members, or loved ones. Gakirah's typical grief response used rest in peace (RIP) to mourn Lil B:

RIP King Lil B

In this tweet, Gakirah conveys that she is grieving the death of Lil B with the use of "Rip". Gakirah's use of the word "king" suggests that they had a close relationship and she has praise and high regard for Lil B. Gakirah's followers also used Twitter to communicate the nature of their on- and off-line relationships with her:

> @TyquanAssassin WAS THE REALEST N**** I KNOW She Was My Fucking Shoota She Always Was 1000.

In this post, a Twitter user who followed Gakirah expresses her feelings about the slain young woman. The Twitter users describe Gakirah as "REALEST N*****" and that "SHE WAS ALWAYS 1000." "Always 1000" has several meanings but often suggests that someone has integrity and legitimacy. Expressing that Gakirah was "always 1000" is a clever way to magnify the colloquial term "keeping it 100" which denotes one's ability to stay true to themselves across contexts. Within an urban gang context, "SHOOTA" refers to one living or embodying gang lifestyle. "MY FUCKING SHOOTA" depicts the follower's personable, close ties with Gakirah.

Sadness and worldview. Posts coded *sadness* described anxiety, sorrow, and helplessness about oneself, another person, or group. Gakirah's tweets provide insight into her worldview after Lil B's death:

> @Tyquanassassinh: Jst playin da hand I was dealt no aces 👿 👿 *100*.

In this post, Gakirah posts a lyric from a popular hip-hop artist. The lyric is generally in reference to an idiom that refers to misfortune and disadvantage in life. This post is situated within a series of posts that follow the death of her friend Raason.

Gakirah's untimely death affected her Twitter followers. This post illustrates a trauma-driven change in perspective:

> @Tyquanassassin: Rip Lil bro tyquan I gotta different mind stage now.

The statement "different mind stage" provides insight into how Gakirah's death affected an individual she was connected with on Twitter. Twitter users conveyed shock following Gakirah's death:

> Twitter User: Naw Not Gakirah Mann Tell Me This Shit Ain't True "@Liljay_UpNext00: Shit Crazy Rip my Hitta Stl Finest @TyquanAssassin.

"Naw Not Gakirah" depicts followers' expressed disbelief about Gakirah's death. "Tell Me This Shit Ain't True" suggests the follower perceives Gakirah's death as unreal, inconsistent with the social reality that preceded the traumatic event.

Emotional and physical response. Tweets coded sadness conveyed Gakirah's deep sadness and emotional pain:

> @tyquanassasinDis Shyt Hurt more Dan a bullet.

In this example, Gakirah uses an analogy to describe her emotional pain, comparing it to that of a bullet. This post provides context and a barometer to understand the pain Gakirah is feeling after her friend's death.

After Gakirah's death, her followers also displayed emotional and physical responses:

Table 2. Selected Tweets Associated With Neighborhood Identity, Authority, Awareness, and Pride.

User	Theme	Tweets
Gakira's response to Lil B's death	Neighborhood identity	I'm frm where if dey send shotz we send Em back we never gave af if it was da police
		Dis game so foul but I made a vowel 2 a code dat I'd never break 😊 *100*
	Authority	Cpdk middle fingerz 2 da law
		Police Dan took our boy man 10 year nigga dis shyt so Krazy man
		CPD all ova Me like Snoop u running Dis I'm like Ima Die a Real nigga
		If Da Fedz cum n Snatch Me my mouth staying closed cuz Ima Die a Real Nigga 😊😊
		DA Police I'd kill u Faster Dan niggaz on Da Corner Rip King Lil B 🔫🎮🚓👮☠️😵🔪🔪 CPDK
		Police took my homie I dedicate my life 2 his revenge *100*
	Awareness	Tymb betta Keep raason out dey mouth dats why Ty dead
		Drive bys n homicides wat u dwn 2 die for 💀☠️ ❓
		I Guess u niggaz won't get da picture until I of y'all ass get put in da frame 🖼️☠️👀*100*
		I Do wat I Do Cuz I Kno God Got a day 4 me
	Pride	RIP @TyquanAssassin REAL NIGGA FOR LIFE! WE GOT YOU SHORDY!"
		My family fwm n fought da enemy dat stood n my way 👀*100*
Gakirah's followers' response to her death	Neighborhood identity	Damn I juss peeped shorty on da news out here @TyquanAssassin .smh.Chicago crazyyy.#RestUpShorty
	Pride	Real Recognize Real Big Homie You the Realest Rest Easy Kirah Real Niggas Dont Die They Multiply 🎮🙏 @TyquanAssassin

My Body Shaking I'm Fucking Breaking These Tears Running the Opps Laughing Ima Lose It They Took My Shooter @TyquanAssassin 😔.

This user indicates experiences both physical (e.g., body shaking) and emotional (e.g., tears running), which highlight the complex responses following Gakirah's death. The term "opps" or opposition is typically used to describe a rival gang or faction. This post suggests the user believes that rival gang members may have been responsible for Gakirah's death.

Perceptions of Neighborhood and Community as a Response to Trauma

We coded instances of neighborhood identity, authority, awareness, and pride (see Table 2). Results suggest that Twitter enables users to convey awareness of one's surroundings, neighborhood identity, and sense of community.

Awareness. After Lil B's death, Gakirah was keenly aware of her community surroundings and expressed mistrust of those she held responsible for Lil B's death:

> @Tyquanassassin: Trust No One 🖤💢☁.

Gakirah's comment to "trust no one" does not appear to be targeted toward any one person or group; however, the statement is quite pointed. The tweet suggests Gakirah is hypervigilant and advises her Twitter follows to also be aware of their surroundings.

Neighborhood identity. Posts describing neighborhood characteristics or individuals embodying neighborhood characteristics were coded *neighborhood identity*. Gakirah describes a loss of neighborhood identity resulting from Lil B's death:

> @Tyauanassassin:Rip Lil b dey jst took da hood out da hood real Shyt 💯 💯

"Hood" is a common slang for neighborhood and at times may be connected to someone ascribing to the gang lifestyle. This tweets suggests that Lil B's individual identity is linked with neighborhood identity and gang lifestyle. Gakirah suggests that, by shooting Lil B, police severed Lil B's ties to the neighborhood and possibly the gang.

Gakirah's Twitter followers viewed her death as symptomatic of a larger community violence problem in Chicago and specifically Chicago's Southside. Some tweets term Chicago "Chiraq," comparing violence in Chicago to that of Iraq:

> RIP @TyquanAssassin. Chiraq Getting it Cracking Early This Year Unfortunately.

"Getting it cracking" implies community violence. This tweet suggests that among Gakirah's followers, violence might be part of everyday life in the community. Gakirah's death was an indication that violence in Chiraq started early that year.

Community. Posts coded as *pride* depicted community and kinship Gakirah felt for Lil B and fellow gang members. She expressed pride at the prospect of dying for people connected to her:

> Ion kno wat u do fo yo n***** but ima die fo mine 💯.

Here, "n*****" refers to fellow gang members. "ima die fo mine" and use of the hundred points symbol suggest Gakirah is willing to avenge Lil B's death and protect those around her, even if she risks losing her life.

Discussion and Conclusion

A Space to Cope and Make Meaning of Trauma

The results suggest that Gakirah and her Twitter network used Twitter as a space to respond to the death of a peer—a traumatic life event that can have physical, psychological, cognitive, emotional, and behavioral effects on adolescents (Balk, Zaengle, & Corr, 2011). Communication about praise, grief, sadness, aggression, changes in worldview, mistrust, increased awareness of one's surroundings, and feelings of revenge observed in this study are consistent with the responses of bereaved adolescents (Balk et al., 2011).

In particular, Gakirah's response to Lil B's death is consistent with the responses of adolescents whose friends were murdered. African American adolescent females between 16 and 19 years of age

report sadness, depressive symptoms, and traumatic grief (e.g., recurring thoughts) following a traumatic event (Johnson, 2010). In line with those findings, Gakirah's expression that "Dis Shyt Hurt more Dan a bullet" communicates painful feelings and contextualizes her emotional state. Physical responses like crying and shaking are common ways adolescents respond to a peer's death (Balk et al., 2011), and these responses were common among Gakirah's followers' who tweeted "body shaking" and "breaking tears." Gakirah's anger, sense of retaliation, awareness of her surroundings, and mistrust of others are also consistent with Johnson's (2010) findings that adolescent females experience aggression, perceptions of insecurity in their communities, distrust of others, and fear and caution in their everyday lives. Johnson (2010) also found that the loss of a friend diminished adolescents' sense of invincibility and perceptions of life as infinite. Changes in perceptions about life can be likened to Gakirah's perceptions of playing with "no aces" and being in a different "mind stage." These tweets provide some insight into Gakirah's meaning making—which refers to the process of finding meaning in life after significant life experiences like trauma or loss (Tavernier & Willoughby, 2012). Adolescents who have experienced the loss of a friend also report disappointment that "nobody's speakin' up" to identify the murderer or address delays in medical and police responses to the event they perceive to be motivated by racism, classism, and assumptions that the shooting resulted from the victim's involvement in criminal behavior (Johnson, 2010, p. 368). The perception that one should stand up for friends might underlie Gakirah's tweet, "Ion know wat u do for yo n*** but ima die fo mine." This tweet might also reflect enduring respect and honor that is a major aspect of gang culture, characterized by one's unwavering commitment to protect and defend members within their gang with whom they have a close relationship. Adolescent females engage in coping strategies to overcome the painful reality of a loss, including public strategies to mourn such as contributing to street shrines and wearing T-shirts to memorialize the deceased (Johnson, 2010). The current study suggests that Twitter may facilitate such collective, public mourning experiences. This platform may also help individuals hide intense feelings to avoid eliciting attention or reactions from others that might occur at funerals, vigils, or other memorial events in which one might express strong emotions publicly or "lose control" (Johnson, 2010, p. 367). Twitter might also facilitate interpersonal relationships between users at a time when being socially connected with peers can help adolescents cope with loss, especially when peers acknowledge adolescents' grief and offer empathy (Balk et al., 2011). In this regard, Twitter might be a useful tool in preventing withdrawal, avoidance, and feelings of isolation that can lead to maladaptive coping strategies.

Perceptions of Neighborhood and Community as a Response to Trauma

Gakirah's aggression and attitudes toward police by calling "WAR" might also be in response to the aggressive gang suppression strategies the police have been known to use to combat gangs and gun crime. For instance, the police have a history of using military-style equipment and tactics such as weaponry, armored vehicles, and helicopters (McCorkle & Miethe, 2002), a response that began when the government declared "war on gangs" in 1997 (Howell, 2010, p. 57). Gakirah's attitude toward police may also be associated with African American youths' experiences that involve routinely being denigrated by police and treated as suspects, regardless of delinquency in some instances (Brunson & Miller, 2006). Additionally, research with African American and Latino high school students in Chicago suggests that for both of these groups, being stopped and treated disrespectfully by officers negatively affects their perceptions of whether the police care about their neighborhoods and affects youth's willingness to assist the police. African American students who report being disrespected are significantly less likely to report respecting the police than youth who were respected. Furthermore, compared to Latinos, African Americans are more likely to report that the police had physically mistreated them (Lurigio, Greenleaf, & Flexon, 2009).

AQ2

Aggression, awareness of one's surroundings, and neighborhood identity depicted in Gakirah's tweets may also be forms of "street code." Street code refers to individuals' values, beliefs, and behavior about the extent to which it is justifiable or advantageous to use violence to reduce one's risk of victimization in disadvantaged, violent communities (Stewart, Schreck, & Simons, 2006). The street code includes use of physical force or aggression to teach someone not to disrespect you, using violence to get even when someone uses violence against you, letting others known how tough you are to prevent them from taking advantage of you, threating people in order to get them to treat you fairly, showing others you cannot be intimidated, and perceptions that people tend to respect a person that is tough and aggressive. While it may appear that adopting the street code may reduce the probability of victimization such as fights, gang violence, drug violence, robbery, homicide, and aggravated assaults, research with African American adolescents living in Iowa and Georgia suggests that adopting the street code may in fact increase risk for victimization (Stewart et al., 2006). Additionally, the effect of street code on violence is greater in neighborhoods where the street code is part of the culture and is endorsed widely by neighborhood residents (Stewart & Simons, 2010).

Along these lines, gang members tend to respond in aggressive, retaliatory ways to threats to their person, gang, and neighborhood. For instance, gang disputes tend to arise from a need to defend one-self or others; retaliation to avenge a previous attack or any other perceived or actual wrongdoing by the targeted party; and an attack on personal or gang identity, including accusations, insults, challenges, and claims to a particular territory or neighborhood (Howell, 2010).

Vernacular

The vernacular used in Gakirah's tweets are consistent with those used by African American youth. For instance, hood is typically used to refer to impoverished, inner-city neighborhoods where violence is prevalent (Xie, Osumare, & Ibrahim, 2007). Additionally, "realest" connotes authenticity to a group or culture, similar to the use of "keeping it real" (Xie et al., 2007, p. 457). "The realest nigga" has also been associated with African American men's and hip-hop artists' constructions of masculinity and their attempts to establish dominance or control over their social circumstances. In the context of hip-hop culture, "real" also tends to be synonymous with "aggressive" and "gang-sta" (Nichols, 2006, p. 57). Gakirah's use of king to praise Lil B is also consistent with the use of king by other gangs to convey praise and regard. For instance, "Latin Kings" is a name adopted by a Latino gang in Chicago starting in the 1940s. Like other gang names, Latin Kings is an attempt to create the impression of a large and powerful organization (W. B. Miller, 2001).

Gender

While gender was not the primary focus of this study, it is important to note Gakirah appears to counter traditional notions of females in gangs. Female gang members have traditionally been characterized as peripheral to male gang members as sexual and romantic interests (Petersen & Howell, 2013). They have also been described as less likely to take part in confrontations that involve shootings and be intended targets of gang retaliation or other violent attacks, compared to male gang members (J. Miller & Decker, 2001). In this case study, however, Gakirah appears to be a core member of the gang, where she engages in gang-related behavior like other male gang members and is an intended target of violence.

Research has tended to focus on the experiences of male gang members, leading researchers to call for the inclusion of females in gang research to understand the gendered experience of gang membership in social systems that have traditionally been patriarchal (Petersen & Howell, 2013). Gendered experience means that gender matters and can shape the experiences of gang-involved

AQ3

youth. For instance, female delinquency is associated with the composition of the gang. Girls tend to have a higher frequency of criminal involvement (e.g., personal and property offending) in gangs comprised of primarily males, compared to gangs comprised of both males and females and gangs comprised of primarily females (Petersen & Howell, 2013). Gakirah's membership and possible leadership in a primarily male gang may have influenced her gang-related activities including whom the gang targeted and their intentions for carrying out violent acts. Further, Gakirah's adoption of the street code is consistent with young African American women's adoption of the street code to establish an identity on the street, earn a reputation, acquire and maintain respect, and navigate dangerous neighborhoods (Brunson & Stewart, 2006).

Privacy Concerns

There is no established ethical practice standard on how to appraise the use of Twitter for researchers. Unlike other forms of social media in which someone has to be "friended" or "invited" to see posts, Twitter posts are by default public and people use Twitter knowing it is public communication.

Paradoxically, the public may never have known about Gakirah's story without the communication capabilities of social media. In the pre-Twitter era, she may have been a name in a back-page newspaper story or another tragic statistic. But Internet news stories, YouTube videos memorializing her life, and tweets from followers have published the details of her life. While alive, Gakirah controlled how her story was told. That ability to control personal information, rather than the strict nonpublication of that information, is the essence of privacy. Gakirah knew that she could retract or delete anything she posted to Twitter; the posts that she published indicated she intended her voice to be heard.

Limitations

The findings from this study should be considered in light of several limitations. First, the data represented in the study are limited in that they come from a single Twitter user who is African American, female, gang involved, and from Chicago. We did not examine the Twitter the communication of other youth living in similar conditions nor did we examine Twitter communication of youth who live in low-risk neighborhoods in and outside of Chicago. As such, the results from this study cannot be generalized to other Twitter users or individuals using other social media platforms, other African American youth, or Chicago youth more generally.

In addition, we only present data from within a 2-week time period following Gakirah's experience with the death of her best friend. While this approach allows us to examine Gakirah's approach to trauma more closely, it is unclear whether or not the communications were examined were typical or extreme cases. As such, we cannot make claims about Gakirah's Twitter communications before or after that time period. Moreover, we do not present Gakirah's full Twitter network with whom she communicated with and connected to on Twitter; Gakirah posted more than 27,000 tweets from the time that she joined Twitter in December 2011 to her death and had thousands of Twitter followers. A deeper look at Gakirah's Twitter network may help us understand the impact her communications had on others and the extent to which her network responded to trauma in similar ways. With these limitations in mind, our purposeful sample and approach provide an opportunity to look closely at how trauma and grief is communicated on Twitter to generate future directions for research.

Implications

The results can inform the integration of social media, particularly Twitter, with gang and violence reduction programs. Understanding youths' perspectives of gang and community violence is an

initial step in this direction. In this study, tweets made no mention of support from schools, religious organizations, agencies, or any other community group. The only public entity named was the police and they were not described as helpful or as providing security. Other communities, however, have attempted to find ways out of the gang violence cycle.

The Little Village Gang Project was a comprehensive, community-based program that began in the early 90s that aimed to reduce gang violence in communities in Chicago. One of the strengths of this project was that it valued youths' perspectives about gang-related violence and included youth in planning sessions to address violence (Spergel et al., 2002). Additionally, the project considered youth as change agents capable of supporting youth experiencing violence. Community outreach workers, comprised of youth from the community, including former gang members, provided youth with counseling, advising, and access to resources, depending on youths' needs. These needs ranged from help dealing with pressures from gangs, homelessness, parental conflict, depression, substance use, physical injuries, and hospitalization (Spergel et al., 2002).

More recently, community-based organizations such as Homeboy Industries appear to be increasing their online and social media presence over time. Homebody Industries is a nonprofit based in East Los Angeles, CA, that serves high-risk and former gang members with a range of services and programs including educational and employment services, case management, legal services, mental health services, and a solar panel installation training and certification program (Homebody Industries, 2015c). Homebody Industries has garnered considerable attention from the academic community (Leap, Franke, Christie, & Bonis, 2011), and the National Gang Center, a division of the U.S. Department of Justice's Office of Juvenile Justice and Delinquency Prevention and the Bureau of Justice Assistance (National Gang Center, 2014), for its innovative approach to working with high-risk and former gang members. Most recently, Homeboy Industries was awarded over one million dollars in funding from the U.S. Department of Labor to develop and expand employment opportunities for youth and adults involved in the criminal justice system (U.S. Department of Labor, 2015). Homeboy Industries is active on Twitter with over 4,000 followers and its YouTube channel has over 100,000 likes (Homebody Industries, 2015a, 2015b). Their social media presence raises interesting questions such as can social media be used by community-based organizations to reach out to high-risk youth? That task will not be easy. Gakirah was adamant in her tweets to trust no one in their surroundings, referring to their community, while other tweets equated the violence in Chicago to Iraq. However, members of her gang were her community and something for which she would die to protect. Examination of these tweets has provided insights on the rich communication that is used to convey their perspectives. If some means can be discovered to use this means of communication to broker a trust between gangs and the larger community, then the possibility for change might exist.

Future Research

Results of the present study indicate that social network analysis could be used to analyze the social networks of Gakirah's followers via their tweets and retweets. Each retweet would be a node representing an individual in the network; subsequent retweets would reflect network ties. The number of ties would capture the strength, or influence, of that individual. A social network analysis approach could further our understanding of the influence that Twitter might have on youth's responses to community violence and trauma.

Authors' Note

Declaration of Conflicting Interests

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References

Alderfer, M. A., Navsaria, N., & Kazak, A. E. (2009). Family functioning and posttraumatic stress disorder in adolescent survivors of childhood cancer. *Journal of Family Psychology, 23*, 717–725. doi:10.1037/a0015996

Alim, H. S. (2004). Hip hop nation language. In E. Finegan & J. Rickford (Eds.). *Language in the USA: Themes for the 21st Century*. Cambridge: Cambridge University Press.

Allen, D. (2013). Walk on the wild side: Gang members need help too. *Mental Health Practice, 16*, 6–7.

Balk, D. E., Zaengle, D., & Corr, C. A. (2011). Strengthening grief support for adolescents coping with a peer's death. *School Psychology International, 32*, 144–162. doi:10.1177/0143034311400826

Breslau, N., Wilcox, H. C., Storr, C. L., Lucia, V. C., & Anthony, J. C. (2004). Trauma exposure and posttraumatic stress disorder: A study of youths in urban America. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 81*, 530–544. doi:10.1093/jurban/jth138

Brubaker, J. R., Hayes, G. R., & Dourish, P. (2013). Beyond the grave: Facebook as a site for the expansion of death and mourning. *Information Society, 29*, 152–163. doi:10.1080/01972243.2013.777300

Bruner, J. (2013, December 3). Tweets loud and quiet. *O'Reilly*. Retrieved from http://radar.oreilly.com/2013/12/tweets-loud-and-quiet.html

Brunson, R. K., & Miller, J. (2006). Gender, race, and urban policing. The experience of African American youths. *Gender and Society, 20*, 531–552.

Brunson, R. K., & Stewart, E. A. (2006). Young African-American women, the street code, and violence: An exploratory analysis. *Journal of Crime and Justice, 29*, 1–19.

Chen, W. (2010). Exposure to community violence and adolescents' internalizing behaviors among African American and Asian American adolescents. *Journal of Youth and Adolescence, 39*, 403–413. doi:10.1007/s10964-009-9427-7

Chicago Police Department. (2011). *2011 Chicago murder analysis*. Chicago , IL: Research and Development Division, Chicago Police Department.

Clettenberg, S., Gentry, J., Held, M., & Mock, L. A. (2011). Traumatic loss and natural disaster: A case study of a school-based response to Hurricanes Katrina and Rita. *School Psychology International, 32*, 553–566. doi: 10.1177/0143034311402928

Cohen, J. A., Bukstein, O., Walter, H., Benson, R. S., Chrisman, A., Farchione, T. R., ... Medicus, J. (2010). Practice parameter for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*, 414–430. doi:10.1016/j.jaac.2009.12.020

David-Ferdon, C., & Simon, T. R. (2014). *Preventing youth violence: Opportunities for action*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Davis, R. G., Ressler, K. J., Schwartz, A. C., Stephens, K. J., & Bradley, R. G. (2008). Treatment barriers for low-income, urban African Americans with undiagnosed posttraumatic stress disorder. *Journal of Traumatic Stress, 21*, 218–222.

Décary-Hétu, D., & Morselli, C. (2011). Gang presence in social network sites. *International Journal of Cyber Criminology, 5*, 876–890.

Desanctis, G., & Poole, M. S. (1994). Capturing the complexity in advanced technology use: Adaptive structuration theory. *Organization Science, 5*, 132.

Ford, H. (2014). Big data and small: Collaborations between ethnographers and data scientists. *Big Data &Society, 1,* 1–3.

Fowler, P. J., Tompsett, C. J., Braciszewski, J. M., Jacques-Tiura, A. J., & Baltes, B. B. (2009). Community violence meta-analysis on the effect of exposure and mental health outcomes of children and adolescents. *Developmental Psychopathology, 21,* 227–259.

Geofeedia, (2012). *Detroit crime commission: Securing the 2012 world series through real-time location based social media monitoring.* Case study. Chicago, IL: Author.

Glessmann, C., Krisberg, B., & Marchionna, S. (2009). *Youth in gangs: Who is at risk?* Oakland, CA: National Council on Crime and Delinquency. Retrieved from http://www.nccdglobal.org/sites/default/files/publication_pdf/focus-youth-in-gangs.pdf

Homebody Industries. (2015a). *Facebook page.* Retrieved September 28, 2015, from https://www.facebook.com/HomeboyIndustries

Homebody Industries. (2015b). *What we do.* Retrieved September 28, 2015, from http://www.homeboyindustries.org/

Homebody Industries. (2015c). *Twitter page.* Retrieved September 28, 2015, from https://twitter.com/HomeboyInd?ref_src=twsrc%5Egoogle%7Ctwcamp%5Eserp%7Ctwgr%5Eauthor

Horowitz, K., McKay, M., & Marshall, R. (2005). Community violence and urban families: Experiences, effects, and directions for intervention. *American Journal of Orthopsychiatry, 75,* 456–368. doi:10.1037/0002-9432.75.3.356

Howell, J. C. (2010a). Lessons learned from gang program evaluations. In R. J. Chaskin (Eds.), *Youth gangs and community intervention. Research, practice, and evidence* (pp. 51–75). New York, NY: Columbia University Press.

Howell, J. C. (2010b). Urban gangs and violence. In J. Buddy & C. Howell (Eds.). *Gangs in America's communities* (pp. 197–224). Los Angeles, CA: Sage.

Hutchings, T. (2012). Wiring death: Dying, grieving and remembering on the internet. In D. J. Davies & C. Park (Eds.), *Emotion, identity and death: Mortality across disciplines* (pp. 43–58). Farnham, England: Ashgate.

Jenkins, E., Wang, E., & Turner, L. (2009). Traumatic events involving friends and family members in a sample of African American early adolescents. *American Journal of Orthopsychiatry, 79,* 398–406. doi:10.1037/a0016659

Johnson, C. M. (2010). When African American teen girls' friends are murdered: A qualitative study of bereavement, coping and psychosocial consequences. *Families in Society, 91,* 364–370. doi:10.1606/1044-3894.4042

Kerig, P. K., Wainryb, C., Twali, M. S., & Chaplo, S. D. (2013). America's child soldiers: Toward a research agenda for studying gang-involved youth in the United States. *Journal of Aggression, Maltreatment, and Trauma, 22,* 773–795.

Leap, J., Franke, T. M., Christie, C. A., & Bonis, S. (2011). Nothing stops a bullet like a job: Homeboy industries gang prevention and intervention in Los Angeles. In J. S. Hoffman & L. Knox (Eds.), *Beyond suppression: Global perspectives on youth violence* (pp. 127–138). Santa Barbara, CA: Praeger.

Lingel, J. (2013). The digital remains: Social media and practices of online grief. *The Information Society, 29,* 190–195. doi:10.1080/01972243.2013.777311

Lowe, S. R., Galea, S., Uddin, M., & Koenen, K. C. (2014). Trajectories of posttraumatic stress among urban residents. *American Journal of Community Psychology, 53,* 159–172. doi:10.1007/s10464-014-9634-6

Lurigio, A. J., Greenleaf, R. G., & Flexon, J. L. (2009). The effects of race on relationships with the police: A survey of African American and Latino youth in Chicago. *Western Criminology Review, 10,* 29–41.

McCorkle, R. C., & Miethe, T. D. (2002). *Panic. The social construction of the street gang problem.* Upper Saddle River, NJ: Prentice Hall.

Meek, A. (2010). *Trauma and media. Theories, histories, and images.* New York, NY: Routledge.

Miller, J., & Decker, S. H. (2001). Young women and gang violence: Gender, street offending, and violent victimization in gangs. *Justice Quarterly, 18,* 115–140. doi:10.1080/07418820100094841

Miller, W. B. (2001). *The growth of youth gang problems in the United States: 1970-98*. United Sates Department of Justice, Office of Juvenile Justice and Delinquency Prevention. Retrieved May 29, 2015, from https://www-ncjrs-gov.proxy.lib.umich.edu/pdffiles1/ojjdp/181868-1.pdf

Mitchell, L. M., Stephenson, P. H., Cadell, S., & Macdonald, M. E. (2012). Death and grief on-line: Virtual memorialization and changing concepts of childhood death and parental bereavement on the internet. *Health Sociology Review. 21*, 413–431.

Moylan, C. A., Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Russo, M. J. (2010). The effects of child abuse and exposure to domestic violence on adolescent internalizing and externalizing behavior problems. *Journal of Family Violence, 25*, 53–63. doi:10.1007/s10896-009-9269-9

Murthy, D. (2013). *Twitter. Social communication in the Twitter age. Digital media and society series*. Cambridge, England: Polity.

National Gang Center. (2014a). *Bonds of compassion*. Retrieved September 28, 2015, from https://www.natio nalgangcenter.gov/Content/Newsletters/NGC-Newsletter-2014-Spring-Summer.pdf

National Gang Center. (2014b). *Frequently asked questions about gangs*. Retrieved from https://www.national gangcenter.gov/About/FAQ

Nichols, J. (2006). *The realist nigga: Constructions of Black masculinity within rap music* (Doctoral dissertation). Digital Repository at the University of Maryland. Retrieved May 31, 2005, from http://drum.lib.umd. edu/bitstream/1903/3921/1/umi-umd-3772.pdf

Papachristos, A. V. (2013). *48 years of crime in Chicago: A descriptive analysis of serious crime trends from 1965 to 2013* (ISPS working paper no. ISPS13-023). New Haven, CT: Yale Institute for Social and Policy Studies.

Papachristos, A. V., Braga, A. A., & Hureau, D. M. (2012). Social networks and the risk of gunshot injury. *Journal of Urban Health, 89*, 992–1003.

Patton, D. U., Eschmann, R. D., & Butler, D. A. (2013). Internet banging: New trends in social media, gang violence, masculinity and hip hop. *Computers in Human Behavior, 29*, A54–A59. doi:10.1016/j.chb. 2012.12.035

Patton, D. U., Hong, J. S., Ranney, M., Patel, S., Kelley, C., Eschmann, R., & Washington, T. (2014). Social media as a vector for youth violence: A review of the literature. *Computers in Human Behavior, 35*, 548–553. doi:10.1016/j.chb.2014.02.043

Patton, D. U., Woolley, M. E., & Hong, J. S. (2012). Exposure to violence, student fear, and low academic achievement: African American males in the critical transition to high school. *Children and Youth Services Review, 34*, 388–395. doi:10.1016/j.childyouth.2011.11.009

Paxton, K. C., Robinson, W. L., Shah, S., & Schoeny, M. E. (2004). Psychological distress for African American adolescent males: Exposure to community violence and social support as factors. *Child Psychiatry and Human Development, 34*, 281–295.

Petersen, R. D., & Howell, J. C. (2013). Program approaches for girls in gangs: Female specific or gender neutral? *Criminal Justice Review, 38*, 491–509. doi:10.1177/0734016813510935

Pynoos, R. S., Fairbank, J. A., Steinberg, A. M., Amaya-Jackson, L., Gerrity, E., Mount, M. L., & Maze, J. (2008). The national child traumatic stress network: Collaborating to improve the standard of care. *Professional Psychology: Research and Practice, 39*, 389–395.

Rich, J., & Grey, C. (2005). Pathways to recurrent trauma for young black men: traumatic stress, substance use and the "code of the street." *American Journal of Public Health, 95*, 816–824.

Runions, K., Shapka, J. D., Dooley, J., & Modecki, K. (2013). Cyber-aggression and victimization and social information processing: Integrating the medium and the message. *Psychology of Violence, 3*, 9–26. doi:10. 1037/a0030511

Smith, A. (2014). *African Americans and technology use. A demographic portrait*. Pew Research Center. Retrieved May 29, 2015, from http://www.pewinternet.org/2014/01/06/african-americans-and-technology-use/

Spergel, I., Wa, J. M., Choi, S. E., Grossman, S., Jacob, A., Spergel, A., & Barrios, E. M. (2002). *Evaluation of the gang violence reduction in Little Village. Final Report Summary*. Chicago, Il: School of Social Service Administration, The University of Chicago.

Stewart, E. A., Schreck, C. J., & Simons, R. L. (2006). "I ain't gonna let no one disrespect me": Does the code of the street reduce or increase violent victimization among African American adolescents? *Journal of Research in Crime and Delinquency, 43*, 427–458. doi:10.1177/0022427806292338

Stewart, E. A., & Simons, R. L. (2010). Race, code of the street, and violent delinquency: A multilevel investigation of neighborhood street culture and individual norms of violence. *Criminology, 48*, 569–605.

Swaine, J. (2014). Chicago gang shootings go on as Mayor Emanuel boasts crime at 'record low.' The Guardian. Retrieved December 2, 2014, from http://www.theguardian.com/world/2014/apr/19/chicago-deadly-shooting-guns-rahm-emanuel-2014

Tavernier, R., & Willoughby, T. (2012). Adolescent turning points: The association between meaning-making and psychological well-being. *Developmental Psychology, 48*, 1058–1068. doi:10.1037/a0026326

U.S. Department of Labor. (2015). *News release. $59 M in grants will improve employment opportunities for formerly incarcerated adults and youth.* Retrieved September 28, 2015, from http://www.dol.gov/opa/media/press/eta/ETA20151264.htm

Voisin, D. R., Bird, J. D. P., Hardestry, M., & Shiu, C. S. (2011). African American adolescents living and coping with community violence on Chicago's Southside. *Journal of Interpersonal Violence, 26*, 1–16. doi:10.1177/0886260510383029

Walter, T., Hourizi, R., Moncur, W., & Pitsillides, S. (2011). Does the internet change how we die and mourn? Overview and analysis. *OMEGA—Journal of Death and Dying, 64*, 275–302. doi:http://dx.doi.org/10.2190/OM.64.4.a

Xie, P. F., Osumare, H., & Ibrahim, A. (2007). Gazing the hood: Hip-hop as tourism attraction. *Tourism Management, 28*, 452–460.

Zinzow, H. M., Ruggiero, K. J., Resnick, H., Hanson, R., Smith, D., Saunders, B., & Kilpatrick, D. (2009). Prevalence and mental health correlates of witnessed parental and community violence in a national sample of adolescents. *Journal of Child Psychology and Psychiatry, 50*, 441–450. doi:10.1111/j.1469-7610.2008.02004.x

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