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ABSTRACT

A study was designed to identify the potential contributory effects of different social information perspectives on the stability of bully and victim social roles and the interrelationships of three behavioral indices of bully and victim behavior. Students (N=120) from grades 5 and 6 completed behavioral indices of bully and victim behavior. Seventeen classes from four different schools in predominately Caucasian, low-to-moderate economic status neighbors participated. The interrelationship among the victim behavior indices supported the notion that victimized children tended to both recognize how they were perceived by others and agreed with the perceptions of their peer group, yet disagreed with the characterization. Additional descriptive information is provided, including a measure of children's perceived peer perspective and the clinical implications of using all three behavioral indices. (Contains 31 references and 4 tables.) (JDM)

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The Interrelationships of Behavioral Indices of Bully and Victim Behavior

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ABSTRACT

In an exploratory effort to identify the potential contributory effects of different social information perspectives on the stability of bully and victim social roles, the interrelationships of three behavioral indices of bully and victim behavior were examined. Each measure is assumed to represent a different reporting perspective of the bully and victim experience, and includes a peer derived point of view (Introducing My Classmates, IMC), a self-referential report (Self Report Inventory, SRI), and a newly developed self-report measure of one's perceptions of how he/she is perceived by his/her peers, specifically with regard to bully and victim behavior (Perceived Peer Perspective Inventory, PPP).

As a part of a larger study, one hundred and twenty children from grades 5 and 6 (55 males and 65 females) completed all three behavioral indices of bully and victim behavior. Seventeen classes from four different schools participated. All schools were located in areas whose residents were predominantly Caucasian and of low to moderate socioeconomic status.

The interrelationship among the victim behavior indices supported the notion that victimized children tended to both recognize how they were perceived by others and agree with the perceptions of their peer group. The interrelationship among the bully behavior indices suggested that bullies were somewhat aware of how they were perceived by their peer group and yet disagreed with or disregarded this characterization. The additional descriptive information provided by including a measure of children's perceived peer perspective, and the clinical implications of using all three behavioral indices in concert, are discussed.

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Bullying and the chronic victimization of children in today's schools remain a significant problem with longstanding clinical implications. Recent media coverage of retaliatory violence, reportedly by children who have been victimized by their peers, has contributed to a new found awareness of, and sense of urgency about a problem that has been as common in our schools as the 3 r's.

In a United States based study, Perry, Kusel, and Perry (1988) found that 10% of their sample (N = 165) of third through sixth graders were classified as "extremely victimized" (p. 807). Using retrospective data from adolescent students, Hoover, Oliver, and Hazler (1992) found that 76.8% of respondents reported having experienced some form of bullying during their school careers, with 14% reporting having been severely victimized. In a Canadian based survey of children aged 4 to 14 years, Charach, Pepler, and Ziegler (1995) found that 8% of children reported being bullied on at least a weekly basis, and 15% of students admitted to frequently bullying others.

Research has indicated that a variety of immediate and future consequences exist for bullies and victims. Children who are victimized are more likely to be depressed, develop low self-esteem (Austin & Joseph, 1996; Horne, Glaser, & Sayger, 1994; Olweus, 1992; 1993), experience a continuing loss of confidence, peer rejection, school absenteeism (Hazler, Carney, Green, Powell, & Jolly, 1997; Smith, Bowers, Binney, & Cowie, 1993), and anxiety (Besag, 1989). In severe cases of victimization, children have been known to attempt suicide (Olweus, 1991; Smith et al., 1993), and child victims tend to be at a greater risk for developing depressive symptomatology as adults (Olweus, 1992). Based on a survey of 631 fifth through seventh graders, Slee (1993) found that 65% of bullied subjects reported feeling worse about themselves after being bullied, and 15% of their sample reported feeling unsafe at school.

The research indicates that child bullies are more likely than the general population to have a criminal record by the time they are young adults, and to abuse alcohol and engage in domestic violence (Olweus, 1993; Zarzour, 1994). In a 22-year longitudinal study by Huesmann, Eron, Lefkowitz, and Walder (1984), aggressive children appeared to carry their aggression with them into adulthood. Subjects initially rated as highly aggressive were significantly more likely than less aggressive peers to have committed a criminal act, been convicted of a criminal act, been caught driving while intoxicated, and have more traffic violations by age 30. Eron's (cited in Roberts, 1988) research has indicated that 8-year-old bullies have a 1 in 4 chance of having a criminal record by the age of 30, as compared to a 1 in 20 chance for non-bullies.

To make matters worse, bully and victim social roles tend to be relatively stable irrespective of changes in schools, teachers, classmates, and efforts by others to abolish bully and victim behaviors (Olweus, 1984). According to Olweus (1984), children rated as bullies and victims in grade 6 retained these roles at a 3-year follow-up. In a study by Boulton and Underwood (1992), it was found that by early middle school, children (11-12 years of age) who reported being bullied were the most likely to be bullied in the following terms, even though changes in classroom teachers had occurred. Boulton and Smith (1990, as cited in Boulton & Underwood, 1992) found that based on peer nominations, both victim and bully statuses remained stable throughout the school year and into the next. In a study by Craig and Pepler (1993), 6 to 12 year old children involved in bullying during the winter school term were found to continue to engage in this behavior during the spring term.

The enduring quality, social ramifications, and future consequences of being a bully or victim, highlight the need to discover the mechanisms responsible for the maintenance of these social positions. Such information can help in the design of more effective prevention/ intervention programs that may contribute to a reduction in the likelihood of children adopting or remaining in these social roles.

In the current study the contributory effects of different social information perspectives on the stability of bully and victim social roles, were examined through the interrelationships of three behavioral indices of bully and victim behavior. One such perspective is that of the **peer group**. Peer-nomination inventories, involve having a number of children rate an individual child on a set of characteristics. The scores obtained are a composite of multiple rater judgments and therefore offer greater reliability and validity than single-rater inventories (Achenbach, McConaughy, & Howell, 1987; Kane & Lawler, 1978). Given the social nature of bully-victim encounters, the peer group has often been used as the informant of choice in identifying bullies and victims.

The **individual** is another source that has been used to classify children as bullies or victims. A problem with self-referential data is that self-serving biases and selective recall may be operating, and can result in inaccurate reporting (Ledingham, Younger, Schwartzman, & Bergeron, 1982; Wayment & Zetlin, 1989). In a study by Hymel, Bowker, and Woody (1993), peer-identified aggressive children tended to overestimate their competencies on self-report measures. Ledingham and associates (1982) found that children's self-reports were lowest when asked to identify aggressive and withdrawal behaviors, and highest on likeability. These findings support the notion that self-referential data may be vulnerable to some form of image management, particularly when individuals are asked to self-report on controversial areas, such as bully and victim behavior.

Another important consideration with respect to self-referential reports is whether a single individual can offer useful information about an inherently social phenomenon. A consistent finding in the literature is that self-ratings do not tend to correlate well with other measures, and therefore should not be used alone when evaluating social phenomena (Ledingham & Younger, 1985; Ledingham et al., 1982). Nonetheless, self-report data offer insight into the cognitions, feelings, and goals of the individual, that cannot be easily obtained from other sources (Hymel & Franke, 1985). How one perceives him/herself in the social world will likely influence future interpersonal behavior, and therefore, needs to be accounted for in order to understand the individual within a social context.

In addition to peer nomination and self-referential report inventories, the current study also includes a newly developed self-report measure of children's awareness, regarding how they are viewed by their peers. The **Perceived Peer Perspective (PPP)** Inventory is a self-report measure in which children are presented with statements about bully and victim behaviors and are asked to take the perspective of their classmates in rating themselves.

Therefore, in the current study three behavioral indices of bully and victim behavior were administered in order to gather information about: 1) how one is seen by others (peer nominations); 2) how one sees him/herself (self-referential, self-report data); and 3) how one thinks he/she is perceived by others (perceived peer perspective data). With this information, discrepancies between peer and self-derived behavioral descriptions can provide information about one's ability to accept and/or recognize his/her social persona.

METHOD

Subjects

One hundred and twenty children from grades 5 and 6 (55 males and 65 females) completed self-referential and perceived peer perspective measures of bully and victim behavior, and received peer nomination bully and victim behavior scores. Seventeen classes from four different schools participated. All schools were located in areas whose residents were predominantly Caucasian and of low to moderate socioeconomic status.

Measures

Introducing My Classmates (IMC). The IMC is a peer nomination form in which subjects are read a series of stories about fictitious child characters and are asked to nominate all the classmates, on provided lists, that they feel are like the child in the story (i.e.: This girl Loraine is picked on, made fun of, called names, and is hit and pushed by other kids. Kids do mean things to her and try to hurt her feelings. Write the code numbers for all the girls on your list that you feel are like Loraine). Children are read 4 stories about different boys and 4 stories about different girls. The two versions of stories are identical except for the described child's name, which is gender specific. Of the 4 stories, one describes a child exhibiting victim-like characteristics, one describes a child exhibiting bully-like characteristics and two are filler items.

Bully and victim items were adapted from a previously developed peer nomination inventory (PNI-R; Gottheil, 1994). Based on principal axis factor analyses and tests of internal consistency, derived bully and victim subscale items were separately combined into single story formats.

IMC nominations on any given child were made by both boys and girls, regardless of the nominee's gender. This allowed for more raters, therefore reducing the effects of any individually biased ratings. The decision to have both genders rate each other is supported by research, in that bullying is most likely to occur during times when boys and girls are in close vicinity of each other, such as in the classroom (when the teacher is not looking), on the playground, or during recess and lunch. Because boys and girls are likely to observe and be knowledgeable of the ongoing bully and victim behaviors of their peers, it was felt that both should be included as nominators. Additionally, the use of both boys and girls as raters allows for a greater representation of the overall social impression of a given child, who is being evaluated by the standards of both male and female subcultures.

Bully and victim subscale scores were derived separately by adding up all the nominations that a given child received from his or her classmates on the respective bully and victim items. These scores were then divided by the total number of raters and multiplied by 100 in order to obtain a percentage score of peer nominated bully (Percent Bully Score, PBS) and victim (Percent Victim Score, PVS) behavior. Scores can range from 0 to 100 with higher scores reflecting a greater percentage of classmate nominations.

Setting the Record Straight (SRS). The SRS is a survey containing true/false statements that combine the previously developed self-referential self-report measure of bully and victim behavior (SRI; Gottheil, 1994) with the newly developed measure of children's perceptions of how they are viewed by their peers (Perceived Peer Perspective Inventory; PPP). Fifteen of the original twenty SRI items were included in the SRS and were chosen based upon previous principal axis factor analyses and measures of internal consistency. Based on a sample of 218 fourth and fifth graders, the internal consistencies for bully and victim subscales derived from the SRI were .63 and .89, respectively.

Each SRI item (i.e., I get beat up) was preceded by a matching Perceived Peer Perspective (PPP) item (i.e., My classmates think that I get beat up). The format of the survey was such that pairings of SRI and PPP items were clearly recognizable to subjects. This was done in order to reduce the reactivity of items by allowing children to admit to being "perceived" as engaging in potentially inappropriate or embarrassing behaviors (bully and victim behavior) while providing them with the opportunity to present their perspective through the SRI items. Of the 15 SRI/PPP pairings 10 are victim item pairs and 5 are bully item pairs.

SRI and PPP bully and victim scores were tabulated independently. Scores were derived by adding up the respective bully and victim subscale items responded to by the subject as true for them. Bully scores included the number of true responses that a child endorsed for the bully subscale items divided by the total number of bully items ($n = 5$) and multiplied by 100, in order to obtain a percentage. The derivation of victim scores followed the same procedure except that they were divided by the total number of victim items ($n = 10$). Scores on each subscale can range from 0 to 100 with higher scores reflecting higher percentages of self-reported bully and/or victim behaviors.

RESULTS

Scale Refinement Analyses for the Perceived Peer Perspective (PPP) and Self-Report Inventory of Bullying and Victimization (SRI)

For the total sample, and male and female subsamples, two separate 2-factor solution factor analyses were computed, one with PPP items and one with SRI items.

Total sample PPP and SRI factor analyses (Table 1). For the PPP, factor 1 was determined to be a victim factor, with an eigenvalue of 4.48 (29.8% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.49 (16.5% explained unique variance). Together, these two factors accounted for 46.4% of the variance.

Nine of the ten “expected” victim PPP items loaded highest and exclusively on the Victim PPP factor (factor loadings ranged from .31 to .79). One of the “expected” victim items (item 21; My classmates probably think that when I get picked on I don’t like to fight back) originally loaded negatively on the bully factor, and was reverse coded and included with the five original “expected” bully items. All five “expected” bully items and the reverse coded victim item 21, loaded highest and exclusively on the Bully PPP factor (factor loadings ranged from .30 to .80).

For the SRI, factor 1 was determined to be a victim factor, with an eigenvalue of 4.46 (29.7% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.60 (17.3% explained unique variance). Together, these two factors accounted for 47% of the variance.

Eight of the ten “expected” victim SRI items loaded highest and exclusively on the Victim SRI factor (factor loadings ranged from .30 to .80). One of the “expected” victim items (item 22; When I get picked on I don’t like to fight back) originally loaded negatively on the bully factor, and was reverse coded and included with the five original “expected” bully items. One item (item 30; I don’t defend myself) did not meet the inclusion criteria (loading $|\geq .30|$ or above) for either victim or bully factors, and was dropped from further analyses. Four of the five “expected” bully items and the reverse coded victim item 22, loaded highest and exclusively on the Bully SRI factor (factor loadings ranged from .45 to .68). One of the “expected” bully items (item 28; I can beat everyone up) did not meet the inclusion criteria for either victim or bully factors, and was dropped from further analyses.

Male sample PPP and SRI factor analyses (Table 2). For the PPP, factor 1 was determined to be a victim factor, with an eigenvalue of 5.08 (33.9% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.25 (15% explained unique variance). Together, these two factors accounted for 48.9% of the variance.

As with the total sample, the same nine of the ten “expected” victim PPP items loaded highest and almost exclusively on the Victim PPP factor (factor loadings ranged from .38 to .82). Item 21 did not meet inclusion criteria for either victim or bully factors. Four of the five “expected” bully items loaded highest and exclusively on the Bully PPP factor (factor loadings ranged from .56 to .78). Item 27 (My classmates probably think that I can beat everyone up) did not meet inclusion criteria for either victim or bully factors.

For the SRI, factor 1 was determined to be a victim factor, with an eigenvalue of 4.96 (33.1% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.62 (17.4% explained unique variance). Together, these two factors accounted for 50.5% of the variance.

Eight of the ten “expected” victim SRI items loaded highest and exclusively on the Victim SRI factor (factor loadings ranged from .36 to .87). One of the “expected” victim items (item 22; When I get picked on I don’t like to fight back) loaded negatively on the bully factor, and was reverse coded and included with the five original “expected” bully items. One item (item 30; I don’t defend myself) did not meet the inclusion criteria for either victim or bully factors. Four of the five “expected” bully items and the reverse coded victim item 22, loaded highest and exclusively on the Bully SRI factor (factor loadings ranged from .41 to .81). One of the “expected” bully items (item 28; I can beat everyone up) did not meet the inclusion criteria for either victim or bully factors.

Female sample PPP and SRI factor analyses (Table 3). For the PPP, factor 1 was determined to be a victim factor, with an eigenvalue of 3.80 (25.3% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.74 (18.3% explained unique variance). Together, these two factors accounted for 43.6% of the variance.

Seven of the ten “expected” victim PPP items loaded highest and exclusively on the Victim PPP factor (factor loadings ranged from .34 to .72). Item 3 (My classmates probably think that I get beat up) and item 29 (My classmates probably think that I don’t defend myself) did not meet inclusion criteria for either victim or bully factors. Item 21 (My classmates probably think that when I get picked on I don’t like to fight back) loaded negatively on the bully factor, and was reverse coded and included with the “expected” bully items. All five of the “expected” bully items, and the reverse coded victim item 21, loaded highest and exclusively on the Bully PPP factor (factor loadings ranged from .40 to .80).

For the SRI, factor 1 was determined to be a victim factor, with an eigenvalue of 3.91 (27.9% explained unique variance); and factor 2 was determined to be a bully factor, with an eigenvalue of 2.68 (19.2% explained unique variance). Together, these two factors accounted for 47.1% of the variance.

Seven of the ten “expected” victim SRI items loaded highest and exclusively on the Victim SRI factor (factor loadings ranged from .47 to .78). Item 22 (When I get picked on I don’t like to fight back) loaded negatively on the bully factor, and was reverse coded and included with the five original “expected” bully items. Item 4 (I get beat up) did not have vary and therefore could not be included in the factor analysis. Item 30 (I don’t defend myself) did not meet the inclusion criteria for either victim or bully factors. All five of the “expected” bully items and the reverse coded victim item 22, loaded highest and exclusively on the Bully SRI factor (factor loadings ranged from .34 to .79).

Summary and decisions about subscale formation. The factor analyses based on the total sample supported a priori predictions of scale item composition. The factor structure remained relatively stable across gender with some exceptions. This may be partly accounted for by the lowered sample size resulting from dividing the total sample along gender lines. It was therefore decided that scale items based on the total sample would be retained for all further analyses involving the PPP and SRI.

Internal consistencies for PPP and SRI subscales. Based on the results of the total sample factor analysis, Cronbach’s alphas were computed for the total sample, and male and female subsamples, for each PPP and SRI subscale. For the victim PPP subscale items, alpha levels were .85 for the total sample, .88 for the male subsample, and .78 for the female subsample. For the bully PPP subscale items, alpha levels were .69 for the total sample, .63 for the male subsample, and .75 for the female subsample. For the victim SRI subscale items, alpha levels were .88 for the total sample, .90 for the male subsample, and .85 for the female subsample. For the bully SRI subscale items, alpha levels were .72 for the total sample, .75 for the male subsample, and .67 for the female subsample.

Intercorrelations of Behavioral Indices (Table 4)

The distributions of PBS and PVS residuals were not normally distributed. As a result, a Log10 transformation was applied to both variables in order to pull in extreme scores, and increase normality in the distributions (Neter, Wasserman, & Kutner, 1990; Winer, 1971). Both transformed and non-transformed results are reported. The transformation did not appear to substantially affect the results in the current study.

The intercorrelations of all variables were computed. All self derived- (VPPP and VSRI) and peer-report (PVS and Transformed PVS) measures of victim behavior were significantly and positively correlated with one another for the total sample (range = .50 to .82, \underline{M} = .63), male subsample (range = .49 to .82, \underline{m} = .62), and female subsample (range = .45 to .82, \underline{m} = .55). With few exceptions, self derived- (BPPP and BSRI) and peer-report (PBS and Transformed PBS) measures of bully behavior were significantly and positively correlated with one another for the total sample (range = .38 to .79, \underline{M} = .53), male subsample (range = .28 to .75, \underline{m} = .44), and female subsample (range = .14 to .85, \underline{m} = .50). The BSRI did not significantly correlate with the PBS for the total sample, with the PBS or Transformed PBS for the male subsample, nor with the Transformed PBS for the female subsample. The BSRI was modestly correlated with PBS for the female subsample ($r = .14$, $p < .001$) and the Transformed PBS for the total sample ($r = .20$, $p < .05$). Interestingly, and in contrast to the BSRI, the BPPP scores consistently and significantly correlated with peer-report measures for the total sample (PBS: $r = .38$, $p < .001$; Transformed PBS: $r = .41$, $p < .001$) and male (PBS: $r = .29$, $p < .05$; Transformed PBS: $r = .28$, $p < .05$) and female (PBS: $r = .45$, $p < .001$; Transformed PBS: $r = .47$, $p < .001$) subsamples. All means and ranges reported above are of the significant correlations.

With few exceptions, self derived and peer-report measures of bully behavior did not correlate with measures of victim behavior. Of the few exceptions (7 of 48), bully and victim indices were negatively correlated, except for one instance in the male subsample, in which the BPPP and VPPP was positively correlated. Also noteworthy is the moderate to high, significant correlations of VSRI with PVS and Transformed PVS, in contrast to the largely nonsignificant, low correlations of BSRI with PBS and Transformed PBS.

DISCUSSION

Behavioral measures of bullying tended to be unrelated to measures of victim behavior. The within group relationships of the behavioral indices (peer, perceived peer perspective, and self-report) offer descriptive information beyond any single measure, and allow for speculation about possible mechanisms contributing to the maintenance of bully and victim behaviors. The pattern of behavioral indices of bullying and victimization, and the potential implications, will be discussed separately, and in turn.

In the current study, peer, perceived peer perspective, and self-referential self-report measures of bullying and victimization will be discussed as though they represent actual perceptions. However, caution is necessary given that bully and victim behaviors represent a controversial social phenomenon and hence, may be susceptible to image management efforts, selective recall, etc. (Hymel et al., 1993; Ledingham et al., 1982), potentially resulting in an under or over report of bully and victim behavior.

Pattern of Interrelations Among Bully Behavior Indices

Based on the total sample, bully scores obtained through peer nominations (PBS) were not significantly related to those derived from the bully self-report inventory (BSRI), but were moderately related to measures of perceived peer perspectives on bullying (BPPP). Previous research in the area of bullying has tended to note an absence of, or minimal relationship between peer and self reports (Ledingham & Younger, 1985; Ledingham et al., 1982). In a study by Gottheil (1995), bully behavior scores derived from peer nomination and self-report measures were only minimally related ($r = .18$, $p < .01$). However, the moderate relationship between peer nominations and perceived peer perceptions of bullying, provides support to the notion that the lack of relationship between conventional bully self-report indices with peer nominations may simply reflect children's disagreement with, rather than a lack of recognition about, how they are being perceived by their peers.

Each of the three measures of bullying used in the current study provides a different perspective on the bully phenomenon. Given the social nature of bullying, the peer nomination method is the only measure of the three that provides a social perspective, by virtue of having each child's social classification determined by his/her peers. Additionally, the peer nomination method has tended to be regarded in the literature as the method of choice in identifying bully behavior, and has been the standard by which other measures have been compared (Hymel et al., 1993; Ledingham & Younger, 1985). However, if, as in the current study, the objective is to learn about the factors that serve to maintain bully behavior, it becomes important to gather information about children's understanding about their own behavior, and the degree to which they are aware of how they present themselves on the social stage. Hence, peer nominations alone do not provide enough information about bullying, beyond mere classification.

In order to explore potential social information processing factors as possible contributors to the durability of bully behavior, three reporting perspectives are useful, and in the current study include information about: 1) how one is seen by others (PBS); 2) how one sees him/herself (BSRI); and 3) how one thinks he/she is perceived by others (BPPP). With this information, discrepancies between peer and self behavioral descriptions can provide information about one's ability to accept and/or recognize his/her social persona.

In the current study, the relationship pattern of behavioral indices of bully behavior suggests that bullies are somewhat aware of how they are perceived by their peer group and yet disagree with or disregard this characterization. The use of an index of perceived peer perspectives, together with peer and self-report indices, provides additional information that sheds new light on the commonly noted minimal relationship between self and peer indices of bully behavior. Such a pattern of findings lends support to the notion that children with higher peer bully scores are more likely to process this information in a way described by Piaget (as cited in Miller, 1989) as assimilation. Assimilation is the process of taking information and making it fit into ones "current cognitive organizations" or schemata (p. 74). Rather than modifying ones way of thinking (accommodation), contradictory information is

modified to better fit already present schemata. The tendency of these children to be aware of yet discount social information about their bully behavior, is possibly an example of this process.

Children who disagree with or simply disregard the opinions of others, are less inclined to benefit from social information, and likely lack the motivation necessary to change their behavior. Therefore, an assimilation cognitive style has implications regarding the focus and prognosis of treatment interventions. Based on this conceptualization, the goal of treatment will be to help these children begin to modify their beliefs about their bully behavior so that they (the beliefs) are more consistent with the social information being provided to them. The objective is to provide these children with the necessary motivation to give up bully behavior patterns. The development of perspective-taking and empathy skills may help these children better recognize the full impact of their behaviors on others, and possibly move them toward obtaining the above-mentioned goal. However, the noted stability of bully behavior and the lack of acceptance of peer feedback, presents a treatment challenge. Information about the beliefs that these children hold may be helpful in designing more effective treatment interventions.

With regard to male and female subsamples, the same set of relationships among behavioral indices was noted with one exception in the female subsample. For the female subsample, there was a minimal but significant relationship between self and peer reports. Therefore, females tend to somewhat agree with their peer group's perceptions. The fact that females continue to engage in behavior that they recognize as being a social and personal phenomenon, may indicate that they either lack the skills to change this behavior, lack understanding of the serious impact of this behavior on others, do not care about peer opinions, or possibly have beliefs about bully behavior that encourage its continuation. The latter will be explored more fully below.

Pattern of Interrelations Among Victim Behavior Indices

The pattern of indices of victim behavior was consistent across the total sample, and male and female subsamples. Victim scores derived from peer nominations (PVS) were significantly related to scores derived from the self-reports of victim behavior (VSRI), and perceived peer perspectives on victim behavior (VPPP).

Therefore, unlike the pattern noted for indices of bully behavior, children reporting on victim behavior tended to both recognize how they were perceived by others and agreed with the perceptions of their peer group. Therefore, children tended to have somewhat "accurate" perceptions of their social standing with regard to victim behavior and yet, having this social information did not serve to change their social standing. Such a pattern of responding may indicate that children with high levels of victim behaviors lack the necessary skills to break free from their difficult social position. One can surmise that children who are aware that they are victims and remain so, despite this awareness, may also be dealing with feelings of helplessness and hopelessness regarding their social situation.

With regard to treatment implications, given that these children appear to be aware of their social standing, increasing social awareness of this general fact is not necessary. However, interventions that focus on social and problem solving skills development might be useful. Given the likely initial feelings of helplessness and hopelessness, maintaining motivation and increasing self-confidence in the use of newly developed skills likely will be crucial. Therefore, interventions should be designed to promote successes by providing the necessary structure to make the skill acquisition and employment process feel safe.

Limitations and Future Research

There is an important consideration regarding the peer and self-report behavioral indices used in the current study, in terms of their ability to accurately identify the children who engage in bully and victim behaviors. The peer reports presumably identify those children who engage in bully and victim behaviors, regardless of whether the children being identified would be willing to admit to this behavior themselves. However, the self-referential self-report measure identifies those children who are willing to admit to bully or victim behavior. This is relevant when interpreting results from self-report data, in that scores only represent the different degrees of bully or victim behavior among those children who are willing to admit to engaging in this behavior. And even then, one must consider the fact that people may be willing to only admit to certain degrees of "truth" about their behavior. While it has been proposed that the commonly noted minimal relationship between peer and self-report indices of bully behavior may reflect a disagreement between peer and self perceptions, it is also possible that this finding is explainable by the reactivity of the construct being measured, and the limitations of the measurement tools.

This issue may have been somewhat addressed through the design and presentation of the three behavioral measures used in the current study. The fact that children were made aware that peer reports would be used may have contributed to a sense of having to acknowledge these reports, such as through the perceived peer perspective measure, while still being able to disagree with these ratings through their self-reports. It is possible that without the peer ratings children may have been less inclined to admit to being perceived by their peers as engaging in bully behaviors. Future research that manipulates the timing of when subjects become aware that peer ratings will be used may help to examine the influence of the inclusion of peer ratings on self and perceived peer perspective scores.

In light of the various treatment implications based on the different behavioral indices profiles, an additional area for future research can be to look at treatment successes and effective interventions for children belonging to different behavioral indices profile groups.

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Table 1

Setting the Record Straight (SRS) (Total Sample) and Highest Factor Loadings of Each Item

VICTIM PPP	I	II
1. My classmates probably think that kids make fun of me.	.68	
3. My classmates probably think that I get beat up.	.38	
5. My classmates probably think that I get called names by other kids.	.68	
9. My classmates probably think that kids do mean things to me.	.71	
13. My classmates probably think that I get picked on by other kids.	.79	
15. My classmates probably think that I get hit and pushed by other kids.	.57	
17. My classmates probably think that kids try to hurt my feelings.	.74	
23. My classmates probably think that I get teased a lot.	.77	
29. My classmates probably think that I don't defend myself.	.31	
BULLY PPP		
7. My classmates probably think that I make fun of people.		.69
11. My classmates probably think that I hit and push others around.		.80
19. My classmates probably think that if someone gets in my way I will shove them out of the way.		.63
25. My classmates probably think that there are certain kids I like to bother.		.48
21. My classmates probably think that when I get picked on I don't like to fight back (reverse coded).		.30
27. My classmates probably think that I can beat everyone up.		.30

VICTIM SRI		
2. Kids make fun of me.	.80	
4. I get beat up.	.30	
6. I get called names by other kids.	.67	
10. Kids do mean things to me.	.80	
14. I get picked on by other kids.	.80	
16. I get hit and pushed by other kids.	.60	
18. Kids try to hurt my feelings.	.68	
24. I get teased a lot.	.75	
30. I don't defend myself (dropped).		
BULLY SRI		
8. I make fun of people.		.66
12. I hit and push others around.		.68
20. If someone gets in my way I will shove them out of the way.		.63
22. When I get picked on I don't like to fight back (reverse coded).		.45
26. There are certain kids I like to bother.		.67
28. I can beat everyone up. (dropped)		

Note. Only factor loadings of |.30| and above are reported. Based on these items, alphas were .85 for the victim PPP scale, .69 for the bully PPP scale, .88 for the victim SRI scale, and .72 for the bully SRI scale. N = 174 for PPP section and N = 175 for SRI section of table.

Table 2

Setting the Record Straight (SRS) (Male Sample) and Highest Factor Loadings of Each Item

VICTIM PPP	I	II
1. My classmates probably think that kids make fun of me.	.69	
3. My classmates probably think that I get beat up.	.42	
5. My classmates probably think that I get called names by other kids.	.69	.32
9. My classmates probably think that kids do mean things to me.	.71	
13. My classmates probably think that I get picked on by other kids.	.82	
15. My classmates probably think that I get hit and pushed by other kids.	.65	
17. My classmates probably think that kids try to hurt my feelings.	.78	
23. My classmates probably think that I get teased a lot.	.81	
29. My classmates probably think that I don't defend myself.	.38	
BULLY PPP		
7. My classmates probably think that I make fun of people.		.71
11. My classmates probably think that I hit and push others around.		.78
19. My classmates probably think that if someone gets in my way I will shove them out of the way.		.62
25. My classmates probably think that there are certain kids I like to bother.		.56
21. My classmates probably think that when I get picked on I don't like to fight back (reverse coded).		
27. My classmates probably think that I can beat everyone up.		

VICTIM SRI		
2. Kids make fun of me.	.87	
4. I get beat up.	.36	
6. I get called names by other kids.	.72	
10. Kids do mean things to me.	.85	
14. I get picked on by other kids.	.81	
16. I get hit and pushed by other kids.	.67	
18. Kids try to hurt my feelings.	.71	
24. I get teased a lot.	.78	
30. I don't defend myself (dropped).		
BULLY SRI		
8. I make fun of people.		.71
12. I hit and push others around.		.60
20. If someone gets in my way I will shove them out of the way.		.60
22. When I get picked on I don't like to fight back (reverse coded).		.41
26. There are certain kids I like to bother.		.81
28. I can beat everyone up. (dropped)		

Note. Only factor loadings of $|\geq .30|$ and above are reported. Alphas were computed using items from total sample refinements. Based on these items, alphas were .88 for the victim PPP scale, .63 for the bully PPP scale, .90 for the victim SRI scale, and .75 for the bully SRI scale. $n = 91$.

Table 3

Setting the Record Straight (SRS) (Female Sample) and Highest Factor Loadings of Each Item

VICTIM PPP	I	II
1. My classmates probably think that kids make fun of me.	.68	
3. My classmates probably think that I get beat up.		
5. My classmates probably think that I get called names by other kids.	.56	
9. My classmates probably think that kids do mean things to me.	.68	
13. My classmates probably think that I get picked on by other kids.	.72	
15. My classmates probably think that I get hit and pushed by other kids.	.34	
17. My classmates probably think that kids try to hurt my feelings.	.71	
23. My classmates probably think that I get teased a lot.	.71	
29. My classmates probably think that I don't defend myself.		
BULLY PPP		
7. My classmates probably think that I make fun of people.		.71
11. My classmates probably think that I hit and push others around.		.80
19. My classmates probably think that if someone gets in my way I will shove them out of the way.		.64
25. My classmates probably think that there are certain kids I like to bother.		.40
21. My classmates probably think that when I get picked on I don't like to fight back (reverse coded).		.42
27. My classmates probably think that I can beat everyone up.		.61
VICTIM SRI		
2. Kids make fun of me.	.72	
4. I get beat up (dropped due to lack of variance)		
6. I get called names by other kids.	.61	
10. Kids do mean things to me.	.73	
14. I get picked on by other kids.	.78	
16. I get hit and pushed by other kids.	.47	
18. Kids try to hurt my feelings.	.71	
24. I get teased a lot.	.72	
30. I don't defend myself (dropped).		
BULLY SRI		
8. I make fun of people.		.58
12. I hit and push others around.		.79
20. If someone gets in my way I will shove them out of the way.		.71
22. When I get picked on I don't like to fight back (reverse coded).		.41
26. There are certain kids I like to bother.		.49
28. I can beat everyone up.		.34

Note. Only factor loadings of $|\geq .30|$ and above are reported. Alphas were computed using items from total sample refinements. Based on these items, alphas were .78 for the victim PPP scale, .75 for the bully PPP scale, .85 for the victim SRI scale, and .67 for the bully SRI scale. $n = 83$ for PPP section and $n = 84$ for SRI section of table.

Table 4

Intercorrelations of Dependent Variables

Total Sample

	BPPP	VPPP	BSRI	VSRI	PBS	PVS	TransPBS	TransPVS
BPPP		.04	.55**	.06	.38**	-.15	.41**	-.19*
VPPP			-.04	.68**	-.03	.52**	-.08	.50**
BSRI				-.11	.10	-.13	.20*	-.06
VSRI					-.17	.63**	-.19*	.60**
PBS						-.17	.79**	-.15
PVS							-.18*	.82**
TransPBS								-.17

Male Subsample

	BPPP	VPPP	BSRI	VSRI	PBS	PVS	TransPBS	TransPVS
BPPP		.26*	.44**	.12	.29*	-.03	.28*	-.11
VPPP			.03	.70**	-.08	.53**	-.12	.49**
BSRI				-.14	.05	-.18	.17	-.14
VSRI					-.16	.75**	-.17	.70**
PBS						-.21	.75**	-.17
PVS							-.26*	.82**
TransPBS								-.24

Female Subsample

	BPPP	VPPP	BSRI	VSRI	PBS	PVS	TransPBS	TransPVS
BPPP		-.09	.57**	.05	.45**	-.20	.47**	-.24*
VPPP			-.25*	.64**	.09	.46**	.02	.45**
BSRI				-.11	.14**	-.16	.17	-.14
VSRI					-.19	.48**	-.23	.47**
PBS						-.12	.85**	-.16
PVS							-.12	.82**
TransPBS								-.14

* $p < .05$; ** $p < .001$



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