Bullying and Peer Victimization: An Examination of Cognitive and Psychosocial Constructs Journal of Interpersonal Violence I-23 © The Author(s) 2015 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/0886260515572476 jiv.sagepub.com



Kisha M. Radliff, PhD,¹ Cixin Wang, PhD,² and Susan M. Swearer, PhD³

Abstract

Research has demonstrated a link between internalizing factors and bullying perpetration and peer victimization; however, few studies have examined predictors of cognitive and psychosocial factors, such as locus of control and hopelessness. The current study examined cognitive and psychosocial factors in bullying perpetration and peer victimization in a sample of 469 middle school students. A mediator model of hopelessness was also investigated. Students involved in bullying reported a greater external locus of control compared with peers who were not involved in bullying. Bully-victims endorsed the highest externality. Results showed that hopelessness fully mediated the relationship between verbal/relational victimization and external locus of control for the victim group, but not the bully-victim group. Implications for bullying prevention and intervention efforts are discussed.

Keywords

bullying, hopelessness, locus of control, children, adolescents

Corresponding Author:

Kisha M. Radliff, Assistant Professor of School Psychology, The Ohio State University, PAES Bldg. Rm. 436, 305 W. 17th Ave., Columbus, OH, 43210, USA.

Email: radliff.2@osu.edu

¹The Ohio State University, Columbus, USA

²University of California, Riverside, Columbus, USA

³University of Nebraska-Lincoln, USA

Within the last few decades, bullying among school-aged youth has increasingly been recognized as an important problem in schools and presents in many forms (i.e., physical, verbal, relational, and cyber). Prevalence rates have largely varied within the research due to how bullying is defined and who is reporting (e.g., self-report, teacher reports). General estimates suggest that roughly 25% to 30% of students (e.g., Nansel et al., 2001; Robers, Kemp, Truman, & Snyder, 2013; Wang, Iannotti, & Nansel, 2009) are involved in bullying during their school years. Prevalence rates of cyberbullying also have significant variation, which is often due to inconsistency in how cyberbullying is defined. Patchin and Hinduja (2012) reviewed 35 articles and found that approximately 24% of youth reported they were cyberbullied (i.e., victims) and about 17% reported cyberbullying others. The number of youth who experience cyberbullying ranges, on average, from 10% to 40% (see Tokunaga, 2010, for a review). Many individuals involved in cyberbullying also report involvement in traditional forms of bullying. One study reported that 36% of students experienced both traditional bullying and cyberbullying (Ybarra, Diener-West, & Leaf, 2007), while another reported that up to 85% of youth who were cybervictims were also bullied at school (Juvoven & Gross, 2008). It is important that future research and prevention and intervention efforts consider the potential consequences of experiencing multiple forms of bullying.

Researchers who study the bullying phenomenon have provided insight into the many harmful effects of bullying and have estimated that involvement in traditional forms of bullying can be considered a risk factor for social, emotional, psychological (e.g., Craig, 1998; Nansel et al., 2001; Nishina, Juvonen, & Witkow, 2005), and academic problems (e.g., Nakamoto & Schwartz, 2010; Nishina et al., 2005). Livingstone and Smith (2014) conducted a research review and reported that longitudinal studies of cyberbullying also demonstrate evidence of emotional and psychological problems for victims of cyberbullying. High prevalence rates, potential harmful effects, and the seemingly persistent and evolving nature of bullying (e.g., traditional forms of bullying and cyberbullying) emphasize the importance of continuing to further our understanding of the impact of involvement in bullying. Bronfenbrenner's (1977) ecological systems theoretical framework, also referred to as social-ecological theory, could provide an ideal framework for examining bullying, both traditional and cyberbullying. This framework provides a context for examining bullying across the various systems that have potential to influence the bullying experience at the individual level (e.g., demographics) and the micro- (e.g., family, peer, and school variables), exo-(community, media), and macrosystem levels (e.g., culture, current policies; Espelage, 2014; Hong & Garbarino, 2012). Furthermore, prevention and

intervention efforts that are framed within a social-ecological context allow bullying to be addressed across systems and include key stakeholders (e.g., school staff, parents and guardians, students), increasing the likelihood of their effectiveness.

Locus of Control and Hopelessness: Ties to Aggression and Bullying

Locus of control is a cognitive construct that refers to the perception of a causal relation between one's behavior and the consequences of that behavior (Nowicki & Strickland, 1973). This construct refers to evaluations that are made prior to the outcome; which are influenced by past experiences. Locus of control has been explored extensively in relation to aggressive behavior among children and adolescents but has generally been overlooked in the bullying research with few investigators examining its effects. Researchers have demonstrated a link between several forms of aggressive behavior (e.g., verbal, physical) and an external locus of control (Halloran, Doumas, John, & Margolin, 1999; Österman et al., 1999); a similar finding has been identified with bullying perpetration (Andreou, 2000; Atik & Güneri, 2013; Slee, 1993). In the bullying literature, peer victimization has also been linked (Andreou, 2000; Atik & Güneri, 2013; Hunter & Boyle, 2002) with a more external locus of control; however, this link has not been as well established in the literature and warrants further exploration.

External and internal loci of control have been linked to different types of outcomes. An external locus of control has been linked to poorer psychosocial outcomes (Brackney & Westman, 1992), such as aggressive behavior (Österman et al., 1999) and internalizing problems (e.g., depression and hopelessness; Pinto & Francis, 1993; Ward & Thomas, 1985). Researchers have consistently linked an internal locus of control to positive outcomes, such as academic achievement and high self-esteem in children (Halloran et al., 1999; Mullis & Mullis, 1997; Ross & Broh, 2000). Significant stressors, such as bullying, may contribute to a more external locus of control and result in compounding negative outcomes for youth involved in bullying.

Bullying, an experience that occurs repeatedly over time, is a stressful event, particularly for the individual being victimized. With each bullying incident, the individual makes several attributions about the event, including why it occurred, potential consequences, and what this means about the self (Abramson, Metalsky, & Alloy, 1989). These attributions and the importance ascribed to the event are what contribute to the development of hopelessness. In 1989, Abramson and colleagues formulated the hopelessness theory of

depression, a revision of earlier models of a learned helplessness type of depression (Abramson, Seligman, & Teasdale, 1978). The hopelessness theory of depression postulates that depressed individuals develop negative thought patterns that include self-blaming, viewing the cause of events as unchangeable, and overgeneralizing weaknesses in one area to several areas. This theory positions hopelessness as an integral symptom of depression that includes helplessness as a necessary component of hopelessness. As such, an individual will experience helplessness as a part of hopelessness, but the reverse is not true. For example, an individual might feel helpless in a bullying situation (e.g., he or she has no power to change the situation) but perceive (or feel hopeful) that someone will help them (e.g., that peers will stop the bullying). A victim who is experiencing bullying (a repetitive, negative event) has the potential to develop feelings of hopelessness depending on how they experience each act of bullying.

Hopelessness has been defined as negative expectations toward oneself and the future (Kazdin, Rodgers, & Colbus, 1986), and there are two types of symptoms that characterize hopelessness (Abramson et al., 1989). The first is a motivational symptom, relating specifically to the helplessness aspect of hopelessness. If an individual believes that his or her actions will not make a difference, he or she is unlikely to bother trying. The second symptom is sad affect, an emotional symptom. The sadness experienced as a symptom of hopelessness stems from the negative expectations an individual holds about him or herself and the future. The helplessness aspect of hopelessness could likely be enhanced by a repetitive event such as bullying. If the victim feels hopeless, then he or she may feel little control over each bullying situation expressing a more external locus of control.

Few studies have been conducted that have focused on hopelessness in relation to bullying, peer victimization, or aggression. Biggam and Power (1999) explored internalizing problems among incarcerated youth who were bullied while in prison using the Hospital Anxiety Depression Scale. Victims expressed the highest levels of hopelessness, anxiety, and depression, with the youngest victims reporting the highest ratings. Another study examining bullying and symptoms of depression among Chilean middle school students reported a strong association between sadness/hopelessness and bully victimization (Fleming & Jacobsen, 2009). Specifically, youth who experienced peer victimization were more likely to report sadness/hopelessness compared with non-bullied youth. Furthermore, as the frequency of victimization increased, so did the level of sadness/hopelessness. These findings are not surprising given research indicating that individuals who are victimized generally report more internalizing issues (Austin & Joseph, 1996; Craig, 1998; Haynie et al., 2001; Nishina et al., 2005).

Further emphasis on the importance of examining hopelessness lies in the research that has identified hopelessness as a significant link between depression and suicidal behavior (Beck, Kovacs, & Weissman, 1975). Recent research has found that suicidal thoughts and ideations are common among adolescents involved in bullying. Bully-victims and victims as well as perpetrators all reported higher levels of suicidal thoughts than non-involved peers (Hinduja & Patchin, 2010; Kim & Leventhal, 2008). Longitudinal studies have also shown that frequent victimization at age 8 predicted later suicide attempts and completed suicides for both boys and girls, while frequent bullying perpetration at age 8 also predicted later suicide attempts and completed suicides for boys (Klomek et al., 2009).

The scant research available examining locus of control and hopelessness together has provided some understanding of the relation between locus of control and hopelessness (Prociuk, Breen, & Lussier, 1976; Topol & Reznikoff, 1982; Ward & Thomas, 1985). Particularly, researchers have reported a positive relation between hopelessness and an external locus of control, meaning that individuals with higher levels of hopelessness were more likely to display a more external locus of control (Prociuk et al., 1976; Topel & Reznikoff, 1982; Ward & Thomas, 1985). Also, both variables have been examined within the broader context of aggression and often are associated with negative outcomes (e.g., Abramson et al., 1989; Brackney & Westman, 1992). It is possible that these two variables may play a role in students' involvement in bullying. The goal of the current study was to contribute to our understanding of hopelessness and locus of control in the context of bullying, specifically as related to peer victimization.

The current study examines the relation between peer victimization and locus of control and explores the mediation effect of hopelessness. Research has begun to examine cognitive perceptions in children who participate in bullying and have found that many involved children experience cognitive distortions (Doll & Swearer, 2006). This emphasizes the need for further examining the cognitive aspects of bullying to add to our understanding of the etiology and consequences of bullying. The purpose of this study was twofold: (a) to explore the relation between locus of control and involvement in bullying, and (b) to examine the mediation effects of hopelessness on the relationship between peer victimization and an external locus of control. In examining the relation between the bullying dynamic and locus of control, we hypothesized that students who reported being bullied by others would endorse a more external locus of control compared with students who bullied others and students who reported no involvement in bullying. We also predicted that students who reported both being victimized and bullying others (i.e., bully-victims) would have the highest levels of external locus of control.

To address the second aim of this study, we hypothesized that hopelessness would mediate the relationship between peer victimization and locus of control. Specifically, we predicted that the experience of peer victimization would relate to an external locus of control partially through increased levels of hopelessness. We also hypothesized that this relationship might be different across the bully/victim groups, with hopelessness having a stronger meditational effect for students who were victims compared with students who were bully-victims.

Method

Participants

Participants included 469 students (265 females) from three Midwestern middle schools. Participants were in Grades 6 through 9 ranging from ages 11 to 15 ($M=13.21,\ SD=0.97$). The sample was primarily comprised of Caucasian students (83.6%), with the remainder of the sample including African American (4.7%), Asian/Asian American (3.8%), Biracial (3.8%), Latino/Hispanic (1.9%), Native American (1.1%), Middle Eastern (0.6%), and Eastern European (0.4%) participants. Bully/victim status was determined based on student responses to the *Bully Survey–Student Version* (Swearer, 2001).

Instruments

Bully/victim experiences. The Bully Survey (Hamburger, Basile, & Vivolo, 2011; Swearer, 2001) asks questions about students' experiences, perceptions, and attitudes toward bullying and victimization during the past year. Bullying is defined in every section as "bullying happens when someone hurts or scares another person on purpose and the person being bullied has a hard time defending him- or herself. Usually, bullying happens over and over" (Hamburger et al., 2011, p. 69). Specifically, the following two scales within the Bully Survey were used in this investigation.

Victimization scale. The Verbal and Physical Bullying Scale—Victimization (VPBS-V; Swearer, Turner, Givens, & Pollack, 2008) is an 11-item scale that assesses both verbal/relational (7 items) and physical victimization (4 items). The verbal victimization factor included verbal (e.g., "called me names") and relational items (e.g., "won't let me be a part of their group"; see Swearer et al., 2008). All items are scored on a 5-point Likert-type scale ("never happened" to "always happened") with higher scores indicating more frequent

peer victimization. A previous study demonstrated a two-factor structure (physical victimization and verbal/relational victimization) of this measure and high internal consistency (α = .79-.87; Swearer et al. 2008). A principal axis factoring analysis using oblimin rotation (allowing factors to correlate with each other) yielded a two-factor solution consistent with the findings of Swearer et al. (2008), with expected items loading onto the physical victimization (explaining 8.26% of the variance; α = .67) and verbal/relational victimization (explaining 32.66% of the variance; α = .85) with the exception of the item "played jokes on me." This item "played jokes on me" was deleted from the further analysis because of the low factor loading (<.30) in the current sample. The internal consistency reliability for VPBS-V was .82, for verbal/relational victimization subscale was .80, and for physical victimization subscale was .67.

Bullying perpetration scale. Verbal and Physical Bullying Scale–Perpetration (VPBS-P; Swearer et al., 2008). This is a 10-item scale assessing physical, verbal, and relational bullying perpetration using items parallel to the VPBS-V. All items are scored on a 5-point Likert-type scale ("never happened" to "always happens") with higher scores indicating more frequent bullying. The internal consistency reliability for VPBS-P was .78. Correlational analyses indicated significant correlation between the frequency of total bullying perpetration and office referral, r(469) = .10, p = .04, suggesting the validity of the scale.

Children's Nowicki Strickland Internal–External Control Scale (CNSIE). The CNSIE (Nowicki & Strickland, 1973) is a 40-item self-report measure that consists of questions requiring a yes or no response to assess locus of control. This instrument was developed for children ages 9 to 18 and was designed to measure beliefs about results of behavior as controllable (internal locus of control) or uncontrollable (external locus of control), assessing a general locus of control orientation. The scoring ranged from 0 to 40 with a higher score indicating a more external locus of control. This measure has been used frequently with children and adolescents, and has been found to be a valid measure of locus of control (Nowicki & Strickland). Internal consistency, as measured by the split-half method, ranged between .63 and .81 from children in Grades 3 through 12, and the test–retest reliability ranged between .63 and .71 (Nowicki & Strickland). In the present study, the internal consistency reliability using coefficient alpha was .72 for the total score.

Hopelessness Scale for Children (HSC). The HSC (Kazdin, French, Unis, Esveldt-Dawson, & Sherick, 1983) is a measure that consists of 17 true or

false statements that describe negative expectations for the future or hopelessness concerning current circumstances. Scores range from 0 to 17, with higher scores denoting greater feelings of hopelessness. Kazdin et al. (1986) reported a coefficient alpha of .97 for psychiatric inpatients ages 6 to 13. Spirito, Williams, Stark, and Hart (1988) reported a coefficient alpha of .84 for psychiatric adolescent patients (ages 12-17) compared with .69 for an adolescent control group (ages 13-17). Spirito et al. demonstrated two interpretable factors for the control group: a primary factor that describes hopeful and hopeless feelings (13 items) and a second factor about expectations for the future. Similar factors have been found elsewhere (e.g., Thurber, Hollingsworth, & Miller, 1996) and are consistent with the two symptoms of hopelessness described by Abramson et al. (1989). The coefficient alphas were .82 for the primary factor and .35 for the second factor. For this study, we were most interested in examining the motivational aspects related to hopeful and hopeless feelings; thus, only the primary factor was used for analyses in this study ($\alpha = .78$).

Procedures

Data included in the present study were collected as a part of a larger longitudinal project examining several contextual factors within bullying and peer victimization. Active parental consent and youth assent were obtained for all participants. Of the students with parental consent (n = 500), 94% (N = 469) agreed to participate in the study; students who dissented were given a packet of academic worksheets to complete. The participation rate for this study was approximately 24% of the total available students, ranging from 21% to 27% at each school. Lower participation rates were attributed to difficulty obtaining active parental consent for the larger longitudinal study about a sensitive topic (bullying and depression). Participants individually completed the instruments in small groups in a classroom setting; instruments were counterbalanced across participants. Researchers carefully reviewed instruments on completion, and participants were asked to complete any missing items.

Data Analysis

Structural equation modeling (SEM), specifically path analysis with Mplus software (Version 7.11; Muthén & Muthén, 1998-2013), was used to examine the mediation model. In the hypothesized model, verbal/relational and physical victimization were predictors for external locus of control, and this relationship was partially mediated by hopelessness. In addition, the possible effects of school, age, and grade on external locus of control were controlled (Figure 1). For SEM, a good fit is obtained when Bentler's comparative fit index (CFI) is

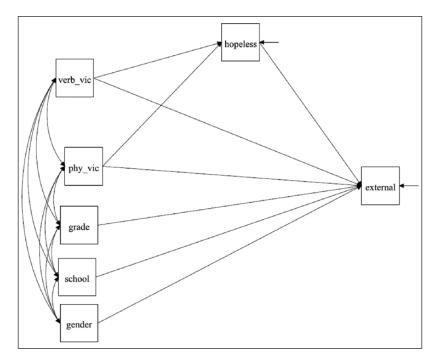


Figure 1. The hypothesized model for victimization, hopelessness, and external locus of control.

Note. verb_vic = verbal/relational victimization, phy_vic = physical victimization, hopeless = hopelessness, external = external locus of control.

larger than .95 and root mean square error of approximation (RMSEA) is below .05. Bootstrapping is a resampling method to gain a more accurate estimate of the indirect effect. Researchers have suggested using this method to test mediation effects (Preacher & Hayes, 2008). In this study, bootstrapping analysis was used to examine the indirect effects because this method has an adequate control of Type I errors (Preacher & Hayes, 2008). We consider a significant indirect effect is observed if the 95% bias-corrected bootstrap confidence intervals (95% BC CI) for the indirect effect do not contain zero.

Results

Bully/Victim Classification

Students were identified as victim, bully, bully-victim, or not involved in bullying based on their responses to the Bully Survey. Students who reported

	$\frac{\text{Bully } (n = 33)}{M \text{ (SD)}}$	$\frac{\text{Bully-Victim}}{(n = 114)}$ $\frac{M \text{ (SD)}}{}$	Victim (n = 163) M (SD)	Not Involved $(n = 159)$ $M (SD)$
Locus of control	13.06 (5.42)	14.70 (5.27)a	14.33 (5.15)b	12.15 (4.84)a,b
Hopelessness	2.00 (1.62)	2.23 (2.03)	2.41 (2.06)b	1.87 (1.52)b
Office referrals	1.70 (3.15)	2.04 (5.35) ^c	0.74 (2.32) ^c	1.35 (5.21)

Table I. M and SD by Bully/Victim Status.

engagement in bullying perpetration, but not victimization were classified as bullies. Students who reported victimization, but not perpetration were classified as victims. Students who reported engagement in both bullying perpetration and victimization were classified as bully-victims. Students who denied bullying perpetration and victimization were classified as not involved. The total sample included 7% bullies (n = 33), 34.8% victims (n = 163), 24.3% bully-victims (n = 114), and 33.9% students not involved in bullying (n = 159). Office referral data were used to validate the self-report responses. After controlling for the effect of school, ANOVA results indicated significant group difference in office referrals, F(3, 457) = 3.58, p = .01, $\eta^2 = .02$. Bonferroni post hoc test showed that bully-victims received significantly more office referrals (M = 2.04, SD = 5.35) compared with victims (M = 0.74, SD = 2.32), p < .01. The expected pattern of results emerged from the office referral data, attesting to the construct validity of this measure (see Table 1).

Locus of Control and Hopelessness: A Comparison of Students Across the Bully/Victim Continuum

After controlling of the possible effect of school, bully/victim groups differed significantly on external locus of control scores, F(3, 457) = 7.08, p < .001, $\eta^2 = .04$. Bonferroni post hoc test showed that students not involved in bullying (M = 12.15, SD = 4.84) reported significantly less external locus of control than bully-victims (M = 14.70, SD = 5.27), p < .001, Hedge's g = .51, and victims (M = 14.33, SD = 5.15), p = .003, Hedge's g = .44, but not bullies (M = 13.06, SD = 5.42; Table 1).

Similarly, bully/victim groups differed significantly on hopelessness, F(3, 462) = 2.90, p = .05, $\eta^2 = .02$. Bonferroni post hoc test showed that victims

^aBully-victims are significantly different from not involved students, p < .001.

bVictims are significantly different from not involved students, p < .01.

cVictims are significantly different from not involved students, p = .06.

^dBully-victims are significantly different from victims, p < .01.

(M = 2.41, SD = 2.06) had significantly higher hopelessness scores compared with students not involved in bullying (M = 1.87, SD = 1.52), p = .06, Hedge's g = .29. No other group differences were identified (Table 1).

A Mediator Effect of Hopelessness

Hopelessness was examined as a partial mediator of the relationship between two types of victimization (physical and verbal/relational) and locus of control using bootstrap procedure. The mediation model was examined with victims and bully-victims together first and then separately for victims and bully-victims. The mediation model was not examined among bullies and not involved students because they were not victimized. Results showed that the model fit the data well for victims and bully-victims together, $\gamma^2(3,$ N = 277) = 0.004, p = .999, CFI = 1, RMSEA = 0. Verbal/relational victimization was a significant predictor for hopelessness, $\beta = .50$, p < .001. Hopelessness was a significant predictor for external locus of control, β = .22, p = .002. Physical victimization was a significant predictor for external locus of control, $\beta = .14$, p = .02. Bootstrapping analyses confirmed one significant indirect effect. Verbal/relational victimization was related to external locus of control (total effect was marginally significant, total effect = .12, p = .08, 95% BC CI [-.02, .23]), which was fully mediated by hopelessness (indirect effect = .10, 95% BC CI [.04, .18]; Figure 2).

When examined separately, the model also fit the data well for the victim group, $\chi^2(3, N=163)=0.38$, p=.94, CFI=1, RMSEA=0. Verbal/relational victimization was a significant predictor for hopelessness, $\beta=.23$, p<.01, and hopelessness was a significant predictor for external locus of control, $\beta=.54$, p<.001. Bootstrapping analyses confirmed the significant indirect effects of hopelessness. Specifically, verbal/relational victimization was related to external locus of control, which was fully mediated by hopelessness (indirect effect = .11, 95% BC CI [.02, .20]). The model for the victim group is similar to the model for the victims and bully-victims combined in that they both showed a significant mediation effect for hopelessness. The difference is that the direct link from physical victimization to external locus of control was no longer significant in the victim-only model, $\beta=.14$, p=.09 (Figure 3).

For the bully-victim group, the model also fit the data well, $\chi^2(3, N=114)=0.20$, p=.98, CFI = 1, RMSEA = 0. Verbal/relational and physical victimization were not significant predictors for hopelessness or external locus of control, although hopelessness continued to be a significant predictor for external locus of control, $\beta=.44$, p<.001. Bootstrapping analyses did not reveal any significant indirect effects or total effects.

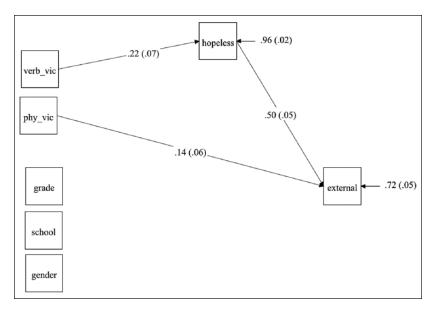


Figure 2. The final model for victimization, hopelessness, and external locus of control for the victims and bully-victims. N = 277.

Note. Only significant standardized path coefficients are presented. verb_vic = verbal/relational victimization, phy_vic = physical victimization, hopeless = hopelessness, external = external locus of control.

Because the current data are cross-sectional and cannot establish causality, another plausible model was tested. In the alternative mediational model, the relationship between victimization and hopelessness is mediated by external locus of control. The model fit the data well for the victim group, $\chi^2(3, N=163)=3.28$, p=.35, CFI=.995, RMSEA=.024. Verbal/relational victimization and physical victimization did not predict external locus of control, $\beta=.12$ and .09, respectively, ps>.10, although external locus of control was a significant predictor for hopelessness, $\beta=.54$, p<.001. Bootstrapping analyses did not reveal any significant indirect effect. The model also fit the data well for the bully-victim group, $\chi^2(3, N=114)=1.16$, p=.76, CFI=1, RMSEA=0. Similarly, verbal/relational victimization and physical victimization did not predict external locus of control, $\beta=.15$ and .01, respectively, ps>.10, although external locus of control was a significant predictor for hopelessness, $\beta=.44$, p<.001. Bootstrapping analyses did not reveal any significant indirect effect.

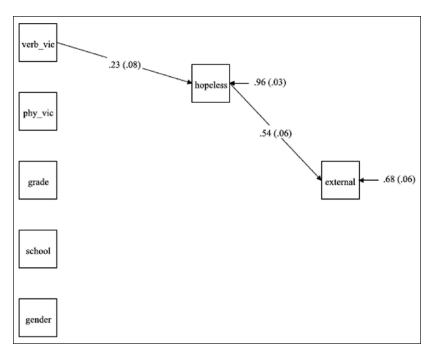


Figure 3. The final model for victimization, hopelessness, and external locus of control for the victim group. N = 163.

Note. Only significant standardized path coefficients are presented. verb_vic = verbal/relational victimization, phy_vic = physical victimization, hopeless = hopelessness, external = external locus of control.

Discussion

We examined cognitive (locus of control) and psychosocial (hopelessness) constructs in bullying perpetration and peer victimization among a middle school population. The hypothesized group difference on external locus of control was partially supported, and these results highlight a cognitive difference between students involved in bullying and students not involved in bullying. In particular, bully-victims and victims presented with significantly higher external locus of control compared with students who were not involved in bullying, which is consistent with previous research (Andreou, 2000; Atik & Güneri, 2013; Hunter & Boyle, 2002). Bully-victims reported the highest levels of external locus of control, which is not unexpected given that previous researchers have demonstrated a link between a more external locus of control and higher levels of aggression (Halloran et al., 1999;

Österman et al., 1999). Surprisingly, no group difference was identified between the bully group and other groups on locus of control. One hypothesis for this finding is that the bully inflicts harm and views the victim's response as a direct result of the bullying, confirming the bully's sense of control.

The secondary aim of this study was to explore the role of hopelessness as a mediator between peer victimization and locus of control for different bully/ victim groups. This is the first study to examine hopelessness as a mediator within the context of bullying. In the present study, victims reported the highest levels of hopelessness and significantly higher scores compared with students not involved in bullying, which is consistent with previous research studies that revealed a strong connection between victimization and higher levels of hopelessness (Biggam & Power, 1999; Fleming & Jacobsen, 2009). Hopelessness mediated the relationship between verbal/relational victimization and external locus of control for the victim group, but external locus of control did not mediate the relationship between verbal/relational victimization and hopelessness. Results suggest that victims who were experiencing higher levels of hopelessness were also more likely to report higher levels of external locus of control. This supports the hypothesis that as a victim experiences repeated bullying, he or she begins to feel hopeless and, in turn, expresses a greater external locus of control believing he or she can do nothing to stop the bullying. Furthermore, verbal/relational victimization that targets adolescent reputations and peer relationships as measured in the present study seems more likely to contribute to feelings of hopelessness and external locus of control compared with physical victimization. In the literature, there is some evidence that different types of victimization might lead to different psychosocial outcomes, although the findings are far from conclusive (Prinstein, Boergers, & Vernberg, 2001; Storch, Zelman, Sweeney, Danner, & Dove, 2002). The results in current study provide further evidence of the unique impact of verbal/relational victimization and physical victimization.

This research provides new insight to our understanding of the bullying dynamic by exploring two constructs, hopelessness and locus of control, that heretofore have been relatively unexplored. Specifically, a broader understanding of how peer victimization relates to locus of control was achieved through this study. In addition, these findings provide an initial look at the role hopelessness might serve as a mediator in the relation between bully/victim status and locus of control. In this sample, hopelessness was a mediator for victims, but not for bully-victims. This suggests that bully-victims are a unique group within the bully/victim continuum who may experience unique outcomes as a result of their role as both a bullying perpetrator and a victim. The established link between hopelessness and victimization suggests that hopelessness could lead to further problems for youth involved in bullying. Finally,

the present study also provides evidence that verbal/relational forms of victimization have a different impact on hopelessness and locus of control compared with physical forms.

Limitations

Despite the interesting findings, this study is not without its limitations. First, there were low participation rates (range 21%-27%) across schools. This limitation suggests that the results may not be representative of the entire school population, and as a result, we may not be able to generalize our results to a larger population. However, these participation rates are consistent with school-based research on sensitive psychological issues, namely, depression, anxiety, and bullying. Second, although this was a large sample, the bully group was much smaller than the other groups, which is a typical problem that occurs in research that includes separate bully and bully-victim groups in analyses (e.g., Andreou, 2000; Camodeca & Goossens, 2005). Some research suggests that students who only bully others and who do not experience any victimization are fewer than previously thought, and many bullies are also victims (Espelage & Swearer, 2003; Wolke, Woods, Stanford, & Schulz, 2001). It is also possible that students who only bully others do not want to report bullying perpetration due to concerns about social desirability. Individuals who both bully others and are victimized might feel justified in their bullying and, as a result, feel more comfortable reporting their bullying behavior. Due to the small sample size of pure bullies, we might not have enough power to reject the null hypothesis.

Another limitation is that the cross-sectional analyses prevent concluding the direction of causal effects between bully/victim status and locus of control beliefs. Although it appears that certain status groups (victims and bullyvictims) are more likely to display an external locus of control, it is possible that those individuals with a greater external locus of control are more likely to be become targets of bullying. Future research should explore the bidirectional effects between victimization and locus of control beliefs using a longitudinal design. Finally, bully/victim status was determined through the use of self-report. Previous researchers have asserted that self-report often provides more accurate information with regard to the prevalence of bullying especially the covert types of bullying that may not be detected by teachers and parents (Holt, Kaufman Kantor, & Finkelhor, 2009; Solberg & Olweus, 2003). It is also important to note the significant correlations between selfreported bullying behaviors and office referrals in the current study, which provides evidence for the validity of the self-report bullying measure. However, using self-report questionnaires in English may prevent students

who are English language learners (ELL) or students in special education who struggle with reading to participate in this study and may contribute to an underestimation of victimization rates as those two groups are likely to be the victims of bullying. Future researchers might consider alternative methods of assessment (e.g., individual interviews, surveys available in another language) and/or include multiple informants to determine bully/victim status (e.g., use of self-report, peer nomination, and teacher nomination).

Implications for Bullying Prevention and Intervention Programs

The findings from this study contribute to an understanding of the potential harmful outcomes of peer victimization for bully-victims and victims, and suggest that interventions for bullying should target cognitive and psychosocial variables. Specifically, youth who are victimized, experience hopelessness, and an external locus of control may be at a greater risk of negative psychosocial (e.g., aggression) and internalizing (e.g., depression) problems. In addition, because the verbal/relational victimization relates to more negative outcomes (i.e., hopelessness and external locus of control) than physical victimization in this study, it is important for teachers, parents, and students to be aware of the seriousness of verbal/relational bullying. Teachers play a critical role, and it is essential that they communicate negative attitudes toward and clear consequences for verbal/relational bullying in addition to other forms of bullying behaviors (Waasdorp, Pas, O'Brennan, & Bradshaw, 2011). One option to address these constructs is through a school-wide program, such as Positive Behavior Interventions and Supports (PBIS), that seeks to create a safe and supportive school climate. PBIS provides a preventive approach that emphasizes creating a positive school climate and addressing environmental issues to reduce bullying at the school-wide, classroom or small group, and individual levels (Wang, Berry, & Swearer, 2013). This framework would emphasize positive relationships, prosocial behaviors, and a supportive climate that does not tolerate bullying.

While psychosocial constructs have been included in some intervention programs, notably missing are strategies for reducing hopelessness and an external locus of control. Following are programs that include components to address cognitive or psychosocial factors and specific techniques that could be used alone or within the context of a program. One example is the *Promoting Alternative Thinking Strategies* (PATHS) program, a classroom-wide preventive intervention program that includes a unit on problem solving (Kam, Greenberg, & Kusché, 2004). This unit helps children recognize the connection between their actions and potential consequences. It is possible that this type of programming could positively affect a child's locus of

control. The *Coping Power* program is another curriculum that addresses risk factors, aggression, and other negative child behaviors; it includes both child and parent sessions, involves teachers, and has demonstrated efficacy and effectiveness (Powell et al., 2011). This program also has a unit addressing problem-solving skills.

Cognitive-behavioral therapy (CBT) has demonstrated effectiveness at reducing aggressive symptoms (Sukhodolsky, Kassinove, & Gorman, 2004). Sukhodolsky et al. (2004) conducted a meta-analysis on 40 CBT outcome studies addressing anger-related problems and found that targeting skill development (e.g., modeling, behavioral rehearsal), using multiple procedures targeting two or more aspects of anger, and problem-solving treatments were the most effective strategies. Cognitive restructuring is a specific CBT technique that has been found effective in improving irrational beliefs associated with an external locus of control (Tony, 2003). This technique could be used alone or as a part of a program (e.g., The Target Bullying Intervention Program; see Swearer, Wang, Collins, Strawhun, & Fluke, 2014, for more information). Rational emotive behavior therapy (REBT) can be used to address irrational beliefs, anger, and aggression (Wilde, 1996). REBT has also been used to address internalizing issues (see Gonzalez et al., 2004, for a review). Last, rational-emotive education (REE), an educational version of REBT, can be implemented in schools (Banks, 2011; see Hajzler & Bernard, 1991, for a review). When intervention programs target the cognitive and psychological process of bullying, they may be more effective in helping victims cope with the negative experience of bullying and help bullies stop their cruel and hurtful behaviors.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

Abramson, L. Y., Metalsky, G. I., & Alloy, L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological Review*, 96, 358-372. doi:10.1037/0033-295X.96.2.358

Abramson, L. Y., Seligman, M. E. P., & Teasdale, J. D. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology*, 87, 49-74.

- Andreou, E. (2000). Bully/victim problems and their association with psychological constructs in 8- to 12-year-old Greek schoolchildren. *Aggressive Behavior*, 26, 49-56. doi:10.1002/(SICI)1098-2337(2000)26:1%3C49::AID-AB4%3E3.3.CO:2-D
- Atik, G., & Güneri, O. Y. (2013). Bullying and victimization: Predictive role of individual, parental, and academic factors. School Psychology International, 34, 658-673. doi:10.1177/0143034313479699
- Austin, S., & Joseph, S. (1996). Assessment of bully/victim problems in 8 to 11 year-olds. *British Journal of Educational Psychology*, 66, 447-456. doi:10.1111/j.2044-8279.1996.tb01211.x
- Banks, T. (2011). Helping students manage emotions: REBT as a mental health educational curriculum. *Educational Psychology in Practice*, *27*, 383-394. doi:10.1080/02667363.2011.624303
- Beck, A. T., Kovacs, M., & Weissman, A. (1975). Hopelessness and suicidal behavior. *Journal of the American Medical Association*, 234, 1146-1149.
- Biggam, F. H., & Power, K. G. (1999). Social problem-solving skills and psychological distress among incarcerated young offenders: The issue of bullying and victimization. *Cognitive Therapy and Research*, 23, 307-326. doi:10.1023/A:1018795632067
- Brackney, B. E., & Westman, A. S. (1992). Relationships among hope, psychosocial development, and locus of control. *Psychological Reports*, 70, 864-866. doi:10.2466/pr0.1992.70.3.864
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*, 513-531.
- Camodeca, M., & Goossens, F. A. (2005). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology and Psychiatry*, 46, 186-197. doi:10.1111/j.1469-7610.2004.00347.x
- Craig, W. M. A. (1998). The relationship among bullying, victimization, depression, anxiety, and aggression in elementary school children. *Personality and Individual Differences*, 24, 123-130. doi:10.1016/S0191-8869(97)00145-1
- Doll, B., & Swearer, S. M. (2006). Cognitive-behavioral interventions for participants in bullying and coercion. In R. Mennuti, A. Freeman, & R. W. Christner (Eds.), Cognitive behavioral interventions in educational settings: A handbook for practice (pp. 183-201). New York, NY: Routledge.
- Espelage, D. L. (2014). Ecological theory: Preventing youth bullying, aggression, and victimization. *Theory Into Practice*, *53*, 257-264. doi:10.1080/00405841.2 014.947216
- Espelage, D. L., & Swearer, S. M. (2003). Research on school bullying and victimization: What have we learned and where do we go from here? *School Psychology Review*, *32*, 365-383.
- Fleming, L. C., & Jacobsen, K. H. (2009). Bullying and symptoms of depression in Chilean middle school students. *Journal of School Health*, 79, 130-137. doi:10.1111/j.1746-1561.2008.0397.x
- Gonzalez, J. E., Nelson, J. R., Gutkin, T. B., Saunders, A., Galloway, A., & Shwery, C. S. (2004). Rational emotive therapy with children and adolescents: A meta-analysis.

Journal of Emotional and Behavioral Disorders, 12, 222-235. doi:10.1177/1063 4266040120040301

- Hajzler, D. J., & Bernard, M. E. (1991). A review of rational-emotive education outcome studies. School Psychology Quarterly, 6, 27-49. doi:10.1037/h0088242
- Halloran, E. C., Doumas, D. M., John, R. S., & Margolin, G. (1999). The relationship between aggression in children and locus of control beliefs. *The Journal of Genetic Psychology*, 160, 5-21. doi:10.1080/00221329909595376
- Hamburger, M. E., Basile, K. C., & Vivolo, A. M. (2011). Measuring bullying victimization, perpetration, and bystander experiences: A compendium of assessment tools. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control.
- Haynie, D. L., Nansel, T., Eitel, P., Crump, A. D., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, and bully/victims: Distinct groups of at-risk youth. *Journal of Early Adolescence*, 21, 29-49. doi:10.1177/0272431601021001002
- Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of Suicide Research*, 14, 206-221.
- Holt, M. K., Kaufman Kantor, G., & Finkelhor, D. (2009). Parent/child concordance about bullying involvement and family characteristics related to bullying and peer victimization. *Journal of School Violence*, 8, 42-63. doi:10.1080/15388220802067813
- Hong, J. S., & Garbarino, J. (2012). Risk and protective factors for homophobic bullying in schools: An application of the social-ecological framework. *Educational Psychology Review*, 24, 271-285. doi:10.1007/s10648-012-9194-y
- Hunter, S. C., & Boyle, J. M. E. (2002). Perceptions of control in the victims of school bullying: The importance of early intervention. *Educational Research*, 44, 323-336. doi:10.1080/0013188022000031614
- Juvoven, J., & Gross, E. F. (2008). Extending the school grounds? Bullying experiences in cyberspace. *The Journal of School Health*, 78, 496-505.
- Kam, C. M., Greenberg, M. T., & Kusché, C. A. (2004). Sustained effects of the PATHS curriculum on the social and psychological adjustment of children in special education. *Journal of Emotional and Behavioral Disorders*, 12, 66-78. doi:10.1177/10634266040120020101
- Kazdin, A. E., French, N. H., Unis, A. S., Esveldt-Dawson, K., & Sherick, R. B. (1983). Hopelessness, depression, and suicidal intent among psychiatrically disturbed inpatient children. *Journal of Consulting and Clinical Psychology*, 51, 504-510. doi:10.1037/0022-006X.51.4.504
- Kazdin, A. E., Rodgers, A., & Colbus, D. (1986). The Hopelessness Scale for Children: Psychometric characteristics and concurrent validity. *Journal of Consulting and Clinical Psychology*, 54, 241-245. doi:10.1037/0022-006X.54.2.241
- Kim, Y. S., & Leventhal, B. (2008). Bullying and suicide. A review. *International Journal of Adolescent Medicine and Health*, 20, 133-154.
- Klomek, A. B., Sourander, A., Niemelä, S., Kumpulainen, K., Piha, J., Tamminen, T., . . . Gould, M. S. (2009). Childhood bullying behaviors as a risk for suicide attempts and completed suicides: A population-based birth cohort study. *Journal*

- of the American Academy of Child & Adolescent Psychiatry, 48, 254-261. doi:10.1097/CHI.0b013e318196b91f
- Livingstone, S., & Smith, P. K. (2014). Annual research review: Harms experienced by child users of online and mobile technologies: The nature, prevalence and management risk of sexual and aggressive risks in the digital age. *Journal of Child Psychology and Psychiatry*, 55, 635-654. doi:10.1111/jcpp.12197
- Mullis, A. K., & Mullis, R. L. (1997). Vocational interests of adolescents: Relationships between self-esteem and locus of control. *Psychological Reports*, *81*, 1363-1371.
- Muthén, L. K., & Muthén, B. O. (1998-2013). *Mplus user's guide*. Los Angeles, CA: Muthén & Muthén.
- Nakamoto, J., & Schwartz, D. (2010). Is peer victimization associated with academic achievement? A meta-analytic review. Social Development, 19, 221-242. doi:10.1111/j.1467-9507.2009.00539.x
- Nansel, T. R., Overpeck, M., Pilla, R. S., Ruan, W. J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychological adjustment. *Journal of the American Medical Association*, 285, 2094-2132.
- Nishina, A., Juvonen, J., & Witkow, M. R. (2005). Sticks and stones may break my bones, but names will make me feel sick: The psychosocial, somatic, and scholastic consequences of peer harassment. *Journal of Clinical Child and Adolescent Psychology*, *34*(1), 37-48. doi:10.1207/s15374424jccp3401 4
- Nowicki, S., & Strickland, B. R. (1973). A locus of control scale for children. *Journal of Consulting and Clinical Psychology*, 40, 148-154. doi:10.1037/h0033978
- Österman, K., Björkqvist, K., Lagerspetz, K. M. J., Charpentier, S., Caprara, G. V., & Pastorelli, C. (1999). Locus of control and three types of aggression. *Aggressive Behavior*, 25, 61-65. doi:10.1002/(SICI)1098-2337(1999)25:1%3C61::AID-AB6%3E3.0.CO;2-G
- Patchin, J. W., & Hinduja, S. (2012). Cyberbulling: An update and synthesis of the research. In J. W. Patchin & S. Hinduja (Eds.), *Cyberbullying prevention and* response: Expert perspectives (pp. 13-35). New York, NY: Routledge.
- Pinto, A., & Francis, G. (1993). Cognitive correlates of depressive symptoms in hospitalized adolescents. *Adolescence*, 28, 661-672.
- Powell, N. P., Boxmeyer, C. L., Baden, R., Stromeyer, S., Minney, J. A., Mushtaq, A., & Lochman, J. E. (2011). Psychology in the Schools, 48, 233-242. doi:10.1002/pits
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi:10.3758/BRM.40.3.879
- Prinstein, M. J., Boergers, J., & Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 30, 479-491. doi:10.1207/ S15374424JCCP3004 05
- Prociuk, T. J., Breen, L. J., & Lussier, R. J. (1976). Hopelessness, internal-external locus of control, and depression. *Journal of Clinical Psychology*, 32, 299-300. doi:10.1002/1097-4679(197604)32:2%3C299::AID-JCLP2270320221 %3E3.0.CO;2-G

Robers, S., Kemp, J., Truman, J., & Snyder, T. D. (2013). *Indicators of school crime and safety: 2012* (NCES 2013-036/NCJ 241446). Washington, DC: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice. Available from http://nces.ed.gov

- Ross, C. E., & Broh, B. A. (2000). The role of self-esteem and the sense of personal control in the academic achievement process. *Sociology of Education*, 73, 270-284. doi:10.2307/2673234
- Slee, P. T. (1993). Bullying: A preliminary investigation of its nature and the effects of social cognition. Early Child Development and Care, 87, 47-57. doi:10.1080/0300443930870105
- Solberg, M. E., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus Bully/Victim Questionnaire. Aggressive Behavior, 29, 239-268. doi:10.1002/ab.10047
- Spirito, A., Williams, C. A., Stark, L. J., & Hart, K. J. (1988). The Hopelessness Scale for Children: Psychometric properties with normal and emotionally disturbed adolescents. *Journal of Abnormal Psychology*, 16, 445-458. doi:10.1007/ BF00914174
- Storch, E. A., Zelman, E., Sweeney, M., Danner, G., & Dove, S. (2002). Overt and relational victimization and psychosocial adjustment in minority preadolescents. *Child Study Journal*, 32(2), 73-80.
- Sukhodolsky, D. G., Kassinove, H., & Gorman, B. S. (2004). Cognitive-behavioral therapy for anger in children and adolescents: A meta-analysis. *Aggression and Violent Behavior*, *9*, 247-269. doi:10.1016/j.avb.2003.08.005
- Swearer, S. M. (2001). The Bully Survey—Student version. Unpublished Instrument, Department of Educational Psychology, University of Nebraska-Lincoln, Lincoln, NE.
- Swearer, S. M., Turner, R. K., Givens, J. E., & Pollack, W. S. (2008). "You're so gay!" Do different forms of bullying matter for adolescent males? *School Psychology Review*, 37, 160-173.
- Swearer, S. M., Wang, C., Collins, A., Strawhun, J., & Fluke, S. (2014). Bullying: A school mental health perspective. In M. Weist, N. A. Lever, C. Bradshaw, & J. S. Owens (Eds.), *Handbook of school mental health* (2nd ed., pp. 341-354). New York, NY: Springer.
- Thurber, S., Hollingsworth, D. K., & Miller, L. A. (1996). The Hopelessness Scale for Children: Psychometric properties with hospitalized adolescents. *Journal of Clinical Psychology*, 52, 543-545. doi:10.1002/(SICI)1097-4679(199609)52:5%3C543::AID-JCLP7%3E3.0.CO;2-O
- Tokunaga, R. S. (2010). Following you home from school: A critical review and synthesis of research on cyberbullying victimization. *Computers in Human Behavior*, 26, 277-287. doi:10.1016/j.chb.2009.11.014
- Tony, T. S. K. (2003). Locus of control, attributional style, and discipline problems in secondary schools. *Early Child Development and Care*, 173, 455-466. doi:10.1080/0300443032000088203

- Topol, P., & Reznikoff, M. (1982). Perceived peer and family relationships, hopelessness, and locus of control as factors in adolescent suicide attempts. Suicide and Life-Threatening Behavior, 12, 141-150.
- Waasdorp, T. E., Pas, E. T., O'Brennan, L. M., & Bradshaw, C. P. (2011). A multilevel perspective on the climate of bullying: Discrepancies among students, school staff, and parents. *Journal of School Violence*, 10, 115-132. doi:10.1080/15388220.2010.539164
- Wang, C., Berry, B., & Swearer, S. M. (2013). The critical role of school climate in effective bullying prevention. *Theory Into Practice*, 52, 296-302. doi:10.1080/0 0405841.2013.829735
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, 45, 368-375. doi:10.1016/j.jadohealth.2009.03.021
- Ward, L. C., & Thomas, L. L. (1985). Interrelationships of locus of control content dimensions and hopelessness. *Journal of Clinical Psychology*, 41, 517-520.
- Wilde, J. (1996). *Treating anger, anxiety, and depression in children and adolescents*. Washington, DC: Accelerated Development.
- Wolke, D., Woods, S., Stanford, K., & Schulz, H. (2001). Bullying and victimization of primary school children in England and Germany: Prevalence and school factors. *British Journal of Psychology*, 92, 673-696. doi:10.1348/000712601162419
- Ybarra, M. L., Diener-West, M., & Leaf, P. J. (2007). Examining the overlap in Internet harassment and school bullying: Implications for school intervention. *Journal of Adolescent Health*, 41, S42-S50.

Author Biographies

Kisha M. Radliff, PhD, is an assistant professor of School Psychology at The Ohio State University (OSU). She is the clinical director for the Practicum (school-based) and Advanced Practicum (clinical experiences) field-based experiences. She is coeditor of the book *School Psychology and Social Justice: Conceptual Foundations and Tools for Practice* (2013). Her research interests are in the areas of understanding and addressing child and adolescent mental health issues (e.g., bullying prevention and intervention); youth empowerment, particularly for youth in urban settings; social justice training models in school psychology; and addressing non-academic barriers to success in school within a social justice framework.

Cixin Wang, PhD, is an assistant professor in the Graduate School of Education at University of California, Riverside, United States. Her research interests are in the areas of bullying prevention, mental health promotion, family involvement, and culture difference in students' psychosocial development.

Susan M. Swearer, PhD, is the Willa Cather professor of educational psychology and a professor of school psychology at the University of Nebraska–Lincoln (UNL). She is the co-director of the Bullying Research Network (http://brnet.unl.edu), director of the Empowerment Initiative (http://empowerment.unl.edu), and chair of the research advisory board for Lady Gaga's Born This Way Foundation (www.bornthiswayfoundation.org).

She is the co-author of Bullying Prevention and Intervention: Realistic Strategies for Schools (2009) and co-editor of the books, *Handbook of Bullying in Schools: An International Perspective* (2010) and *Bullying in North American Schools, 2nd edition* (2011). She was an invited presenter at the White House Bullying Prevention Conference, and she was a panel member at Harvard University for the launch of the Born This Way Foundation along with Lady Gaga, Oprah, Deepak Chopra, and Secretary of HHS Kathleen Sebelieus. Her research interests are in the areas of bullying prevention and intervention, cognitive-behavioral interventions, youth empowerment and youth engagement, and supports needed to create a kinder and braver world.