Observations of Bullying in the Playground and in the Classroom

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ABSTRACT The present study employed naturalistic observations to compare bullying and victimization in the playground and in the classroom. The results indicated that there were more opportunities to observe aggression and receive and initiate aggression in the playground than in the classroom. The frequency of bullying was higher in the playground (4.5 episodes per hour) than in the classroom (2.4 episodes per hour). The nature of bullying reflected the constraints of the context (i.e. direct bullying was more prevalent in the playground and indirect bullying was more prevalent in the classroom). Being at the receiving end of aggression was more likely to occur in the playground as compared to the classroom. Nonaggressive children were more likely to bully in the playground, whereas aggressive children were more likely to bully in the classroom. There was no difference across context in the proportion of episodes of reinforcement with peers present or in the rate of peer and teacher intervention. The results highlight the necessity of a systemic intervention programme that addresses not only the individual characteristics of bullies and victims, but also the roles of the peer group, teachers and the school.

Introduction

Bullying is an interaction in which a dominant individual (the bully) repeatedly exhibits aggressive behaviour intended to cause distress to a less dominant individual (the victim) (Olweus, 1991; Smith and

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Thompson, 1991). Research in Norway, Canada, Britain, Japan, the United States, Australia and Ireland reveals that bullying is a frequent and normative behaviour in schools (Olweus, 1987; Pepler et al., 1994; Perry et al., 1988; Rigby, 1996; Whitney and Smith, 1993). Although bullying unfolds as a dyadic interaction between the bully and the victim, it must be understood within the broader social context in which it occurs (i.e. the ecological perspective of the person in context—Cairns and Cairns, 1991). To date, research on bullying has been limited by a focus on characteristics of individual bullies and victims and a reliance on questionnaire methodologies. In the present research, we conducted naturalistic observations of bullying in the playground and in the classroom to examine the role of context and the dynamics in bullying behaviour. An understanding of the dynamics of bullying will provide direction for prevention and intervention efforts to reduce violence in schools.

Questionnaires and interviews provide assessments of the prevalence of bullying problems, characteristics of the bully and/or victim, the type and location of bullying episodes and peers' attitudes. In addition, the anonymous nature of questionnaires recognizes the importance of the subjective experience in defining bully or victim status. They are limited, however, by the children's abilities to report and their inability to identify the complex, multi-level processes underlying bully–victim interactions. Naturalistic observations of children's aggression have several advantages over laboratory studies (e.g. Caprara et al., 1986) such as high external validity and the opportunity to observe spontaneous incidents of bullying not normally witnessed by adults (Pepler and Craig, 1995).

As recommended for studies of other aspects of aggression (Cairns and Cairns, 1991; Coie and Jacobs, 1993), we adopted an ecological perspective for the present study of bullying. The interactions of bullies and victims are considered within a complex of interactional influences, such as those within the peer group and with teachers. For a consideration of contextual effects, we drew from a social learning perspective. Huesmann and Eron (1984) identified three contextual processes that increase the likelihood of aggression: observing aggression, receiving aggression and reinforcement for aggression. When these factors converge, children learn that aggressive behaviour is acceptable and appropriate and antisocial behaviours are likely to develop. These social learning processes likely operate in both the playground and the classroom but may differ in frequency, strength and intensity as a function of the structure and supervision within the context. We hypothesized that the processes underlying bullying are the same in the playground and in the classroom, but the opportunities for social learning (i.e. observing, receiving and reinforcing aggression) are considerably greater in the playground compared to the classroom.

The first social learning process is opportunities to observe aggression. We expected more opportunities for observing aggression or bullying in the playground compared to the classroom. In a programme evaluating social skills, previous observational assessments of aggression (Pepler et al., 1995) indicated that it occurs frequently in elementary school playgrounds. Aggressive interactions (either physical or verbal) occurred once every 2.4 minutes in the playground. These observations are consistent with students' reports in survey research that the playground is the most likely location for bullying (Olweus, 1991; Pepler et al., 1994; Whitney and Smith, 1993). In contrast, observations in the classroom indicate aggressive interactions occurred once every 37 minutes (Roberts et al., 1999). Students have more opportunities to observe aggression in the playground than in the classroom and we predict that, compared to the classroom, bullying will occur more frequently in the playground.

The second social learning process is receiving aggression. Because aggression occurs more frequently in the playground than in the classroom, children are more likely to be the recipients of bullying in the playground. Nevertheless, characteristics of bullies and victims (i.e. gender, aggressiveness) and the composite characteristics of the bully–victim dyad may interact with context in determining the occurrence of bullying. One characteristics is gender. Self- and teacher-reports reveal that males are more likely to bully than females (Olweus, 1991; Stephenson and Smith, 1989). In a Canadian survey, 23 percent of male students and only 8 percent of female students acknowledged that they had bullied other students more than once or twice per term (Charach et al., 1995). With respect to victimization, boys and girls reported being victimized at similar rates (Charach et al., 1995).

A second individual characteristic is aggressiveness. Olweus (1987) described bullies as having an aggressive personality pattern that predisposes them to respond aggressively. By bullying, these children employ their aggression to assert power and dominance. In contrast, victims are characterized as being passive, anxious, weak, lacking self-confidence, unpopular and as having low self-esteem (Olweus, 1991). Because aggressiveness is stable over time (Olweus, 1993), we expected that aggressive children would be more likely to bully than nonaggressive children in both contexts. In the playground, children have a more diverse choice in playmates (i.e. they are not limited to their classmates as in the classroom). Cairns et al. (1988) found that aggressive children tend to form networks of similarly aggressive peers. Dishion et al. (1995) found that antisocial boys tend to be coercive and reciprocate negative interactions. Thus, aggressive children are likely to seek out one another in the playground. We predicted that there would be differences between the playground and classroom in the make-up of the bully–victim dyad. Aggressive children would be more likely than nonaggressive children to

bully both aggressive and nonaggressive children. Nonaggressive children would bully nonaggressive children.

The third social learning process identified by Huesmann and Eron (1984) is reinforcement. Bullying is reinforcing if bullies triumph over their victims and experience power and control. Similarly, victims may be reinforced in the victim role because of the attention, albeit negative, that they receive from their peer group. The contingencies linked to bullying behaviour also can be considered from the teachers' and the peers' perspectives. Adults are generally not privy to bullying episodes; therefore, it is unlikely that bullies will receive consistent punishment from teachers for their actions (Olweus, 1991). Given that the ratio of students to teachers in the playground may be three or four times greater than that in the classroom, supervising adults may have more difficulties detecting and intervening to stop bullying in the playground than in the classroom. Bullying may also be difficult to detect because of high levels of activity in the playground (Pepler et al., 1995) and the frequency of similar behaviours such as rough and tumble play (Pelligrini, 1988). Supervision in the playground is further complicated by the large play spaces and the diverse types of unstructured activities of the children. In contrast, the classroom is much smaller and the activities are more structured with expectations for all children's behaviour. In the constrained classroom context, teachers may be more likely to notice and intervene in aggressive interactions and bullying. We expected that teachers would be less likely to intervene to stop bullying in the playground than in the classroom due to the differences in supervision, type of activity and available space.

The form of bullying (physical or verbal) may be another factor contributing to the likelihood of intervention. In both the playground and classroom contexts, nearly twice as many bullying episodes involve verbal aggression compared to physical aggression (Atlas and Pepler, 1998; Craig and Pepler, 1997). The problems of detecting verbal bullying in the playground are compounded for several reasons. The nature of activity, the area encompassed and the teacher student ratio suggest that the likelihood of adult intervention in bullying interactions may be more limited in the playground compared to the classroom. The lack of consequences signals tacit approval of bullying and serves as additional reinforcement for bullies.

Peers may play a direct role in reinforcing bullies for their behaviours. If peers stand by and watch, they provide the reinforcer of an audience for bullies' dominance displays. Peers may take a more active role in reinforcing bullies if they align with the bullies, encourage them, or defer to them. Furthermore, if peers observe bullying episodes without intervening on the victims' behalf, bullies may interpret this inaction as tacit approval of their aggressive behaviours. The apparent victory of bullies

over their victims can weaken peers' inhibitions for aggressive behaviour and increase the likelihood of their joining in the aggression. Craig and Pepler (1995) found that peers are present in most bullying episodes and may be critical in instigating, maintaining and exacerbating bullying.

In summary, the present research compares *naturally occurring bullying/victimization episodes* in two different contexts, in the playground and in the classroom. The social context may mediate the frequency of bullying and victimization, through opportunities for the social learning processes of observing, experiencing and reinforcing bullying. Our objectives were to compare bullying in the playground and in the classroom for the following: (a) opportunities to observe bullying as measured by the frequency, duration and type of bullying; (b) opportunities to receive aggression as related to individual factors of gender, age, race and aggressive reputation of the bullies and victims and the composition of the bully–victim dyad; and (c) reinforcement processes as indexed by peer involvement and intervention by peers and adults in bullying.

Method

Participants

The sample comprised 34 (24 male, 10 female) aggressive and non-aggressive children in the original study who were observed in a bullying episode. Within this sampling frame, all bullying episodes in which the target children were involved as a bully, victim, or a peer participating in the episode were coded. As a result, some episodes involved children who were not originally targeted for filming (e.g. because they were bullying the target child). The extended sample of children observed is referred to as the opportunity sample (n = 185). The gender by grade level breakdown only can be provided for the sample in the original study. There were 20 children (14 males and 6 females) in grades 1 to 3 and 14 children (10 males and 4 females) in grades 4 to 6.

Observation procedure, categories and ratings

To observe children's interactions, a video camera was set up in a classroom overlooking the playground. During filming, each target child wore a small remote microphone and pocket-sized transmitter. In the classroom, a video camera was set up overlooking the classroom and was operated by a trained observer who was present for the filming. All children who wore the microphones were aware that they were being filmed. Children were randomly chosen for filming during lunch and recess or in the classroom and were instructed to play/work as they

normally would. Children were observed for an average of 28 minutes in the playground and 31 minutes in the classroom.

Observers, blind to group membership, identified bullying episodes and coded contextual factors. (Definitions of the coding categories and reliabilities are available from the first author.) There was 90 percent and 95 percent inter-rater agreement on the identification of the playground and classroom bullying episodes, respectively. Agreement for the contextual variables ranged from 87 to 100 percent. Inter-rater agreement was based on 33 percent of the playground episodes and 47 percent of the classroom episodes that were coded independently.

Results

The results are organized according to the hypothesized social learning processes related to bullying: observing, receiving and reinforcing. *Z*-tests for proportions were conducted to compare the frequencies of coded variables in the playground and in the classroom.

Opportunities to observe bullying

To assess the opportunities to observe bullying, we compared their frequency, duration and nature in the playground and in the classroom. As expected, bullying occurred more frequently in the playground than in the classroom; at rates of 4.5 and 2.4 episodes of bullying per hour, respectively. Duration of bullying in the playground and in the classroom did not differ. In both contexts, most bullying episodes were short-lived, but they varied in duration. In the playground, the mean duration of bullying episodes was 33.6 seconds (SD = 63.5 seconds), with a range from 2 to 448 seconds. In the classroom, the mean duration of bullying episodes was 26 seconds (SD = 35.4 seconds) with a range from 2 to 227 seconds.

We assessed two dimensions of bullying: direct versus indirect and physical versus verbal. There was a greater proportion of episodes with direct bullying in the playground, $Z = 2.3, p < .01$ and a greater proportion of episodes with indirect bullying in the classroom, $Z = -2.13$, $p < .01$. Most of the episodes in both the playground and classroom were verbal (42 percent and 53 percent, respectively). Context did not differ in the proportion of episodes containing physical or verbal aggression.

Opportunities to receive bullying

To assess the process of learning about bullying by being at the receiving end of it, we compared individual characteristics of victims and their bullies, as well as characteristics of the bully–victim dyad. Children were classified as bullies, victims, or bully/victims if they were involved in at least two episodes within a context (indicating stability of the

behaviour). The proportion of episodes in which males were victimized was lower in the playground than in the classroom (56 percent and 75 percent, respectively), $Z = -2.0$, $p < .05$. In the playground, the proportions of male and female victims were relatively equal whereas in the classroom, there were more male than female victims. The proportion of episodes with male and female bullies did not differ across context. In both contexts, slightly more than half the episodes observed the bullies were male (56 percent and 57 percent for the playground and classroom, respectively). Similarly, the proportion episodes with male and female bully/victims (someone who bullies others and is bullied) did not differ across context.

Another index of whether bullying is more likely to be received in the playground than in the classroom is the pervasiveness of the behaviour. We were interested in whether victimization was a widespread phenomenon experienced by both aggressive and nonaggressive children or whether it was experienced only by the aggressive children. Both aggressive children and nonaggressive were equally likely to involved as a victim in the playground and in the classroom Aggressive children were involved as bullies in a higher proportion of classroom episodes compared to the playground, $Z = 2.91$, $p < .001$. The pattern for nonaggressive children was the inverse, they were involved as bullies in a higher proportion of playground compared to classroom episodes (42 percent and 7 percent), $Z = 2.90$, $p < .001$. The proportions of episodes with aggressive or nonaggressive bully/victims was similar across contexts.

The likelihood of receiving aggression also was examined as a function of the dyad characteristics (i.e. the gender and racial composition of bully/victim dyads). In both contexts, there was a higher proportion of episodes where male bullies targeted same-sex victims than the proportion of episodes where female bullies targeted female victims. In the playground, males were the victims in 86 percent of the episodes involving male bullies. In the classroom, in 89 percent of the episodes involving male bullies, males were the victims. A different pattern emerged for females. In 48 percent of the playground episodes involving female bullies, the victims were female. In the classroom, 52 percent of the episodes involving a female bully involved a female victim.

We coded race according to four categories (Caucasian, African Canadian, Asian or other). There was no difference in the proportion of episodes involving a bully and a victim of the same race and a bully and a victim of different races across context. In both contexts, approximately two-thirds of the episodes involved a bully and a victim of different races. This finding may represent the ethnic diversity at the school.

Reinforcement of bullying
The third social learning process examined was the reinforcement of bullying, which was assessed by peer involvement in bullying and peer and teacher intervention to stop bullying.

Peer involvement. Four levels of peer involvement were coded: active participation in the episode, observing the interaction, involvement in a activity with the bully or victim and intervening in the interaction. Peers were observed in some capacity in 79 percent of the bullying episodes observed in the playground and in 85 percent of the episodes in the classroom. The playground and the classroom did not differ in the proportion of students who were actively involved in bullying, who were involved in a joint activity or who observed the interaction. For boys, however, there were differences across contexts in the proportion of episodes in which they were observers and peers in joint activities. Males were observed in both these roles in a higher proportion of episodes in the playground compared to the classroom. Bullies were more likely to attract the attention of boys in the playground than in the classroom.

We postulated that reinforcement would not accrue for the bully if peers attempted to intervene. Peer intervention was coded as appropriate (i.e. attempts to terminate the bullying in a prosocial manner) and inappropriate (i.e. attempts to terminate the bullying in an aggressive manner). There was no difference in the proportion of episodes in which students intervened across the playground and classroom contexts after collapsing over appropriate and inappropriate intervention and controlling for presence of adults or students in the camera frame. The proportion of episodes in which males intervened appropriately was greater in the playground than in the classroom, $Z = 2.06$, $p < .05$. Conversely, the proportion of episodes in which females intervened appropriately was greater in the classroom than in the playground, $Z = 2.47$, $p < .01$. The proportion of episodes with inappropriate peer intervention was higher in the playground, $Z = 2.41$, $p < .01$, than in the classroom where no episodes involved inappropriate intervention. All the episodes with inappropriate peer intervention in the playground involved male interveners.

A final index of the reinforcing contingencies for bullying was teacher intervention. The proportion of episodes in which adults intervened between the playground and the classroom did not differ. In the playground, adults intervened in 15 percent of the episodes and, in the classroom, teachers intervened in 18 percent of the episodes.

Discussion

This descriptive study examined the nature of bullying in the playground and in the classroom. We hypothesized that the processes

underlying bullying are potentially the same in the playground and in the classroom, but the opportunities for social learning (i.e. observing, receiving and reinforcing aggression) are greater in the playground compared to the classroom. Our observations confirm that there are more opportunities to observe aggression and receive and initiate aggression in the playground than in the classroom. Contrary to expectations, there are no differences in reinforcement for bullying and intervention in bullying across contexts.

The first social learning process, opportunities to observe bullying, is stronger in the playground than in the classroom, as indexed by the frequency of bullying episodes. These observational data are consistent with children's self-reports of bullying (i.e. both indicate a higher prevalence of bullying in the playground than in the classroom) (Charach et al., 1995). Although the two contexts does not differ in the frequency of verbal and physical aggression in bullying, there were differences in the type of bullying. Direct bullying was more frequent in the playground than in the classroom. The unstructured nature of playground activities, the high activity level and limited adult supervision may be more conducive to direct bullying. There are fewer rules and constraints on children's behaviour in the playground compared to the classroom. Furthermore, behaviours that may precede bullying, such as playful teasing, occur frequently in the playground (Pellegrini, 1988). Although these behaviours are acceptable in the playground, they are inconsistent with the demands of the classroom.

Indirect bullying occurred more often in the classroom than in the playground. In the classroom, children may resort to covert types of bullying to avoid detection. The use of remote microphones in the present study facilitated the observation of gossip and social exclusionary behaviours, both at their inception and after the effect was recognized. The contextual features of the classroom environment, such as the structured activities, the small and defined space and the close adult supervision, may contribute to differences in the opportunities to observe aggression as well as the nature of bullying.

The second social learning process, being at the receiving end of bullying, is more likely to occur in the playground than in the classroom. The unstructured, free-ranging, loosely supervised playground context appears to foster bullying. Even those children identified by their teachers as nonaggressive are more likely to bully in the playground than in the classroom. The nonaggressive children's involvement in bullying in the playground may relate to experiences of receiving bullying. If children are the targets of aggression, they are more likely to respond with a counterattack (Hall and Cairns, 1984; Pepler et al., 1998). Although these observations are not comprehensive enough to track the full range of experiences in children's lives, most children may

experience bullying at some point, which readies them to bully when the circumstances are right. More research is needed to confirm this postulation. The nonaggressive children's behaviour may be uncharacteristically aggressive in the playground where activity levels are high, supervision is low and bullying is pervasive. Olweus (1991) argued that there is an arousal levels increase when watching bullying and that this increased arousal may contribute to the involvement in bullying of children who are not usually aggressive. The contextual factors, together with the arousal associated with bullying, may draw nonaggressive children into bullying activities in the playground, but not in the classroom where they are focussed on academic tasks.

Aggressive children were observed as bullies in a higher proportion of classroom episodes than nonaggressive children. These observations suggest that individual child characteristics interact with contextual variables. In spite of the structure and clear task demands of the classroom context, children with aggressive behaviour problems tend to persist in disruptive bullying activities. This finding is consistent with classroom observations of aggressive children that indicate that they engage in more off-task behaviour and require more teacher attention than nonaggressive children (Coie and Dodge, 1988). Aggressive children may not possess the academic or attentional skills to apply themselves successfully to independent learning tasks (Patterson et al., 1989). The disruptive, off-task behaviours of children who bully may detract their attention from acquiring critical academic skills and thereby contribute to their academic failure (Patterson, 1986). Bullying within the classroom context may interfere not only with the bullies' academic progress, but also with that of their peers.

The third social learning process, reinforcement of bullying, occurred as often in the playground as in the classroom contexts. In most bullying episodes in both environments, peers were present as observers. The behaviour of bullies in bullying episodes appears to command an audience both in the playground and in the classroom. The consistent presence of other children is somewhat surprising, given that 90 percent of children report that it is somewhat or very unpleasant to watch bullying (Charach et al., 1995). On the other hand, bullying is an arousing event that has the potential to draw in bystanders (Olweus, 1991). By virtue of their presence and lack of intervention, peers seem to reinforce bullies for their aggressive behaviours.

We examined the likelihood of peer and teacher intervention as an process to counter the reinforcing contingencies for bullying. There was no difference in the frequency of peer intervention in the playground and the classroom. The low rate of peer intervention may reflect a lack of strategies rather than an attitude of apathy among peers. Children may not intervene to stop bullying because they are unsure what to do in order

to help. In a Canadian survey, 33 percent of students reported that they did nothing but thought they should do something (Charach et al., 1995). Children may also hesitate to identify bullying if they are not confident about gaining teacher support. Nineteen percent of students in the Canadian survey indicated that teachers almost never intervened; less than half of the victims of bullying indicated that they had told a teacher about the incident (Charach et al., 1995). Students need to feel confident in their own skills to stop bullying and in the certainty that teachers will intervene to stop bullying.

In our observations in the playground and in the classroom, teachers seldom intervened to stop bullying. Their lack of intervention may be related to the difficulties of detecting bullying. Although the form of bullying was more overt (i.e. direct) in the playground than in the classroom, the playground context is more difficult to monitor. When teachers are closer for supervision in the classroom context, indirect forms of bullying are more likely to occur. These covert forms of bullying are difficult to detect and to arrest. Our observations indicate that teachers intervene in approximately one in six playground episodes and one in five classroom episodes. The tacit message conveyed to bullies by the low frequency of intervention is that there is little discouragement and minimal risk in harassing their peers.

Implications for intervention. The observations relating to bullying from the present study provide direction for prevention and intervention efforts to reduce aggression in school. The analysis of bullying episodes from a social learning perspective has highlighted the processes that may maintain or exacerbate problem behaviours. According to Huesmann and Eron (1984), the three contextual processes that we analysed in the present study increase the likelihood of aggression. Our observations suggest that contrary to the universal educational objective of promoting prosocial behaviour and reducing aggression, children's experiences on school playgrounds and in classrooms may be teaching them that bullying is acceptable and appropriate in certain circumstances.

The observations confirm the importance of assuming an ecological perspective in the development of interventions for aggressive behaviour problems. Although it is necessary to focus on the behaviour problems of individual children involved in bullying and victimization, these observations highlight the importance of addressing the problem within multiple systems, particularly, the peers and teachers. The results of this study indicate that peers are often aware of bullying, provide an audience for it, but fail to intervene. A component of the intervention must be aimed at peers to reduce their reinforcement of the bully and to encourage their support of the victim. First, schools must strive to increase children's sensitivity to victimized children and culti-

vate an ethos of peer support. Rigby and Slee (1993) found that most children were supportive of victims, but sympathy for the victims decreased with age. This developmental trend suggests that an early intervention aimed at developing student attitudes against bullying and against viewing the victim negatively may help prevent bullying in schools.

The second approach to intervention with peers involves lessons on the definition of bullying, providing strategies and a language or script for intervening. Providing children with a language to stop bullying empowers children to use their voices and take action against bullying. In the Norwegian intervention, Olweus (1991) outlined three class rules against bullying for peers to follow: 'We shall not bully other students, we shall try to help students who are being bullied, and we shall make a point to include students who become easily left out' (Olweus, 1991, p. 445).

Similarly, teachers may inadvertently contribute to the problem of bullying. The low rate of intervention in bullying by teachers may also serve as reinforcement for bullying. The lack of teacher intervention may be a function of inadequate numbers of adults to supervise the playground and/or a lack of awareness of bullying. Olweus (1991) found an inverse relationship between adult supervision and bullying. As the number of adult supervisors in the playground increases, there is a decrease in bullying. With increased supervision, it is likely that adults are intervening more in bullying episodes, thus students are not getting reinforced for bullying as often. Besag (1989) argued that some episodes of bullying occur as a function of staff being unpunctual or failing to supervise carefully. In addition, she suggested that passive supervision is an ineffective style of supervision. Teachers' lack of awareness of the extent of bullying is consistent with the discrepancy between teacher and student reports in survey data. In a Canadian survey, 71 percent of teachers and only 25 percent of students indicated that teachers almost always intervened to stop bullying (Charach et al., 1995). Our observations of bullying interactions in the playground and in the classroom highlight the challenges for school staff in identifying and responding to bullying. Because bullying episodes in both contexts are brief and predominantly verbal, they are difficult to identify. One strategy to overcome the difficulty of detecting bullying is to raise teachers' awareness about bullying to increase their likelihood of recognizing bullying and intervening in bullying interactions. The challenge for teachers, however, extends beyond recognizing bullying. Due to its covert nature, it is unreasonable to expect teachers to be responsive to every bullying episode. Our observations indicate that children have well developed strategies to conceal bullying or to deflate teachers' concerns. It is essential, therefore, that teachers be receptive to children's concerns about bullying and responsive in following through when bullying is

identified by the victim or peers. Interventions to reduce bullying at school must encourage students to recognize bullying and speak out to stop it, but at all time adults within the school provide the keystone of support to take power and control out of the hands of the aggressor and to protect victims.

The results of this study indicate the need for a systemic intervention which not only focuses on bullies and victims, but also incorporates peers, teachers, school administrators and parents. Although implementing a broad-based intervention may appear ambitious, systemic programmes in Canada, Norway and Britain have been successful in significantly reducing bullying problems (Olweus, 1991; Pepler et al., 1994; Smith and Sharp, 1994). The results of this study highlight the social learning processes underlying bullying in the playground and in the classroom and provide specific directions for intervention.

This study must be considered in the context of its limitations. First, participants were only observed in one school, which limits generalizability because school climate and/or classroom climate may be related to bullying problems (Stephenson and Smith, 1989). School climate data were not available; therefore, the extent to which school climate influenced bullying problems in the present study could not be assessed. Second, the frequency of observed bullying cannot be generalized because our sample included focal aggressive and nonaggressive children. A random selection of children for observations might yield lower rates of bullying; nevertheless, the involvement of nonaggressive children in bullying in the playground suggests that context plays an important role in eliciting the social learning processes of concern.

In conclusion, the present observational study comprises a preliminary investigation of bullying in the playground and in the classroom. Observations provide important insights into the covert processes involved in bullying and encourage others to consider using observations to complement student and teacher reports. Effective interventions rely on an understanding of the processes that initiate, maintain and exacerbate bullying. Future research with both observational and self-report data will further elucidate these processes and the risk factors related to bullying and victimization. In this way, research and interventions can coalesce to provide a strong foundation for ensuring that children have a safe and positive environment to foster both social and academic development.

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