

Exploring Social Media Rumination: Associations With Bullying, Cyberbullying, and Distress

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Abstract

In this study, we examined students' perceptions of peer aggression occurring within their school environment and how these perceptions are interconnected with both social media rumination and distress. Social media usage is associated with a range of negative mental health and interpersonal outcomes for adolescents. Social media use can increase youth's vulnerability to peer victimization and psychosocial difficulties. In addition, ruminating when sad or stressed has been linked to elevated distress for youth experiencing peer aggression. Yet rumination specifically regarding social media activities has not been investigated in relation to peer aggression and distress, nor has the degree to which students perceive peer aggression occurring at school been included in these investigations. Participants were 169 high school students (age, $M = 15.89$, $SD = .87$), largely identifying as Black/African American and female, who completed surveys as part of a larger program working with at-risk youth in a Midwestern, urban city. We found that social media

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rumination mediated the relationship between perceptions of bullying at school and feelings of distress, but mediation was not supported when examining student perceptions of cyberbullying frequency and youth distress. In the case of bullying, rumination may disrupt other forms of coping—such as positive cognitive distractions—that would ameliorate symptoms of distress. Furthermore, we present evidence that social media rumination is experienced by, and has different influences on, youth. We highlight the need for differentiated intervention and prevention efforts regarding these two forms of peer aggression. Future research may be justified to examine these possibilities.

Keywords

bullying, cyberbullying, social media, rumination, mediation

Social Media Rumination: Associations with Bullying, Cyberbullying, and Distress

Social media has become a mainstay in the lives of youth for communication, expression, and networking—with recent findings indicating that the majority of youth access online social media platforms “almost constantly” (Anderson & Jiang, 2018). Although there are many positives to social media use such as rapid knowledge acquisition and an ease of communication, for some youth such use is associated with psychosocial difficulties and a heightened risk of experiencing peer aggression (Vogel et al., 2014). Researchers point to the possibility that youth who increasingly ruminate on their social media experiences have a greater vulnerability to negative mental health outcomes associated with increased social media use (Lannin et al., in press). Furthermore, youth may experience peer aggression as they navigate social media, and their response to such interactions may determine whether they recover quickly or find their mental health eroding (Response Styles Theory; Nolen-Hoeksema, 1991). Youth who have experienced peer victimization engage in greater rumination in response to sadness or social stress, and this has been linked to worse mental health (Feinstein et al., 2014; Monti et al., 2017). Given youths’ pervasive social media usage, it may be important to examine rumination that specifically centers around youths’ social media posts, related situational factors about their posts, and consequences of those posts. Therefore, the purpose of our current study was to investigate the relationship between perceptions of peer aggression among adolescents, social media rumination, and psychological distress.

Peer Aggression

We examined two forms of peer aggression—bullying and cyberbullying—in the current study. The first form of peer aggression, bullying, is often considered the more “traditional” form of peer victimization in that it occurs in face-to-face environments. Bullying behaviors are intentional, repeated efforts to cause distress in another person who is perceived as somehow less powerful (Olweus, 1994); this can include physical (e.g., hitting), verbal (e.g., name-calling), and relational (e.g., spreading rumors, exclusion) bullying (Olweus, 1994). The second form of peer aggression, cyberbullying, is related to bullying but is constrained to behaviors that occur in virtual forms, such as social media, online gaming, and texting (Hinduja & Patchin, 2007; Thomas et al., 2015). Cyberbullying consists of electronic behaviors that are acts of intentional, repeated aggression against someone who cannot readily defend themselves (Thomas et al., 2015). Cyberbullying can include posting unwanted pictures to embarrass someone, making disparaging comments on someone’s social media page, and making fun of someone online (Hinduja & Patchin, 2007; Thomas et al., 2015). There are a variety of factors that may contribute to cyberbullying, such as the ability to hide one’s identity, reduced inhibitions when interacting with others online, and the frequent inaction of others to defend victims (Sarmiento et al., 2019; Thomas et al., 2015).

Although researchers suggest bullying shares some similarities with cyberbullying (Bauman & Newman, 2013; Del Rey et al., 2012), some major differences exist. For example, while investigators demonstrated traditional bullying predicted cyberbullying, engagement in cyberbullying was not predictive of traditional bullying (Del Rey et al., 2012). Furthermore, researchers found differences between bullying and cyberbullying in personality traits (Baroncelli & Ciucci, 2014), values (Menesini et al., 2013), moral engagement and disengagement (Perren & Gutzwiller-Helfenfinger, 2012), and feelings of safety while at school (Varjas et al., 2009). Indeed, victims of bullying are often not the same students as victims of cyberbullying, and there is variation in psychosocial outcomes based on which type of aggression youth report experiencing (cf. Kubiszewski et al., 2015).

Nevertheless, generally outcomes for youth victimized by bullying and cyberbullying are similar: depression (Lemstra et al., 2012; Morin et al., 2018), school truancy (Cornell et al., 2013; Morin et al., 2018), and self-harm (Hinduja & Patchin, 2010; McMahon et al., 2010). Yet, it is not just victims who experience negative outcomes. Perpetrators of bullying and cyberbullying also have associated symptoms of depression (Campbell et al., 2013; Hepburn et al., 2012), increased aggression and conduct problems (Morin et al., 2018), and elevated risk of peer victimization (Morin et al., 2018; Terranova, 2009).

Furthermore, students who witness incidents of bullying report decreased safety and comfort at school (Stevens et al., 2004) and increased feelings of stress (Rigby & Slee, 1993). Specific to bullying, bystanders have demonstrated an increased risk of interpersonal challenges and substance abuse even when compared with perpetrators and victims of bullying (Rivers et al., 2009). There is evidence that bystanders of cyberbullying feel some distress and feel pressure to respond to incidents (Patterson et al., 2017), yet relatively few actively defend cybervictims (Sarmiento et al., 2019). Bullying and cyberbullying have an impact not only on those directly involved, but uninvolved youth who are within the same environment as well.

That is, it is not only the direct experiences that youth have with bullying and cyberbullying that impact their functioning, it is also the degree to which they feel these forms of aggression occur at school. The negative impact of both bullying and cyberbullying may be, in part, associated with the perception of low social support (Slonje et al., 2017), which is one aspect of school climate. Indeed, investigators have highlighted the importance of a positive school climate in combating the effects of both bullying and cyberbullying among students (e.g., La Salle et al., 2018; Morin et al., 2018). Specifically, feeling that school personnel strive to reduce the occurrence of peer aggression and increase safety for students can buffer the influence of bullying and cyberbullying for students. In contrast, perceptions that school is a place where frequent victimization occurs are associated with increased negative outcomes (e.g., psychosocial difficulty, reduced feelings of safety) related to bullying and cyberbullying (Huang et al., 2020; La Salle et al., 2018). In this study, we focus on bullying and cyberbullying in terms of student perceptions of the frequency with which incidents involving both types of aggression occur at school. This allows for an examination of perceptions of the broader school climate and its relationship with student behaviors and functioning.

Rumination and Peer Aggression

Rumination—the tendency to think repetitively about causes, situational factors, and consequences related to a stressful or distressing event—may exacerbate distress related to the victimization that occurs from bullying and cyberbullying (Feinstein et al., 2014; Monti et al., 2017). Response Styles Theory posits that one's response to stress-induced negative emotions can determine the likelihood that the feeling will be maintained, attenuated, or exacerbated (Nolen-Hoeksema, 1991). Rumination occurs and functions as part of a general coping style that creates negative cognitions and perceptions that intensify negative emotions and increase the risk of psychosocial difficulty. Rumination, as a coping style, is associated with disruptions to

problem-solving, social support, positive thinking, and general well-being (Nolen-Hoeksema et al., 2008). Youth who experience bullying or cyberbullying are at increased risk of rumination as a coping style, which may subsequently lead to greater depression over time (Feinstein et al., 2014; Monti et al., 2017). This suggests that rumination may represent a cognitive process that maintains and exacerbates the negative responses of youth that are victims of bullying and cyberbullying.

Social Media and Rumination

Social media usage is linked with increased bullying (Shams et al., 2017) and cyberbullying (Best et al., 2014; Shah et al., 2019). Given that social media use, in general, is associated with increased psychosocial distress (Vogel & Rose, 2017), it is possible that certain aspects of social media engagement could compound negative outcomes of students who experience peer victimization. Indeed, there is evidence that youth engaging in social media increasingly compare themselves with others, which can result in greater feelings of sadness, anxiety, and rumination (Feinstein et al., 2014; Yang et al., 2018). Although researchers have linked rumination on sadness and stress to peer aggression and subsequent distress, investigators have not specifically examined rumination on social media experiences. This level of specificity is important given increased social media usage is linked to increased mental distress due to increased rumination about social media content (Authors, under review).

Social media rumination—repetitively thinking and worrying about one's social media posts, related situational factors, and consequences of those posts—may increase the vulnerability of victims of peer victimization. Specifically, students who witness bullying and cyberbullying occurring among their peers may notice an increase in how often they worry about social media activities. This increased rumination on social media may exacerbate symptoms of distress (Espelage et al., 2018; Swearer et al., 2014) and the effect of rumination on psychosocial functioning (Bandura, 1989, 1997). However, these relationships have yet to be empirically tested.

The Current Study

Our aim was to address the gap in the literature regarding how perceptions of bullying and cyberbullying frequency at school and personal social media rumination relate to youth's distress. We hypothesized, based on previous research, that students who perceive bullying and cyberbullying to be more frequent in their school would report greater rates of distress. Furthermore, we hypothesized that greater social media rumination would be associated

with increased ratings of distress. Finally, we hypothesized that the relationships between perceptions of bullying and cyberbullying at school with ratings of distress would be mediated by social media rumination. Because increased rumination has been observed to be more frequent in women (Johnson & Whisman, 2013), gender was included as a covariate in all mediation analyses.

Method

Participants

Participants were recruited as part of a larger program, the *Champaign Area Relationship Education for Youth (CARE4U)* program, which provides relationship education and workforce readiness training, and financial literacy education to at-risk youth in an urban Midwestern county across five local high school settings. We recruited participants through the use of flyers and announcements posted and shared throughout the schools, as well as given out at school events (e.g., school fairs, registration). Students were also referred to the program by school personnel (e.g., counselors, teachers) as well as their friends. Once students indicated interest or were identified for the program by school personnel, parent consent forms for the research study were sent home with students. Student participation in the CARE4U program was not contingent on their willingness or ability to take part in the research. Child assent was obtained prior to survey administration. Only students who had parent permission and provided child assent completed surveys, which were administered prior to starting the CARE4U program. A total of 169 youth completed surveys, with 53.8% identifying as Black/African American, 19.3% White, 12.3% Asian/Asian American, 5.3% Hispanic/Latinx, 3.5% Native American, and 5.8% as Other. Participants ranged in age from 14 to 19 years ($M = 15.89$, $SD = .87$) and identified as male (25.3%), female (73.7%), and transgender (1.1%). Regarding gender, females may be more likely than males to seek out preventive health services (Lau et al., 2013) and hold positive attitudes toward seeking professional help (Nam et al., 2010). These gender differences may help explain why more female students opted to join the CARE4U program. Approximately 71% received free or reduced lunch and 78.7% qualified for one or more forms of government assistance.

Measures

Bullying and cyberbullying. Bullying and cyberbullying were assessed using two items from *School Climate Scales Student Survey* (U.S. Department of

Table 1. Factor Loadings for Items of the Social Media Rumination (SMR) Scale.

Item	Factor Loading
1. I worry about how people will react to my social media posts	.76
2. Seeing what others post on social media makes me self-conscious	.74
3. My self-esteem can depend on how many likes my posts get	.72
4. I am worried that I won't look attractive in my social media posts	.70
5. I obsess over what I am going to post on social media	.70
6. I worry about what my social media posts say about who I am	.68
7. I beat myself up for posting something stupid on social media	.64
8. I can't stop thinking about what somebody posted on social media	.63
9. I spend several minutes deciding what to post on social media	.62
10. I don't post on social media because I am afraid I won't get many likes	.59
11. I feel jealous about other peoples' posts on social media	.54
12. I am intentional about the image I try to present on social media	.53

Education [DOE], 2017). The items were designed to assess the degree to which bullying and cyberbullying occur at their school as potential indicators of school climate. Participants were provided with a definition of bullying and then asked to rate the item “Students at this school are often bullied.” Participants were then provided a definition of cyberbullying and asked to rate the item “Students often spread mean rumors or lies about others at this school on the internet (i.e., Facebook, email, and instant message).” Participants rated both items on a scale of 1 = *strongly disagree* to 4 = *strongly agree*. Items were positively correlated (see Table 1).

Psychological distress. Participants’ psychological distress was measured using the K6+ (Kessler et al., 2002), which presented the stem: “During the past 30 days, how often did you feel . . .” followed by six items (e.g., nervous, hopeless, so depressed that nothing cheered you up) that are rated from 1 = *all the time* to 5 = *none of the time*. A clinical score is calculated by summing all six scores after converting items so that higher scores indicated greater distress

(i.e., 0 = *none of the time* through 4 = *all of the time*). The scale contains items that assess anxiety and depression factors (Lace et al., 2018); however, most researchers have utilized the K6+ as a screener for psychological distress (Green et al., 2010; Mewton et al., 2016). Researchers provided evidence for validity through K6+ scores predicting scores on the Strengths and Difficulties Questionnaire, a widely used mental health screener for children and adolescents (Goodman et al., 2000), as well predicting different levels of severity of psychological distress for adult and adolescent populations (cf. Mewton et al., 2016; Prochaska et al., 2012). Reliability in a large sample of adolescents ($N = 4,434$; Mewton et al., 2016) was $\alpha = .84$.

In the current study, reliability was similar to previous reports ($\alpha = .83$, $\omega = .81$ [.79–.83]) and was within generally acceptable parameters (see Dunn et al., 2014). In terms of construct validity, correlational data were similar to previously reported findings where female reports were generally higher than those of male participants (see Table 1; Johnson & Whisman, 2013). Furthermore, higher scores on the K6+ were associated with greater social media rumination (see Table 1), providing some evidence of convergent validity based on similar findings regarding rumination from other researchers (Feinstein et al., 2014; Yang et al., 2018).

Social media rumination. Because there was no previously developed scale designed to assess the degree to which youth think about social media activities, one was created by the researchers. The year prior to this study, focus groups were conducted with participants in the CARE4U program that included questions regarding social media and the impact it has on youth. Specifically, interviewers explored what motivates students to post certain things to social media and how often they felt they thought about social media (see Author, under review). Using this qualitative data, items for a potential social media rumination scale were developed by a graduate research assistant and a team of undergraduate research assistants. This allowed us to ground the scale in the language of youth and use examples provided by this particular population (e.g., “I obsess over social media”). Additional items were added by the principal investigators based on general rumination examples (e.g., “I can’t stop thinking about . . .”). Nineteen items were created by the research team.

Results from initial analyses indicated that the sample was adequate (Kaiser–Meyer–Olkin [KMO] coefficient = .88) and the items were sufficiently related (Bartlett’s Test, $p < .01$) to conduct a factor analysis. A parallel analysis (Hayton et al., 2004) was conducted, as well as an examination of the Scree Plot (Cattell, 1966) to determine the appropriate number of factors to retain for the scale. An exploratory factor analysis (EFA) with a direct oblimin rotation was then conducted to examine item loadings and

structure. Initially, two factors were identified by the parallel analysis; however, multiple cross-loadings were noted after the EFA was conducted constraining the model to two factors. After cross- and/or poor-loading items (i.e., $<.5$; Hair et al., 1998) were removed ($n = 7$) and the parallel and scree plot analyses were repeated, a one factor model was retained. The EFA was run again constraining the model to one factor and no further items needed to be removed. The final scale consisted of 12 items (see Table 1) that were rated on a scale of 1 = *almost never* to 4 = *almost always*. Reliability analyses fell within adequate ranges ($\alpha = .86$, $\omega = .84$ [.80–.88]).

Procedures

Surveys were administered online using *Qualtrics*. Participants were given an iPad which was already set to the survey page and their participant identification number was already keyed in by a research assistant. A research assistant reviewed the child assent, which was also included on the first page of the survey. Participants were then instructed to complete the survey at their own pace, with research assistants available in the room to answer questions as necessary. Audio versions of the survey were also made available to participants with the use of headphones. Once surveys were complete, a research assistant took the iPad to ensure that the survey was exited to prevent anyone from scrolling back through the survey. Participants were compensated with a US\$10 gift card for their participation. All procedures and forms were approved by the university's Institutional Review Board.

Data Analysis

Analyses were conducted using Statistical Package for Social Sciences version 26 (SPSS) with the PROCESS tool (Hayes, 2018). A mediation model that examined the effect of bullying on distress and social media, as well as the indirect effect of bullying on distress through social media rumination, was first tested. The second model was the same except it looked at the effect of cyberbullying on the outcome variables.

Results

Variable correlations, mean scores, and standard deviations can be found in Table 2. To test the hypothesis that the relationships between perceptions of bullying and cyberbullying with ratings of distress would be mediated by social media rumination, two mediation models were conducted with distress as the outcome variable and social media rumination as the mediator

Table 2. Correlations and Descriptive Statistics for All Variables.

Variable	1	2	3	4	5	6	7	M	SD
1. Gender ^a	1.00							—	—
2. Race ^b	.04 ^c	1.00						—	—
3. Age	.06	.07	1.00					15.89	0.87
4. Bullying	.13	-.06	-.15	1.00				2.57	0.74
5. Cyberbullying	.13	-.05	-.01	.39**	1.00			2.98	0.84
6. Distress	.24**	.08	.05	.07	.09	1.00		8.84	5.37
7. SMR	.12	-.04	-.01	.18*	.12	.41**	1.00	1.68	0.59

Note. ^a0 = Male, 1 = Female. ^b1 = White, 2 = Hispanic/Latinx, 3 = Black/African American, 4 = Native American, 5 = Asian/Asian American, 6 = Pacific Islander, 7 = Other. ^cSpearman's Rho used. SMR = social media rumination.

* $p < .05$. ** $p < .01$.

variable; in the first model, perceptions of bullying at school was the predictor variable, and in the second model perceptions of cyberbullying at school was the predictor variable. Similar to prior researchers (Johnson & Whisman, 2013), we found that gender was correlated with distress in that female participants had significantly higher distress scores compared with male participants ($M_{\text{diff}} = 2.75$). Therefore, gender was entered as a covariate in subsequent analyses.

We found evidence to support our hypothesis with regard to perceptions of bullying (see Figure 1). Supporting the mediation hypothesis, there was a statistically significant indirect effect from perceptions of bullying to mental distress through social media rumination ($\beta = 0.05$, 95% confidence interval [CI] = [0.01, 0.11]). That is, youth who indicated bullying happened more often at their school also tended to report greater distress, which was largely due to the links between bullying and greater social media rumination. Perceptions that bullying occurred more frequently was associated with greater social media rumination ($b = 0.12$, $\beta = 0.13$, $p < .05$), which in turn was associated with greater distress ($b = 3.12$, $\beta = 0.37$, $p < .001$). Contrary to expectations, cyberbullying among school peers was not found to have a statistically significant indirect effect on mental distress through social media rumination ($\beta = 0.04$, 95% CI = [-0.01, 0.10]). Perceptions that cyberbullying often occurred among peers at school was not associated with distress ($b = 0.25$, $\beta = 0.04$, $p = .58$) nor social media rumination ($b = 0.09$, $\beta = 0.12$, $p = .09$).

Discussion

In our study, we addressed an important gap in the research by examining the relationships between bullying, cyberbullying, social media rumination, and

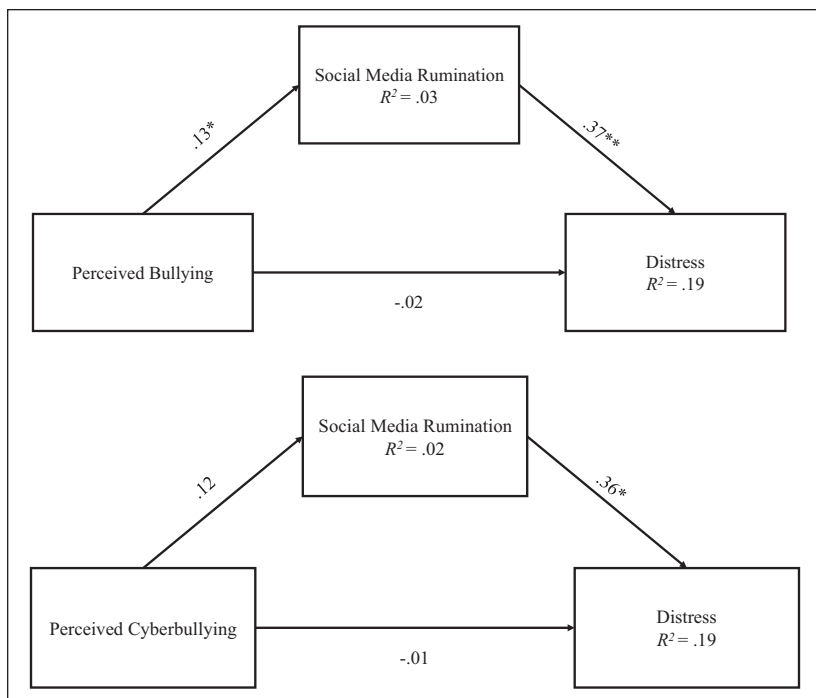


Figure 1. Hypothesized mediation models. All pathways represent standardized betas.

* $p < .05$. ** $p < .01$.

mental distress in a sample of diverse youth. Based on the current literature and tenants of the Response Styles Theory of behavior, we hypothesized that perceptions of both bullying and cyberbullying occurring at school would be linked to greater mental distress due to greater social media rumination. Our findings were partially in line with this hypothesis. There was support for the notion that social media rumination mediated the association between perceptions of bullying at school and mental distress. Youth who perceived a higher frequency of bullying at school also tended to ruminate about their social media posts more, the latter of which was strongly related to increased distress. This main finding extends Response Styles Theory, by indicating that domain-specific responses such as social media rumination can exacerbate negative feelings that arise from stressful events (Nolen-Hoeksema et al., 2008). It is possible that threats and threat-responses associated within physical environments also extend into youths' virtual environments and

ultimately increase their psychological distress. It is conceivable that youth may worry that their social media posts could have real world consequences such as bullying (cf. Shams et al., 2017).

If students engage in rumination regarding their social media activities, they may reduce their ability to effectively disengage from cognitions regarding bullying they experience and witness at school. An example would be a student who is at school but cannot stop thinking of the potentially negative outcomes of a social media post. Given the student's rumination on negative aspects of social media, that student may be more sensitive to observing and experiencing bullying. It is also possible such a student would be more inclined to be vigilant in detecting negative interactions with peers, the latter of which would maintain negative mental health outcomes associated with bullying. This would support the Response Styles Theory of rumination, in that rumination would be part of a larger negative coping style that exacerbates negative emotions (Nolen-Hoeksema et al., 2008).

Furthermore, social media rumination may interfere with adolescents' ability to engage in positive cognitive distractions or distancing, which has been shown to sometimes be beneficial for addressing peer aggression in the short term or when other resources are limited (Machackova et al., 2013; Parris et al., 2019). Indeed, cognitive distancing is associated with reduced symptoms of depression for victims (Sugimura et al., 2014) and buffered the effects of victimization for some students (Kochenderfer-Ladd & Skinner, 2002). Students who felt they were good at solving problems on their own reported using cognitive distancing more frequently (Parris et al., 2019), which may be associated with reports that other strategies (e.g., problem-solving, externalizing) are linked to increased victimization and worse mental health outcomes (Sesar et al., 2013; Singh & Bussey, 2011; Terranova, 2009). Future research is needed to investigate the benefit of cognitive distancing as a counter to social media rumination and ruminative coping styles.

In our study, we did not find evidence of a mediation effect from cyberbullying to psychological distress through social media rumination, despite the fact that cyberbullying often occurs on social media platforms (Whittaker & Kowalski, 2015). This was surprising given that social media is a common medium for cyberbullying, suggesting there would be a greater connection between worries regarding social media activity and perceptions of cyberbullying among peers at school. Although the results trended in the hypothesized direction, the present sample may have been underpowered to detect a statistically significant effect. It is also imaginable that perceptions of bullying represent a more global threat to youths' worries about online self-presentation because face-to-face bullying may feel less controllable than cyberbullying (e.g., one cannot block or unfriend an in-person bully).

Researchers suggested that youth feel they can disconnect more from cyberbullying incidents (Parris et al., 2012), reducing the risk that online activities will influence their school day. It is also possible that cyberbullying is not as easily identified or perceived by others at school. That is, it is more difficult to estimate how much cyberbullying is occurring among peers at school given messages and incidents may be privately shared or quickly removed. Future research is needed to determine what other individual and group-difference factors may influence the relationship between perceptions of cyberbullying and distress.

Our findings are similar to those of previous researchers who concluded that bullying and cyberbullying have key differences and associated outcomes, suggesting that it may be best to conceptualize these two forms of peer victimization as different constructs (e.g., Kubiszewski et al., 2015; Varjas et al., 2009). Although they are clearly similar, the roles these forms of aggression play in terms of school climate issues, social media rumination, and distress are unique enough to warrant separate attention. For youth, the way in which bullying is experienced and perceived, as well as the influence of cognitive thinking processes, varies from those associated with cyberbullying exposure. The distinction is important when determining whether to employ a prevention or intervention focus for working with youth exposed to peer aggression. Regardless of current intervention trends to treat them similarly, we support the notion that intervention and prevention efforts be differentiated based on which form of aggression youth are experiencing.

The present study has important implications for understanding and working with youth. We suggest that youths' perceptions about the frequency of peer victimization influence their tendencies to worry and ruminate about their social media presence, which may erode their mental health. In other words, students who feel that bullying is frequent at their school may think more about their social media activities and subsequently experience more distress. One intervention point may be in training students to recognize the impact of social media rumination on their feelings of distress, so students can learn ways to adaptively cope with ruminative thoughts. Interventions grounded in self-affirmation theory may help reduce social media rumination by teaching students to reflect on values and aspects of their identities that are not externally threatened (e.g., Koole et al., 1999). Furthermore, interventions targeted toward prevention of engaging in bullying online could help reduce the likelihood of recurring social media rumination (Feinstein et al., 2014; Monti et al., 2017). Based on current findings, practitioners may want to take into consideration social media rumination when intervening with youth experiencing bullying, as social media rumination may be exacerbating negative outcomes for such experiences. Finally, as our study focused on perceptions of

peer aggression at school, interventions cannot overlook school climate in terms of bullying and cyberbullying. Safe, supportive climates at school that reduce bullying can help further ameliorate the relationships between bullying, social media rumination, and distress found in our study.

Limitations and Future Research

There are some noted limitations to the current study. Participants were largely female, Black youth who were at risk for low-income and economic marginalization (American Psychological Association, 2019) and attended school in an urban Midwestern city. This is a strength given that researchers have investigated reports and experiences of samples that were primarily White and experienced higher socioeconomic status (Bornstein et al., 2013; Graybill et al., 2018). Our study was able to provide information about a population that is not well represented in the current literature, providing some diversity in sampling. Yet this also means that our findings may not generalize to all youth populations. It would be beneficial for future researchers to explore other populations. Such efforts would help provide additional validity and reliability information regarding the social media rumination scale developed as part of this study. Furthermore, this study was correlational and precludes the definitive determination of causal processes. Longitudinal studies are warranted to investigate the causal links between these experiences. Similarly, only quantitative methods were used to investigate the influence of social media rumination on peer aggression and distress. Qualitative studies, such as individual interviews with youth, may help shed light on the complicated and nuanced nature of the relationships we explored in this study.

We investigated bullying and cyberbullying perceptions via one-item indicators to explore the possible relationship between study variables. Furthermore, these items assessed perceptions of how often bullying and cyberbullying occurs in the school setting as opposed to their personal experiences with either form of aggression. Future researchers should use surveys that include multiple items to assess bullying and cyberbullying frequency for youth and expand beyond perceptions of school climate to include individualized experiences. Researchers would then be able to help further determine differences based on the form of bullying (e.g., physical, verbal, relational) while offering a more comprehensive measure of participants' experiences with peer aggression. Finally, we assessed general perceptions of distress, as opposed to distress that was associated with believing peer aggression was a common occurrence at school. Future research is warranted to demonstrate a direct link between study variables.

Conclusion

Overall, we provide preliminary evidence that social media rumination plays a substantial role in the relationship between bullying and distress for youth. Furthermore, we highlight that bullying and cyberbullying are different in their complexities and should be treated as such. Unfortunately, rumination about social media may be one way that students continue to experience ongoing psychological pain after experiences of bullying, and this rumination may evoke other symptoms of distress. Finally, there is a need for a closer examination of cognitive distancing and other adaptive coping strategies that could serve as a response to social media rumination that arises from perceptions that peer victimization is an ongoing threat.

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