Diversity, Disclosure and their relationship to cyberbullying

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Abstract: Researchers have previously explored cyberbullying from a variety of perspectives: the psychosocial characteristics of bullies and their victims, types of bullying acts, and psychological impacts. However, very few researchers have explored the role of bullies' and victims' race/ethnicity in relation to self-disclosures or cyberbullying experiences. In our prior work, we found that youths of color report lower levels of cyber-victimization than their white peers; indeed, black and Hispanic youth are more likely to be cyber-bullies and offline bullies than victims of bullying. In this article, we use an online survey to explore the relationship between race/ethnicity, disclosure, cyberbullying and race and gender. We found that white youth disclose more information than non-whites, and there a significant relationship between disclosure and cyberbullying. Specifically, Black and Hispanic youths self-disclose less and are cyberbullied less than their White peers.

Keywords: cyberbullying; cybercrime; self-disclosure; racial differences

1. Introduction

Cyberbullying is a relatively new phenomenon, a concept with roots in traditional bullying and other interpersonal violence that capitalizes on the power imbalance between victim and bully [1,2]. Cyberbullying has been defined as the use of social media, email, cell phones, text messages, and Internet sites to threaten, harass, embarrass, or socially exclude someone [3-6]. Willard classifies eight types of cyberbullying behaviors that reflect escalating intensity of cyberbullying, ranging from brief flame wars to online death threats [7].

Cyberbullying research is driven primarily by the now-familiar statistics about cyberbullying prevalence. As of 2013, nearly 20% of youths in grades 9-12 in the US reported being traditionally bullied and almost 15% reported being cyberbullied; recent reports, however, estimate these numbers to be slightly higher [8-10]. As a result of bullying victimization, many of these teens exhibit a variety of behavioral and psychological effects, from becoming bullies themselves (i.e., bully-victims), to poor academic performance, depression and suicidal ideation [7, 11-12].

The anonymity and audience afforded by social media and the Internet also contribute to the power imbalance between cyberbullies and their victims. Cyberbullies can remain anonymous while attacking their victims and they are able to post these messages to a wide audience – much larger than the schoolyard [2,13-16]. For these reasons, perpetrators may feel reduced responsibility and accountability when online compared with face-to-face situations [16-18].

However, this cyberbullying research comes with some debate. First, while bullies are often defined as the perpetrators of cyberbullying acts and their targets are defined as victims, the fluid nature of adolescent friendships and the dynamic nature of conflict make these definitions a bit murky. Bullies are sometimes victims of bullying themselves (or friends of victims), potentially rendering their bullying acts as a coping mechanism for their own abuse (or defense of their friends). This circumstance gave rise to the "bully-victim" concept in cyberbullying studies [7,19]. Additionally, the fact that bullying incidents occur among youths who know each other challenges

the concept of "anonymity." It is frequently the knowledge of their peers' personal information that is exploited in bullying acts.

Second, youths rebel against some of these labels. New research suggests that the rhetoric adults use to talk about bullying may not align with the language teens use to describe the same kinds of behavior. In their research, Marwick and boyd observed that the term "bullying" suggests a victim narrative and a level of immaturity that some teens do not wish to identify with, even if they have experienced behaviors that adults may label as such [20]. There may also be cultural differences in minority youths' conceptualization of cyberbullying language [21].

Lenhart, et al conducted one of the few studies that directly asked youths about malicious online behavior and disaggregated the findings by race [22]. In 2011, a Pew survey on Kindness and Cruelty on Social Network sites reported notable racial disparities, with 72% of white teens and only 56% of black teens indicating that the way peers treat one another on social media online is "Mostly Kind." Similarly more black teens (27%) reported that they had had an experience on social media that had gotten them in trouble with their parents than white teens (11%), and that they more frequently see online cruelty (17% of blacks vs. 11% of the white youths and 4% of Latinos).

According to the PEW Research Center, 34% of black teens and 32% of Hispanic teens are online almost constantly; only 19% of white teens report this much usage [23,24]. And there are differences in where youth spend their time online, too. Seventy-one percent of all youth report using Facebook regularly, but black teens report using Instagram in significantly higher percentages (64%) than their white peers (50%). Thirty-three percent of all youth use Twitter, but 45% of black teens prefer this site compared to 31% of Hispanic youth and 30% of white youth [23]. Eighty-nine percent of youths surveyed by Pew report using at least one social media site and report that they are increasingly forming friendships online; more black teens than white or Hispanic teens are meeting friends on social media and video sharing sites [23]. Black and Hispanic youths also report levels of social media engagement that are on par with their White peers, with the exceptions of Twitter and Google+. The most marked difference, however, is in technology ownership with 85% of black youths owning smartphones, compared to 71% of white and Hispanic youths [23]; however, black teens are significantly less likely (40%) than their white and Hispanic peers (61% and 62%, respectively) to use their smartphones to communicate with friends on a daily basis [23].

Youths today regularly disclose personal information to friends and strangers in their online social networks [25-27]. These young people find their online connections beneficial, improving their relationships with friends and affording them increased social capital while reducing feelings of loneliness [28-31]. Recent privacy research has shown that age, gender, and relationship status are related to the disclosure of highly personal information [32-33]. Youths find their online connections beneficial, improving their relationships with friends and affording them increased social capital while reducing feelings of loneliness [28-31]. Chiou found that youths were willing to self-disclose sexual information, regardless of the intimacy of the offline relationship they shared [34]. Some youths consider their online relationships to be as real as face-to-face relationships and frequently befriend strangers [26]. Other studies have shown that age, gender, and relationship status are also related to the disclosure of highly personal information [32,33]. Unfortunately, the personal disclosures that enable youths to develop and maintain social networks may also be used against them by cyberbullies and cyberpredators [35,36].

Youths are willing to self-disclose and make themselves vulnerable to friends as a way to demonstrate trust in that friend [37]. Most research on self-disclosure explores how these disclosures and impressions are managed [38,39]. Some research has found that anonymity and gender difference play a role in the willingness to disclose sexual information for female adolescents; male adolescents, however, will reveal sexual information whether or not they are anonymous [34]. Age, gender, and relationship status are also related to the disclosure of highly personal information [32,33]. For the most part, these online personal disclosures help to support relationships that are positive and affirming. Unfortunately, such personal disclosures can change from socially constructive to destructive, from innocent chats to cyberbullying [7,40].

In our prior work, we found that youths of color report lower levels of cyber-victimization than their white peers; indeed, black and Hispanic youth are more likely to be cyber-bullies and offline bullies than victims of bullying. Black and Hispanic teens report levels of cyberbullying victimization similar to the national average (from 16% to 30%); however, black and Hispanic rates are at the lower range of national averages [6,21,41,42]. Our current research examines the relationship between self-disclosure and cyberbullying for youths of different races and ethnicities. We pose the following research questions:

Research question 1: What is the relationship between race/ethnicity and cyberbullying?

Research question 2: What is the relationship between race/ethnicity and self-disclosing behaviors?

Research question 3: What is the relationship between self-disclosing behaviors and cyberbullying?

2. Materials and Methods[1]

To explore these research questions, we utilized an online survey that included questions about cyberbullying experiences and perceptions, adapted from Willard's cyberbullying survey [7] and questions about self-disclosure attitudes and habits were adapted from Jourard's self-disclosure survey [43,44]. We also collected standard demographic information about race, gender, and age. Facebook advertising was used to direct youth to the survey, and respondents were entered into a drawing for a gift card to thank them for their participation. Participant consent was required to enter the survey system, and additional parent consent was required for minors.

Within the survey, we collected information about cyberbullying experience by asking whether or not the respondent or the respondent's friends had ever been cyberbullied or had ever cyberbullied anyone else. Perception items asked respondents to estimate: 1) the seriousness of the cyberbullying problem in our society, 2) the frequency of different racial groups' cyber-victimization, 3) the frequency of different genders' cyber-victimization, and 4) to characterize hypothetical scenarios as bullying or not.

Self-disclosure habits were collected by adapting Jourard's original 60-item self-disclosure survey, updating the language and deleting items that were not relevant to youth (e.g., items about spouses, taxes, etc.) The instrument was initially developed by Jourard and Lasakow [44] to assess self-disclosure and concealment in an individual's relationships with friends, family and self. The revised version of the survey is more appropriate for youth and contained 30 items measuring the respondent's willingness to disclose feelings about one's appearance, personality, and interests and preferences to parents, friends, romantic partners, online people, or no one at all. These options presented 4 possible sharing scenarios. To calculate the disclosure score, we assigned 1 point for each sharing option identified, and 0 points if participant did not report sharing with one of these target types. When respondents selected the "none" option, the entire item was scored as 0 to avoid contradictory data; "shared with others" and "none" are mutually exclusive, therefore these responses nullified each other. Thus, each of the 30 items received a score from 0 to 4. Participants' responses for each item were then summed to create a scale that ranged from 0 (non-discloser) to 120 (high-discloser). Scores from our respondents ranged from 0 to 104, and were then summarized by race, gender, and cyberbullying history.

There were 221 total responses. Seventy-three surveys were omitted because they were incomplete, leaving a total of 148 completed surveys for this analysis. Participants ranged in age from 10 to 19 and older, with a median age of 15 years old (see Table 1). The respondents were predominantly female (Table 2), and the race/ethnicity of respondents is summarized in Table 3.

Table 1. Age summary for survey respondents

Age	Count	Percentage (%)
10-12	9	6.1
13-15	82	55.4
16-18	42	28.3
19&older	15	10.1

Table 2. Gender Summary for survey respondents

Gender	Count	Percentage (%)
Female	96	64.9
Male	42	28.4
Other	10	6.8

Table 3. Race/Ethnicity Summary for Survey Respondents

Race/Ethnicity[1]	Count	Percentage (%)
White/Caucasian	78	45.1
Hispanic	40	23.1
Black/African American	36	20.8
Asian	7	4.0
Other	12	6.9

[1] Respondents could choose multiple categories.

3. Results

This section presents the findings for each of our three research questions.

3.1. What is the relationship between race/ethnicity and cyberbullying? (RQ1)

Respondents were asked a series of questions about their personal experiences with cyberbullying. Over 47% of respondents reported being cyberbullied, and 66.2% reporting that they have friends who have been cyberbullied. Interestingly, while 76.4% reported never cyberbullying anyone, 44.6% of respondents reported that they have friends who have cyberbullied other people. Forty-eight percent of Black and White youths report being cyberbullied. Hispanic youths report the lowest rates of being cyberbullied and also have the lowest percentage of friends that were cyberbullied (see Table 4). These findings suggest that Black and Hispanic youths experience cyberbullying at rates similar to those of their White counterparts, but differently from each other.

3.2. What is the relationship between race/ethnicity and self-disclosing behaviors? (RQ2)

Respondents were queried about their self-disclosure practices, and several patterns emerged. As seen in Table 5, Asian respondents reported disclosing personal information more often (66.5), on average, than other youths. Blacks and Hispanic youths disclosed least often, 36.9 and 36.6, respectively. Of particular interest to this study, Black and Hispanic respondents disclosed less online (3.1 and 4.4 respectively) than White respondents (5.8).

Table 4. Cyberbullying Experience Summary by Race

Race/Ethnicity[1]	% Reporting being Cyberbullied	% Reporting Cyberbullying Others	% Reporting that Friends have been Cyberbullied	% Reporting that Friends Cyberbullied Others

Asian (n=2)	50.0	100.0	50.0	100.0
Black/African American (n=25)	48.0	12.0	60.0	52.0
Hispanic (n=31)	32.3	16.1	51.6	35.5
Other (n=8)	75.0	0.0	100.0	62.5
Two or more (n=18)	55.6	22.2	72.2	44.4
White (n=64)	48.4	12.5	70.3	42.2
All (n=148)	**47.3**	**14.9**	**66.2**	**44.6**

[1] Respondents who chose multiple races are listed as "Two or more"

Table 5. Disclosure Score Relationship Summary by Race (min=0, max = 120)

Race/Ethnicity[1]	Average Disclosure Parent	Average Disclosure Friend	Average Disclosure Romantic Partner	Average Disclosure Online Friend	Average Disclosure No One	Average Disclosure Total
Asian	16.0	24.0	14.0	12.5	4.5	66.5
Black/African American	11.0	15.7	8.1	3.1	8.7	36.9
Hispanic	12.6	15.6	5.6	4.4	9.5	36.6
Other	10.9	17.6	15.4	10.0	5.3	53.8
Two or more	11.9	11.7	8.6	5.6	10.3	36.4
White	14.8	17.6	9.8	5.8	7.0	46.7
All	**13.1**	**16.2**	**8.8**	**5.3**	**8.1**	**42.3**

[1] Respondents who chose multiple races are listed as "Two or more"

Table 6. Disclosure Score Type Summary by Race (min=0, max = 120)

Race/Ethnicity[1]	Average Tastes and Interest Disclosure	Average Personality Disclosure	Average Body Disclosure	Average Disclosure Total
Asian	20.5	22.0	24.0	66.5
Black/African American	16.8	11.9	8.3	36.9
Hispanic	17.2	11.8	7.6	36.6
Other	25.0	16.3	12.5	53.8
Two or more	16.5	10.9	9.0	36.4
White	20.5	13.8	12.4	46.7
All	**18.9**	**13.0**	**10.5**	**42.3**

[1] Respondents who chose multiple races are listed as "Two or more"

When disclosing personal information, Asian respondents tended to disclose more (66.5) than other respondents, and to disclose more of their feelings about their bodies (24.0) than their interests or personalities, 20.5 and 22.0, respectively (see Table 6). Hispanic respondents were least likely of all respondents to disclose feelings about their bodies (7.6), while respondents who identified racially as "other" were most likely to disclose and share their personal tastes and interests (25.0). Therefore, in

answer to research question #2, youths of color and other non-White respondents disclose personal information differently than White respondents.

3.3. What is the relationship between self-disclosing behaviors and cyberbullying? (RQ3)

We analyzed the disclosure patterns of respondents who reported being cyberbullied and respondents who reported no cybervictimization. Respondents who have been cyberbullied reported higher disclosure means than non-cybervictims.

Table 7. Disclosure Score Summary by Cyberbullying History (min=0, max = 120)

Cyberbullying History	Average Disclosure Total
Was Cyberbullied	47.9
Was not Cyberbulllied	35.1
Not sure	44.3
All	**42.3**

Statistical testing was done to determine if there were racial differences related to disclosure, and to determine the relationship between being cyberbullied and disclosure. We used a Two Sample two-tailed t-test, and checked for level of significance. There are significant differences ($P < .05$) between the way participants who identified as Whites (n=64) disclosure, when compared to Blacks (n=25), Hispanics (n=31) and all non-whites (n=84). Furthermore, there are significant differences ($P<.005$) in disclosure between those who reported having been cyberbullied (n=70) and those who have not been cyberbullied (n=59).

4. Discussion

Youths today live parallel lives online and off, regularly disclosing personal information to build and maintain relationships with family, friends, and acquaintances. Unfortunately, these youths' self-disclosures can be used against them by friends when their relationships sour, turning former friends into bullies, victims, and bully victims.

Our findings show that those youths who report lower self-disclosure rates also report fewer cyberbullying experiences, suggesting some intriguing potential interventions. First, Internet education and safety programs urge youths not to disclose personal information to strangers online [45]; these same warnings could be broadened to include youths' friends and peers. However, there may be some resistance from youths to this type of intervention, given that some youths consider their online relationships to be as real as face-to-face relationships [26,27,33,34,46].

Second, some youths may be more reserved online *because* they were bullied in the past, suggesting their lower self-disclosure rates are actually responses to cyberbullying. Previous research examining the psychological impacts of cybervictimization has found that victims tend to exhibit behaviors of withdrawal and isolation [7,11,12].

Finally, there are clear racial/ethnic differences in self-disclosure behaviors, with White youths disclosing more types of personal information to more people, online and offline, than non-White youths. As noted earlier, there is little previous research exploring racial differences in cyberbullying and the studies that do include demographic data suffer from low numbers of minority respondents [6,11,12,13].

PEW data offers some potential insights into these differing perceptions between Blacks, Hispanics, and Whites of cyberbullying. Lenhart, et al was one of the few studies that directly asked youths about malicious online behavior and disaggregated the findings by race. In 2011, a Pew survey on Kindness and Cruelty on Social Network sites reported notable racial disparities, with 72% of white teens and only 56% of black teens indicating that the way peers treat one another on social

media online is "Mostly Kind."[22] In other words, adolescents may see similar exchanges online, but they are interpreting them differently.

Additionally, Black and Hispanic youths prefer using Twitter and Instagram to Facebook [22]. Although all three technologies are defined as social media platforms, there are distinct differences between their levels and types of engagement. While Facebook allows for extended interactions, photos and videos, and long public messages between and among "friends," Instagram and Twitter are more one-directional sites, where users tend to post images and messages as "announcements" for sharing and comment. There is little opportunity for extended public exchanges on these sites, which minimizes opportunities for extended self-disclosures, which in turn, may minimize some (not all) potential bullying.

5. Conclusions

There is clearly more work still to be done by researchers, educators and advocates in the fight against cyberbullying. Our research finding that minimizing self-disclosures is related to fewer cyberbullying experiences for Black and Hispanic youths may provide an additional tool for youths looking to protect themselves from potential bullies. And this tool, ironically, comes from youths who are frequently under-reported in cyberbullying research. Future research should explore more qualitative and quantitative dimensions of racial and ethnic differences in cyberbullying experiences and their potential role in developing cyber-resilience.

Author Contributions: April Edwards and Lynne Edwards conceived the study, found and revised the survey instrument, conducted, analyzed, and wrote up the study.

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