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## **Bullying Contextualized: Changing the Group Process by Changing Outsiders' Involvement**

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## **Chapter 7**

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### **Changing the Group Process by Changing Outsiders' Involvement: An Evaluation of the Effectiveness of the "Stand Strong: Interact" Antibullying Intervention**

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### **Abstract**

Victim suffering may be most effectively alleviated by activating the defender potential of outsiders who, despite an antibullying attitude, avoid involvement in witnessed victimization. The present study evaluated the effectiveness of the Stand Strong: Interact (SS:I) antibullying intervention in a sample of Dutch fifth- and sixth-grade students ( $N = 395$ ). The SS:I aims at increasing the social and emotional resilience of victimized students and outsiders by teaching them the skills to avoid victimization and to start acting according to their attitude. A subsample of students from ten classrooms ( $n = 56$ ) followed the SS:I based on their peer reputation as victim or outsider. These students' involvement in bullying was compared with that of a matched sample of students from nine control classrooms ( $n = 48$ ). Whole classroom comparisons were also made. The results indicated that the SS:I effectively reduced the outsider behavior of SS:I students and within their classrooms. Also, whereas indirect defending decreased in the control samples, it remained at a similar level for SS:I students. Finally, for being victimized and bullying no significant effects were found. The present — small sample — study suggests that the bullying dynamic could be changed by focusing intervention efforts on increasing outsider involvement.

*Keywords:* Victimization, Bullying, Outsiders, Defending, Antibullying Intervention

## Introduction

The most common subtype of aggression children encounter during their school career is bullying, with about one in four children being frequently victimized (Veenstra et al., 2005). Bullying is defined as recurrent and directional aggressive behavior executed by one or more perpetrators (the bullies) to physically or mentally damage another less powerful individual (the victim; Salmivalli, 2010). Bullying can be considered functional behavior, as it enables bullies to occupy top ranks within their social group (Olthof, Goossens, Vermande, Aleva, & Van der Meulen, 2011; Reijntjes et al., 2013). As bullying occurs within a social context, it does not only impact the (short- and long-term) physical and psychological health of victims in a negative way (Hawker & Boulton, 2000; Troop-Gordon, Rudolph, Sugimura, Little, 2014), but the entire peer group suffers from frequently witnessing victimization (Nishina & Juvonen, 2005).

During children's school career bullying becomes more frequent and accepted by the peer group (Pellegrini & Long, 2002), while at the same time provictim interventions are less often executed (Goossens, Olthof, & Dekker, 2006). Research is starting to recognize that programs aimed at reducing bullying and victimization should focus on addressing the peer group process (Orpinas & Horne, 2010; Polanin, Espelage, & Pigott, 2012; Pozzoli & Gini, 2010, 2013; Pronk, Olthof, Goossens, De Mey, & Willemen, 2013; Pronk, Olthof, & Goossens, 2014; Salmivalli, 1999; Salmivalli, Kärnä, & Poskiparta, 2010). This peer group consists of several other roles besides the (ringleader) bully and victim (Salmivalli, 2010). In the 'probullying camp', there are *assistants* who join in with and help the bullies in their quest for dominance and *reinforcers* who encourage the bully's actions by being the satisfying audience. In the 'antibullying camp', we find *defenders*, who try to alleviate the negative consequences

of victimization for victims. Finally, there are *outsiders* who actively avoid being involved in the bullying process. The present study will focus on the classroom subgroups of outsiders and victims. Specifically, the present study will focus on evaluating the effectiveness of an antibullying program that aims at changing the bullying group process by changing the involvement and behaviors of outsiders by teaching them *and* victims to become more socially and emotionally resilient.

Three arguments underlie the rationale for focusing on outsiders in antibullying programs (Pronk et al., 2013). First, peers are almost always present when victimization occurs (Hawkins, Pepler, & Craig, 2001; Nishina & Bellmore, 2010). Although provictim interventions are not performed often, they effectively alleviate victim suffering when performed (Hawkins et al., 2001; Nishina, 2012). Second, outsiders are the largest within-classroom subgroup with a volume of almost one-third, followed by defenders (roughly one-fifth of classrooms; Olthof et al., 2011; Salmivalli, Lappalainen, & Lagerspetz, 1998). And third, while similar to defenders in antibullying attitude, outsiders are behaviorally dissimilar from defenders as they do not, or only rarely, perform provictim interventions (Goossens et al., 2006; Olthof & Goossens, 2008; Sutton & Smith, 1999). Activating outsiders' antibullying stance could thus result in the emergence of a new dominant classroom subgroup of potentially successful defenders. Previous work suggests that the attitudes and behaviors of dominant classroom subgroups are likely to transfer to those of other classroom members (Salmivalli & Voeten, 2004; Salmivalli, Voeten, & Poskiparta, 2011). We therefore hypothesize that within-classroom bullying and victimization can be tackled by activating the outsiders, while at the same time teaching victims to avoid victimization. The net result will be a decrease in the bullies' dominance position and an increase in the victim's safety net.

Intervention efforts to counteract the negative consequences of victimization are directed at either the individual (i.e., focusing on the bully or victim), the classroom (i.e., focusing on the teacher and classroom coherence), and/or the school (i.e., implementation of an antibullying protocol; Polanin et al., 2012; Ttofi & Farrington, 2011). Meta-analysis has shown that antibullying programs are most effective when they tackle bullying from multiple viewpoints, that is, when they aim at all of these levels (Ttofi & Farrington, 2011). One antibullying program that effectively does so is KiVa (Salmivalli et al., 2010). KiVa focuses on changing the bullying group process within the classroom and strives to increase every classroom members' awareness of and their involvement in battling bullying. Evaluation of KiVa has shown that bullying and victimization behaviors indeed decrease with about one third after full implementation of the program (Kärnä et al., 2011). However, these effects, while impressive, seem to be largely the result of increased awareness and involvement of teachers in the classroom process. The effectiveness of KiVa on increasing provictim intervention and prosocial behaviors, while significant, is less impressive (Cohen's  $d$ 's  $\leq .08$ ; Kärnä et al., 2011).

A recent meta-analysis suggests that antibullying programs are more effective when they focus on increasing provictim intervention behaviors and attitudes (Polanin et al., 2012). Antibullying programs could possibly increase their effectiveness by a more specific focus on these aspects in their program. In the present study we will evaluate the effectiveness of an antibullying intervention aimed at increasing outsiders' provictim intervention behaviors and attitudes, called "*Stand Strong: Interact (SS:I)*", which could also be implemented as a building block into other programs and interventions.

### **Stand Strong: Interact**

The SS:I aims at changing the bullying group process by changing the outsiders' involvement in this process and on teaching victims to avoid and cope with victimization. The SS:I focuses on the subgroups of victims and outsiders specifically rather than on the classroom as a whole. First, the SS:I assumes that students who are often victimized by their peers have inadequate social and coping skills and are therefore socially and emotionally less resilient. This assumption is backed-up by a meta-analysis on factors associated with victimization (Cook, Williams, Guerra, Kim, & Saduk, 2010). Moreover, a recent study found that the negative link between being victimized and psychological health — specifically depressive symptomology — is longitudinally mediated by inadequate coping skills (Troop-Gordon et al., 2014). Second, the SS:I assumes that outsiders' tendency to avoid involvement in witnessed victimization is a consequence of similar inadequacies. With regards to social resilience, research has shown that outsiders — contrary to defenders — lack social competence (Pozzoli & Gini, 2010), social self-efficacy (Gini, Albiero, et al., 2008), and specifically competence and self-efficacy in bullying situations and in intervening in them (Pronk et al., 2013). With regards to emotional resilience, research has shown that outsiders — again, contrary to defenders — cope with social and bullying problems by distancing themselves from the situation (Pozzoli & Gini, 2010, 2013) and are less able to cope with the consequences of being victimized themselves (Pronk et al., 2013). While outsiders and defenders are quite similar — both are attitudinally against bullying (Olthof & Goossens, 2008), both are morally sensitive and low in moral disengagement (Obermann, 2011; Thornberg & Jungert, 2013), and both are able to avoid becoming victimized themselves

(Camodeca & Goossens, 2005) — outsiders seem less able to act in accordance with their attitude.

The main goal of the SS:I is teaching victims and outsiders to become more resilient, that is, teaching them to *stand strong*. Students with a behavioral reputation as victim or as outsider are selected and trained once a week for a period of ten weeks on five aspects of social and emotional resilience, that is, the *five SS:I focal points*: (1) social skills, (2) social information processing skills, (3) coping and emotional skills, (4) assertiveness, and (5) body posture and body language. After the SS:I, victims should be equipped with skills to better cope with bullying and its consequences and outsiders should be equipped with skills to offer help to victims. The expected result should be a dominant within-classroom antibullying group (both attitudinally and behaviorally), that is, the victim's support net increases while at the same time the bullies' dominance position decreases.

With regards to increasing outsiders' defender potential, the focus of the SS:I is on indirect defender behavior specifically (e.g., consoling and being nice to victims), rather than on direct defender (e.g., confronting the bully). A recent study has shown that bullies and their cliques (i.e., other bullies, assistants, and reinforcers) tend to defend each other and seem to prefer doing so by using the more aggressive or direct defending strategies (Huising, Snijders, van Duijn, & Veenstra, 2014), suggesting that direct defender behaviors may not be the preferred strategies for outsiders and defenders. Moreover, Pronk et al. (2013) found that outsiders claimed that they want to help victims by indirect means and that they feel to be self-efficacious with regards to indirect defender behavior. Therefore, indirect defender behavior may be more easily stimulated in outsiders than more direct strategies. Also, compared with direct defender behavior, indirect defender behavior enables outsiders to help victims in a

relatively safe way with a lower risk of retaliation by the bullies. Finally, in the long run, the negative longitudinal consequences of victimization on victims' psychological health may be most effectively countered by having classmates consoling and being nice to them (Hodges, Boivin, Vitaro, & Bukowski, 1999; Sainio, Veenstra, Huitsing, & Salmivalli, 2010; Salmivalli, 2010). Increasing victim's support system may well be the best way to help victim's to cope with victimization.

### **The Present Study**

The present study evaluated whether the SS:I could effectively: (a) decrease within-classroom outsider behavior, (b) increase within-classroom (indirect) defending, (c) decrease within-classroom victimization (being victimized), and (d) decrease within-classroom bullying behavior. Students' involvement in bullying was assessed with peer nominations at the beginning of the school year (T1) in 19 Dutch fifth- and sixth-grade classrooms. Subsequently, six to eight students from ten classrooms were selected to follow the SS:I based on their behavioral reputation with their peers as victim or outsider. The students from the other nine classrooms were recruited as control condition. Shortly after the intervention (T2) and at the end of the school year (T3) students' involvement in bullying was reassessed with peer nominations, enabling proper evaluation of the SS:Is effectiveness. First of all, SS:I students' involvement in bullying — with the exception of bullying behavior, — at the three time points was compared with the involvement in bullying of a sample of matched control classroom students (SS:I students vs. Matched students analyses). Bullying behavior was not included in these analyses, because SS:I students were selected to already be low in bullying behavior at the baseline measure (i.e., they were outsiders and victims who do not bully themselves).

Moreover, the SS:I program does not intend to address bullying behavior directly, but only indirectly via the activation of outsiders' defender potential. Secondly, the involvement in bullying — including bullying behavior — of *all* students in the SS:I classrooms was compared with the involvement in bullying of *all* students in the control classrooms (SS:I classroom vs. Control classroom analyses).

## Method

### Participants

**Total sample.** The data were collected in 19 fifth- and sixth-grade classrooms of eight primary schools in the Netherlands during fall of 2012 (T1), the beginning of spring of 2013 (T2) and the beginning of summer of 2013 (T3). Besides a similar school-wide anti-bullying protocol which is mandated by the Dutch government and checked by the Dutch National School Inspectorate, no other antibullying programs were implemented in any of the participating classrooms during the study period. After obtaining cooperation of schools and classroom teachers, participants' parents were sent a letter about the aims and procedures of the study ( $N = 448$ ). According to the schools' procedural preferences (to protect parents' privacy they insisted on sending the consent letters themselves) and conforming to the Faculty's Ethical Review Board, parents could decline consent by returning a preprinted objection note. A small number of possible participants did not receive parental permission or relocated to a different school not originally selected for the study during the study period ( $n = 55$ ; 12.3%). Preceding testing, the participants themselves were informed that they could opt-out of the study whenever they wanted to, but none did. The final sample consisted of 395 students (45.8% boys;  $M_{\text{age-T1}} = 10.5$  years,  $SD = 9.8$  months; 91.6% Dutch ethnicity). The participants who

participated in the study at every time point did not differ significantly from those who did not (i.e., those not participating at T2 and/or T3) with regards to gender or involvement in bullying at T1.

**Study samples.** From 10 randomly selected classrooms (SS:I classrooms;  $n = 205$ ; 47.3% boys;  $M_{\text{age-T1}} = 10.6$  years,  $SD = 9.1$  months; 93.7% Dutch ethnicity), a total of six to eight students were selected to follow the SS:I. The other nine classrooms were recruited as control classrooms ( $n = 190$ ; 44.2% boys;  $M_{\text{age-T1}} = 10.4$  years,  $SD = 10.3$  months; 89.5% Dutch ethnicity). Selection criteria for participation in the SS:I were high proportion scores on either victimization or outsider behavior (or on both) and low proportion scores on the other measures for involvement in bullying (more details below). The parents of the potential SS:I students, received an active informed consent letter about the aims and procedures of the SS:I ( $N = 69$ ). A small number of potential SS:I participants ( $n = 13$ ; 18.8%) did not get parental permission for participation or were part of the abovementioned subgroup of possible participants who relocated to a nonparticipating school during the study period. The final SS:I student-sample consisted of 56 students (57.1% boys;  $M_{\text{age-T1}} = 10.6$  years,  $SD = 9.5$  months; 94.6% Dutch ethnicity). A similar sample of students was selected from the control classrooms to match the SS:I students with regards to their proportion scores on involvement in bullying (Matched students;  $n = 48$ ; 33.3% boys;  $M_{\text{age-T1}} = 10.2$  years,  $SD = 11.2$  months; 85.4% Dutch ethnicity). The SS:I and Matched students who participated in the study at every measured time point did not differ significantly from the SS:I students who did not participate at every measured time point with regards to gender or involvement in bullying at T1.

## Measures

**Involvement in bullying.** To measure students' involvement in bullying, an internet version of the Bullying Role Nomination Procedure (BRNP; Olthof et al., 2011; Pronk et al., 2013) was used. The BRNP is a frequently used peer report procedure that enables participants to nominate classmates on different types of involvement in bullying. Aggregating participants' received within-classroom nominations assures reliable individual behavioral assessments of all participants (Pellegrini, 2002). Previous reports have proved the BRNPs validity: (a) the BRNP victimization and bullying measures correlate with their self-reported counterparts ( $r = .44$  and  $r = .41$  respectively; Bouman, Van der Meulen, Goossens, Olthof, Vermande, & Aleva, 2012), (b) the BRNP defender measure was found to be related to prosocial behavior, resource control, perceived popularity (Olthof et al., 2011) and to intervening on behalf of victims (Pronk et al., 2013), (c) the BRNP outsider measure was found to be related to low resource control, low perceived popularity (Olthof et al., 2011), and to a lower competence in bullying situations (compared with defenders; Pronk et al., 2013); and (d) the gender effects indicating outsiders and defenders are more often girls while bullies are more often boys, were also confirmed with the BRNP (Bouman et al., 2012; Olthof et al., 2011; Pronk et al., 2013).

Students were presented a definition of bullying conforming to the universal definition (repetition, intention, power imbalance) and subsequently completed 12 peer nominations. Five items elicited nominations for different ways of being victimized, that is, physical (e.g., hitting), material (e.g., taking belongings), verbal (e.g., name-calling), direct relational (e.g., gossiping) and indirect relational (e.g., ostracizing) victimization. Similarly, five items elicited nominations for different ways of bullying. Contrary to Olthof et al. (2011) bullying behavior was not further differentiated in ringleader and assistant bullying behavior and participants

were also not questioned about reinforcement of the bullies' behavior, as the present study focused on general bullying behavior. Finally, two additional items elicited nominations for indirect defender behavior (e.g., consoling victims) and for outsider behavior (e.g., avoiding involvement). All peer nominations were accompanied by a behavioral definition and a description of its manifestations, of which a complete description can be found in Olthof et al. Participants could not nominate themselves and could also decide to not nominate any classmates if they felt that no classmates fitted the provided description. Unlimited numbers of classmates could be nominated by selecting names from dropdown lists including all classmates' names.

Proportion scores were calculated for being victimized, bullying behavior, outsider behavior, and indirect defender behavior by dividing the number of received nominations by the number of within-classroom nominators. General proportion scores for being victimized and bullying were calculated by summing each participants' proportion scores on all five victimization and bullying items. The coefficient alphas for being victimized were .86 at T1, .91 at T2, and .89 at T3; those for bullying behavior were .91 at T1, .92 at T2, and .90 at T3. The mean proportion scores for all involvement in bullying measures can be found in Table 1.

### **Procedure**

**Measures.** The BRNP was administered on internet-linked computers in a separate and quiet room within the students' school. Students received a personalized login name and password to enter a secure website, which ensured correct and anonymous response recording. Students were informed about the confidentiality and anonymity of their responses. Students were seated in such ways so they could not see classmates' responses or talk with each other

Table 1. Means and standard deviations for the different involvement in bullying measures at the three time points for the total sample, for the SS:I students versus the matched students, and for the SS:I classmates versus the matched classmates.

	Total sample <sup>a</sup>		SS:I students <sup>b</sup>		Matched students <sup>c</sup>		SS:I classrooms <sup>d</sup>		Control classrooms <sup>e</sup>	
	M	SD	M	SD	M	SD	M	SD	M	SD
<b>Outsider behavior</b>										
T1	0.10	0.10	0.15	0.11	0.17	0.15	0.11	0.10	0.10	0.11
T2	0.09	0.09	0.12	0.10	0.14	0.13	0.09	0.09	0.09	0.10
T3	0.08	0.09	0.08	0.09	0.13	0.13	0.07	0.08	0.09	0.10
<b>Defending</b>										
T1	0.08	0.08	0.06	0.05	0.08	0.09	0.09	0.08	0.08	0.08
T2	0.07	0.07	0.07	0.06	0.08	0.08	0.08	0.07	0.07	0.07
T3	0.06	0.06	0.07	0.06	0.05	0.06	0.06	0.06	0.05	0.07
<b>Being victimized</b>										
T1	0.16	0.24	0.33	0.38	0.29	0.34	0.17	0.25	0.15	0.23
T2	0.15	0.27	0.30	0.38	0.32	0.45	0.15	0.26	0.15	0.29
T3	0.12	0.25	0.21	0.25	0.28	0.47	0.11	0.19	0.14	0.31
<b>Bullying behavior</b>										
T1	0.19	0.34					0.22	0.37	0.17	0.30
T2	0.22	0.37					0.21	0.36	0.23	0.40
T3	0.19	0.34					0.19	0.29	0.19	0.38

Note. <sup>a</sup> N = 395; <sup>b</sup> n = 56; <sup>c</sup> n = 48; <sup>d</sup> n = 205; <sup>e</sup> n = 190.

during the testing session. Two trained research assistants, unfamiliar with the students, were present at all testing sessions to answer possible questions and to ensure consistent and correct response recording. The BRNP testing procedure took an average of 20 minutes.

**Training.** The SS:I students were trained once a week for ten weeks in a separate and quiet room within their school under the guidance of an SS:I trainer. All four SS:I trainers received three half-day training sessions and followed a written protocol in which all exercises were explained to ensure correct and consistent administration of the SS:I over the different classrooms. Each 90 minute training consisted of: (a) education (learning and rehearsal) on one of the SS:I focal points (i.e., social skills, social information processing, coping and emotional skills, assertiveness, and body posture and body language) (b) increasing awareness of bullying and its consequences, and (c) implementation of what was learned through game-type activities (e.g., role-playing, group talk, relaxation exercises). In addition to the student sessions, two 90 minutes parent-and-teacher sessions (after the fifth and tenth session with the students) were also part of the intervention package. During these sessions, parents and teachers were provided information about the SS:I content, student progress, and how to provide support to students in victimization situations.

### **Statistical analysis**

All proportion scores for involvement in bullying at all measured time points suffered from positive skews, indicating that a large number of students received no or only a few nominations. Therefore, the proportion scores for all measures for involvement in bullying were separately transformed into normal scores with SPSS's Rankit normalization procedure to

obtain proportion scores with an approximate normal distribution. In order to keep the variances between groups and measured time points intact, normalization for all scores was done over the total sample *and* over the measured time points.

For all four measures of involvement in bullying (outsider behavior, indirect defender behavior, being victimized and bullying behavior) separate repeated measures ANOVA models were built to examine the SS:Is effect on students' involvement in bullying. In all models, *time* was a 3-level within-subjects variable reflective of students' involvement in bullying at the three measured time points. *Group* and *gender* were included in the models as between-subjects variables to enable the investigation of the effectiveness of the SS:I (group) and the potential differential effectiveness of the SS:I on boys and girls (gender). For outsider behavior, indirect defender behavior, and being victimized, two separate repeated measures ANOVA models were run. First, the SS:Is effect on the trained students was evaluated, that is, SS:I students were compared with a matched sample of control students (group: SS:I students vs. Matched students). Second, the SS:Is effect on the classroom was evaluated, that is, *all* students in SS:I classrooms were compared with *all* students in control classrooms (group: SS:I classrooms vs. Control classrooms). For bullying behavior only the classroom evaluation repeated measured ANOVA model was run, to investigate whether the SS:I indirectly affected bullying behaviors within the classroom as a result of the activation of outsiders' defender potential.

All ANOVA models were run at a significance level of .05. Significant main effects for time were interpreted by making pairwise comparisons with Sidak corrected significance values. Also, to enable the interpretation of significant interaction effects, ANOVA models in which the predictors contributing to the interaction effect were disentangled, were run. Effect

sizes are reported by means of partial eta squared ( $\eta_p^2$ ). A  $\eta_p^2$  of .01 is considered a small effect, .06 is considered a medium effect, and .14 is considered a large effect (Stevens, 2009).

## Results

### Outsider behavior

First, we investigated whether the SS:I effectively reduced outsider behavior. A repeated measures ANOVA model was run in which outsider behavior over time (3-level within-subjects variable: T1, T2, T3) was predicted by the two-level between-subjects variables group (SS:I students, matched students) and gender (male, female). Full ANOVA results can be found in Table 2 (top panel, first set of columns). A main effect of gender indicated girls ( $M = .16$ ,  $SD = .11$ ) were more likely to show outsider behavior than boys ( $M = .09$ ,  $SD = .08$ ). A main effect of time indicated outsider behavior decreased over time (T1 vs. T2 and T3; T1:  $M = .16$ ,  $SD = .13$ ; T2:  $M = .13$ ,  $SD = .12$ ; T3:  $M = .11$ ,  $SD = .11$ ). Finally, a time  $\times$  group interaction effect was found. While outsider behavior did not significantly decrease over time for matched students, it did significantly decrease over time for SS:I students (T1 vs. T2 and T3, T2 vs. T3; Table 1: first panel, second and third set of columns). As a second step, we investigated whether the decrease in outsider behavior was also visible in the full SS:I classrooms (2-level between-subjects variable: SS:I classrooms, control classrooms). Full ANOVA results can be found in Table 2 (bottom panel, first set of columns). A time  $\times$  group interaction was indeed found. Despite a slight decrease in outsider behavior over time in the control classrooms (T1 vs. T3), the decrease in outsider behavior was stronger in SS:I classrooms (T1 vs. T3 and T2 vs. T3; Table 1: first panel, fourth and fifth set of columns).

Table 2. Repeated measures ANOVA results evaluating the effectiveness of the Stand Strong: Interact antibullying intervention on the different measures for students' involvement in bullying.

	Outsider behavior		Defending		Being Victimized		Bullying behavior	
	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$
SS:I students vs. Matched students <sup>a</sup>								
Gender <sup>b</sup>	13.65***	.13	15.64***	.14	2.17	.02		
Time <sup>c</sup>	14.48***	.13	2.12	.02	6.55**	.06		
Group <sup>b</sup>	0.05	.00	1.18	.01	0.02	.00		
Gender × Time <sup>c</sup>	0.66	.01	3.97*	.04	3.50*	.03		
Gender × Group <sup>b</sup>	1.46	.01	0.31	.00	4.67*	.05		
Time × Group <sup>c</sup>	4.50*	.04	3.60*	.04	0.38	.00		
Gender × Time × Group <sup>c</sup>	0.17	.00	3.16	.03	0.12	.00		
SS:I classroom vs. Control classroom <sup>d</sup>								
Gender <sup>e</sup>	38.56***	.09	75.73***	.16	0.02	.00	9.84**	.03
Time <sup>f</sup>	26.37***	.06	26.83***	.06	36.98***	.09	0.64	.00
Group <sup>e</sup>	0.02	.00	5.79*	.02	0.11	.00	0.19	.00
Gender × Time <sup>f</sup>	0.40	.00	5.97**	.02	3.90*	.01	7.09**	.02
Gender × Group <sup>e</sup>	7.08**	.02	0.15	.00	3.91*	.01	4.85*	.01
Time × Group <sup>f</sup>	7.71**	.02	0.21	.00	0.74	.00	0.54	.00
Gender × Time × Group <sup>f</sup>	1.98	.01	6.61**	.02	0.80	.00	1.91	.01

Note. <sup>a</sup> *N* = 104; <sup>b</sup> *df*(1, 100); <sup>c</sup> *df*(2, 200); <sup>d</sup> *N* = 395; <sup>e</sup> *df*(1, 391); <sup>f</sup> *df*(2, 782).  
\**p* < .05; \*\**p* < .01; \*\*\**p* < .001.

### Indirect Defender behavior

First, we investigated whether the SS:I effectively increased indirect defender behavior. Full ANOVA results can be found in Table 2 (top panel, second set of columns). First, a main effect of gender indicated girls ( $M = .12$ ,  $SD = .08$ ) were more likely to show indirect defender behavior than boys ( $M = .07$ ,  $SD = .08$ ). Second, a time × gender interaction indicated that while for boys indirect defender behavior remained at a stable level, it was higher for girls at T2 than at both T1 and T3 (T1:  $M = .11$ ,  $SD = .11$ ; T2:  $M = .14$ ,  $SD = .10$ ; T3:  $M = .10$ ,  $SD = .08$ ). Finally, a time × group interaction was found. While indirect defender behavior did not significantly change over time for SS:I students, it significantly decreased over time for the matched students (T1 vs. T3; Table 1: second panel, second and third set of columns).

Table 3. Means and standard deviations for the gender  $\times$  time  $\times$  group interaction of defending (SS:I classrooms vs. control classrooms repeated measures ANOVA model;  $N = 395$ ).

	Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
SS:I classroom				
T1	0.08	0.08	0.16	0.13
T2	0.08	0.08	0.14	0.12
T3	0.07	0.08	0.12	0.10
Control classroom				
T1	0.07	0.07	0.12	0.13
T2	0.05	0.08	0.14	0.11
T3	0.05	0.07	0.09	0.10

As a second step, we investigated whether the stability in indirect defender behavior for SS:I students was also visible the full SS:I classrooms. Full ANOVA results can be found in Table 2 (bottom panel, second set of columns). A time  $\times$  group  $\times$  gender interaction was found (see also Table 1: second panel, fourth and fifth set of columns). As can be seen from Table 3, only for boys in SS:I classrooms indirect defender behavior did not change significantly over time. Boys in control classrooms showed less indirect defender behavior over time (T1 vs. T2 and T3). Girls in both SS:I and control classrooms showed less indirect defender behavior over time (SS:I classrooms: T1 vs. T2 and T3, and T2 vs. T3; Control classrooms: T1 vs. T3 and T2 vs. T3).

### Being victimized

First, we investigated whether the SS:I effectively reduced being victimized. Full ANOVA results can be found in Table 2 (top panel, third set of columns). First, a main effect of time indicated that being victimized decreased over time (T1 vs. T3 and T2 vs. T3; T1:  $M = .32$ ,  $SD = .36$ ; T2:  $M = .31$ ,  $SD = .42$ ; T3:  $M = .24$ ,  $SD = .37$ ). Second, a gender  $\times$  time interaction indicated that while being victimized remained at a similar level for girls, it

decreased over time for boys (T1 vs. T3 and T2 vs. T3; T1:  $M = .42$ ,  $SD = .42$ ; T2:  $M = .33$ ,  $SD = .39$ ; T3:  $M = .26$ ,  $SD = .32$ ). Third, a gender  $\times$  group interaction was found. While SS:I boys and girls were equally likely to be victimized, matched boys ( $M = .41$ ,  $SD = .36$ ) were more likely to be victimized than matched girls ( $M = .24$ ,  $SD = .41$ ). Finally, no interaction including time and group was found, indicating that the SS:I did not reduce being victimized in SS:I students. Still, Table 1 (third panel, second and third set of columns) suggests nonsignificant declines in SS:I students compared with matched students.

As a second step, we investigated whether, despite not finding a decrease in being victimized for SS:I students, a decrease in being victimized was visible in the full SS:I classrooms. Full ANOVA results can be found in Table 2 (bottom panel, third set of columns). No significant interaction effect including time and group was found (see also the mean scores in Table 1: third panel, fourth and fifth set of columns), indicating that the SS:I did not effectively reduce being victimized in SS:I classrooms either. However, Table 1 (third panel, fourth and fifth set of columns) does suggest nonsignificant declines are present in the SS:I classrooms compared with control classrooms at T3 compared with T1 and T2.

### **Bullying behavior**

For bullying behavior, we only investigated whether a decrease in bullying behavior occurred in the full SS:I classrooms. Full ANOVA results can be found in Table 2 (bottom panel, fourth set of columns). First, a main effect of gender indicated that boys ( $M = .27$ ,  $SD = .40$ ) were more likely to bully than girls ( $M = .14$ ,  $SD = .23$ ). Second, a gender  $\times$  group interaction indicated that while there were no gender differences in bullying behavior in SS:I classrooms, boys in control classrooms ( $M = .31$ ,  $SD = .45$ ) were more likely to bully than girls

( $M = .10$ ,  $SD = .17$ ). Third, a time  $\times$  gender interaction indicated that while for girls no differences in bullying behavior over time were found, boys were less likely to bully others over time (T3 vs. T1 and T2 vs. T3; T1:  $M = .27$ ,  $SD = .42$ ; T2:  $M = .31$ ,  $SD = .46$ ; T3:  $M = .23$ ,  $SD = .40$ ). Finally, no time  $\times$  classroom interaction was found, suggesting that the SS:I did not affect the average level of bullying behavior in SS:I classrooms compared with control classrooms.

### **Discussion**

The present study aimed at evaluating — for the first time — the effectiveness of the SS:I antibullying intervention in a sample of Dutch primary school students. The SS:I aims at changing the bullying group process by increasing the social and emotional resilience of students who are classifiable as outsiders or victims. After having followed the SS:I, these students should be more socially and emotionally resilient. More specifically, victims should be better able to cope with and avoid victimization while outsiders should be better able to act according to their antibullying attitude and thus to act as defenders. By focusing intervention efforts on the within-classroom subgroups of outsiders and victims, the whole bullying group process should change.

The findings first of all suggest the SS:I effectively reduces students' tendency to show outsider behavior. Moreover, this decline was noticeable in both students who followed the SS:I themselves, as well as in the whole classroom comparison. While, counter to expectation, indirect defender behavior did not increase as a result of having followed the SS:I, indirect defender behavior did remain at a stable level. For the matched students, defender behavior became less frequent over the course of the school year. The stability in indirect defender

behavior was also noticeable in the whole classroom comparison for boys, but not for girls. While the stability in indirect defender behavior may not seem like an impressive feat, previous work has shown that defender behaviors becomes less frequent during the transition into adolescence (Goossens et al., 2006; Pozzoli & Gini, 2013) and the present study suggests that under seemingly normal conditions (i.e., in the control classrooms) a decline in defender behavior is noticeable even within one school year. Moreover, outsiders' tendency to actively avoid involvement in witnessed victimization appeared to be related to their personality (i.e., lacking dominance ambition, strong impulse control, punishment sensitive, and reward insensitive; Pronk et al., 2014). This personality profile suggests that it may be quite difficult to activate outsiders' defender potential. Therefore, the present findings suggest the SS:I has a promising effect on students' (i.e., outsiders') tendency to (indirectly) defend victims, as the normal declines in defender behavior seem to be counteracted.

Secondly, despite the fact that Table 1 suggests declines in being victimized were present in the data for both SS:I students and within their classrooms, these declines were not significant. Moreover, no decline in bullying behavior was found in SS:I classrooms compared with control classrooms. This could be explained — at least in part — by previous findings suggesting that bullying behavior serves to obtain social dominance and resource control for those successfully executing these types of behaviors (Olthof et al., 2011; Reijntjes et al., 2013). Therefore, as it gives the enactor a dominant position, bullying behaviors may be difficult to combat completely without taking away all the rewards the group accords bullies (attention, admiration, power, friendship, popularity). Moreover, it may therefore be difficult to change within-classroom bullying behaviors when intervention efforts are not directly aimed at decreasing students' bullying behavior. Alternatively, based on Ttofi and Farrington (2011), it

may also be the case that more training and more intensive training is necessary for the SS:I to be effectively decrease bullying behavior in classrooms. Then again, it may also simply be that it takes more time for this indirect effect of the SS:I to become noticeable and that an increase in the measurement period is necessary (i.e., extend measurement into the next school year).

Taken together, the present findings suggest that the SS:I does — at least partially — what it intends to do, it changes the within-classroom bullying group process by changing the outsiders' involvement. Of course, the size of the recruited sample was relatively small and more research is clearly needed to see if we can replicate and extend the present findings (e.g., the SS:Is effect on being victimized). However, as a first evaluation of the effectiveness of the SS:I *and* of a subgroup antibullying intervention, the present findings offer interesting information for practice. It seems as if the SS:I can have valuable added effects to other antibullying programs in the field. Meta-analysis has already indicated antibullying programs need to put more emphasis on promoting prosocial behavior to be more effective in combating the bullying process within classrooms (Polanin et al., 2013). One obvious new way to further investigate the value of the SS:I would be to test whether it can be a successful addition to existing antibullying programs. As stated in the introduction, programs like KiVa could potentially benefit from adding a building block like the SS:I to their intervention. However, other classroom antibullying programs that specifically focus on decreasing bullying behavior and victimization (for a program review see Ttofi & Farrington, 2011) could potentially increase their effectiveness by more widely tackling the bullying group process, that is, by adding a SS:I block to their intervention. Finally, it is unlikely that there is a unique panacea for all bullying problems. It may therefore be wise for practice to sociometrically assess the

classroom bullying dynamic before deciding which combination of antibullying programs (and building blocks) may best address the bullying issues in a classroom or school.

### **Future Directions**

The present findings suggest that the SS:I program may need to be improved to increase its' effectiveness, as it was found to be less effective than expected with regards to increasing indirect defender behavior. First of all, the SS:I program consisted of only 10 training lessons over a period of 10 weeks. In line with the meta-analytical findings of Ttofi and Farrington (2011), intensifying and increasing the duration of the training program may be necessary. Practice makes perfect and, compared to a decrease in defender behavior in the control conditions, a stability in defender behavior was found for SS:I students. It may simply take more time to actually increase outsiders' tendency to show defender behavior. Similarly, it may also take more time to sufficiently strengthen victims and to enable them to take a stand against the bullies themselves. Secondly, it was recently suggested that outsiders may be impeded in their prosocial tendencies because they experience high levels of moral distress, that is, they are inhibited by psychological distress that is caused by the idea of having to help victims (Forsberg, Thornberg, & Samuelsson, 2014). This suggests that more emphasis needs to be placed on increasing students' coping skills in the SS:I. Not only on coping with (witnessing) victimization but also on coping with students' own — already existing — insecurities. Similarly, it may also be that outsiders need to increase their confidence in their ability to help victims adequately. In line with the recent findings by Troop-Gordon et al. (2014), it is also important for victims to learn how to cope with victimization and their own insecurities, as to be able to alleviate the short- and long-term negative consequences of

victimization on themselves. Finally, it may be a worthwhile strategy to also include defenders in the SS:I, to provide the outsiders with role models for behaving according to their antibullying attitudes. This idea is borrowed from the general principles of the information goods theory (Henrich & Gil-White, 2001). The more prestigious individuals in social groups are highly liked and valued by other group members and those who like the prestigious individuals are likely to copy their behaviors (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Henrich & Gil-White, 2001). In line with this idea, defenders are highly liked by their classmates — including by the outsiders (Goossens et al., 2006; Olthof & Goossens, 2008; Pöyhönen & Salmivalli, 2008; Sainio et al., 2011) — and during adolescence, peers are highly influential on each other's behaviors and attitudes (Dishion & Tipsord, 2011; Steinberg & Morris, 2001). Providing good examples for learning how to execute prosocial defender behaviors through defender role models, could ease the implementation of defender behaviors in outsiders, that is, it may ease the activation of their defender potential.

### **Strengths, Limitations, and Conclusions**

A strength of the present study was its focus on promoting students' prosocial behavior and on decreasing their tendency to avoid involvement in victimization and increase their provictim intervention behavior. Previous research has already suggested antibullying programs need to focus on promoting provictim intervention behavior of outsiders (Forsberg et al., 2014; Orpinas & Horne, 2010; Pozzoli & Gini, 2010, 2013; Pronk et al., 2013, 2014; Salmivalli, 1999, 2010) and that existing antibullying programs can increase their effectiveness by doing so (Polanin et al., 2012; Pronk et al., 2013). A second strength of the present study was using peer reports to assess the bullying group process and using this information to target

intervention efforts on those students who can have an effect on changing this group process, that is, the outsiders. A related third strength of the present study was training only a subgroup of students to change the whole classroom process. This strategy has the benefits of limiting the costs for implementation, tailoring intervention efforts to the needs of a specific subgroup of students, and of making it possible to implement the intervention in addition to more general (whole-school) programs.

The present study was limited by a relatively small sample size. Future — larger scale — studies are needed to replicate and to investigate the generalizability of the present findings. It will be interesting to see how classroom context and school climate may contribute to the effectiveness of the SS:I in activating outsiders' defender potential, increasing victims' safety net, and equipping victims with the skills to avoid victimization. Unfortunately, only a small number of classrooms ( $n = 19$ ) and schools ( $n = 8$ ) were included in this study. With larger sample sizes — most notably at the nested classroom and/or school levels — it will be possible to reliably investigate the influence of classroom contextual and school climate differences (Maas & Hox, 2005).

A second limitation is that the present study did not enable us to infer which specific aspects of the SS:I are responsible for its effectiveness. For example, why did the SS:I decrease students' tendency to show outsider behavior? Which aspects may need to be strengthened to increase the SS:I's effectiveness in decreasing students' chances of being victimized? Do all five SS:I focal points contribute equally to the SS:I's effectiveness or are some more effective than others? Future studies are needed to answer these questions. Equally important is increasing our knowledge on what factors contribute to increasing students' confidence in

executing defensive acts on behalf of victims, as to enable the practical implication of this knowledge in the SS:I and other antibullying programs.

Notwithstanding these limitations, the present study suggests that it is possible to effectively intervene in the bullying group process by focusing intervention efforts on a subgroup of classroom students. Moreover, the present study suggests that outsiders can be activated to support victims of bullying like defenders do. More in general, the present study suggests that the SS:I antibullying intervention seems to intervene in the bullying group process by changing outsider involvement and increasing victims' possible safety net.