Journal of Child and Family Studies
https://doi.org/10.1007/s10826-018-1194-1

ORIGINAL PAPER

The Healthy Context Paradox: Victims' Adjustment During an Anti-Bullying Intervention

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Abstract

This study investigated the "healthy context paradox": the potentially adverse effects of school anti-bullying norms on victims' psychological (depression, social anxiety, and self-esteem) and school adjustment. Based on the person-group (dis) similarity model, social comparison theory, similarity attraction in friendship formation, and attributional theory, it was hypothesized that the emotional plight of victims is intensified in intervention schools with a visible, school-wide anti-bullying program, as compared with victims in control schools with "a care as usual" approach. Longitudinal multilevel regression analyses were conducted on Randomized Controlled Trial data from the Dutch implementation of the KiVa anti-bullying program (baseline and 1-year follow-up data on 4356 students from 245 classrooms in 99 schools, 68% intervention students, 49% boys, 9–10 years-old). The findings revealed that—despite the overall success of the intervention—those who remained or became victimized in intervention schools had more depressive symptoms and lower self-esteem after being targeted by the intervention for 1 year, compared to those who remained or became victimized in control schools. These effects were not found for social anxiety and school well-being. The findings underscore the importance of individual × environment interactions in understanding the consequences of victimization and emphasize the need for adults and classmates to provide continuing support for remaining or new victims who are victimized in schools that implement anti-bullying interventions.

Keywords Bullying prevention · Mental health · Peer victimization · School-based intervention

Bullying is aggressive, systematic, and goal-directed behavior that harms individuals within the context of a power imbalance (Olweus 1993; Volk et al. 2014). Bullying occurs in direct (physical, verbal, or material) and indirect (gossiping, rumor spreading, excluding others, or cyber-bullying) forms (Mynard and Joseph 2000; Salmivalli et al. 2011). There are high costs associated with bullying for both individuals and society, because victims of bullying as well as bullies experience detrimental short- and long-term consequences (Arseneault 2018; Copeland et al. 2013; Kretschmer et al. 2018). In the past decades, a large number of anti-bullying programs have been developed and implemented (see for overviews: Evans et al. 2014; Farrington and Ttofi 2009; Yeager et al. 2015). Despite the positive effects of anti-bullying programs in reducing the rates of victimization, it may be impossible to totally eliminate bullying in schools. It is therefore critical to focus on the emotional costs of victimization that might increase for those who remain or become victimized in schools where anti-bullying programs are implemented (Garandeau et al. 2018; Huitsing et al. 2012). When children are victimized in schools with highly salient anti-bullying efforts, they may feel more helpless and more negative about themselves and their environment because all efforts made are not effective

Electronic supplementary material The online version of this article (https://doi.org/10.1007/s10826-018-1194-1) contains supplementary material, which is available to authorized users.

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Published online: 21 July 2018

for them. It is therefore crucial to investigate and understand the possible negative consequences of victimization for victims' mental health in schools that strongly support the reduction of victimization. This has recently been described as the "healthy context paradox" (Salmivalli 2018), and there are several theories that explain why experiencing victimization in schools that successfully reduce victimization may be particularly detrimental.

The most pertinent explanation is the person-group dissimilarity model (Wright et al. 1986), which postulates that the evaluation of children's behavior depends on the group and its associated norms in which they are embedded (Wright et al. 1986). During the implementation of a successful anti-bullying intervention, group norms against bullying and victimization become highly salient (more so than in regular schools), and both bullying and victimization are likely to be reduced (Kärnä et al. 2011). The norm in a group can be regarded as a guideline that prescribes which behaviors are appropriate or which experiences are typical or shared. Such norms can then be related to bullying and victimization (Dijkstra et al. 2008; Huitsing et al. 2012; Sentse et al. 2007): when children are victimized in the context of a successful anti-bullying intervention, they deviate from the group norm (i.e., being bullied when hardly anyone else is). If children's behaviors or characteristics do not fit with what is normative in their group, they are evaluated negatively by their classmates, which has an impact on their adjustment.

The above explanation is supported by social comparison theory (Festinger 1954). This theory postulates that humans have a fundamental drive to evaluate themselves by comparing their experiences to those of relevant others. For victims, the referent group of closest and most relevant others are their friends. Comparing oneself with friends in a similar position would likely lead to less negative self-evaluations. However, when there are fewer friends who share the experience of being bullied, those who remain victimized (in spite of an intervention) lack adaptive social comparisons as well as critical sources of close friend support. Indeed, bullied youth are often befriended by others who are victimized (Haselager et al. 1998; Lodder et al. 2016; Sentse et al. 2013; Sijtsema et al. 2013). Similarity in friendships is also known as the similarity attraction hypothesis of friendship formation (Lazarsfeld and Merton 1954; McPherson et al. 2001). Victims with victimized friends indeed appear to have higher levels of well-being than victims with non-victimized friends (Brendgen et al. 2013; Schacter and Juvonen 2018). Maladaptive upward social comparisons and lack of support are then likely to impact children's mental health, which can further be explained through attributional processes.

Attributional processes help to attach meaning to behaviors (Weiner 1986). Victims make attributions to explain why they are victimized (Graham and Juvonen 1998, 2001; Perren et al. 2013). Answers to this question can unfold along three dimensions (Graham and Juvonen 2001; Weiner 1986): locus (whether the cause of victimization is internal or external to the victim), controllability (whether the cause of victimization can be changed), and stability (whether the cause of victimization is stable or varying over time). If children are victimized in a supportive, anti-bullying environment, they are likely to come to the conclusion that the reason for their continued mistreatment has to do with themselves rather than the school (i.e., internal cause), believe they cannot do anything about the plight (uncontrollable), and that they will continue to be bullied (stable). Empirical evidence suggests that when only few children are victimized, victims are more likely to self-blame (Schacter and Juvonen 2015) and when victims' close friends are less bullied, they blame themselves more (Schacter and Juvonen 2018). Hence, when children are victimized in spite of an ongoing anti-bullying intervention and do not have friends with similar experiences, they are likely to make upward comparisons which would strengthen their self-blaming attributions and thereby damage their mental health (Garandeau et al. 2018). Self-blaming attributions capturing internal, uncontrollable, and stable causes promote a negative vicious cycle leading to worsened mental health (Graham and Juvonen 1998).

In the present study, we investigated the "healthy context paradox-hypothesis", which states that there may be adverse effects for victims' adjustment in schools with strong anti-bullying norms. We tested this hypothesis by using data from a randomized controlled trial of the Dutch evaluation of the KiVa anti-bullying intervention. The effects of being victimized in KiVa intervention schools (and control schools) was tested for several psychological and school adjustment outcomes. We focused on indicators of psychological adjustment that are known to be associated with victimization: depressive symptoms, social anxiety, and self-esteem (see for reviews/meta-analyses: Hawker and Boulton 2000; McDougall and Vaillancourt 2015; Reijntjes et al. 2010). Previous research suggests that victimized youth are more likely to blame themselves, to feel depressed, and have low self-esteem in contexts where bullying is less common (Huitsing et al. 2012; Morrow et al. 2018; Schacter and Juvonen 2015). We investigated if comparable patterns can be found in the context of an anti-bullying intervention with salient anti-bullying norms, and whether this "healthy context paradox" may also be problematic for adjustment outcomes that are less centrally related to students' self-evaluations (social anxiety, school well-being). Previous research indicated that students' views on the school climate are negatively affected by victimization, but improved as a function of KiVa program implementation (Juvonen et al. 2016). This broad range of outcomes

provides us the opportunity to test the consequences of victimization with individual × environment influences.

Method

Participants

The longitudinal evaluation of the Dutch implementation in a Randomized Controlled Trial (with randomization at the school level) of the KiVa anti-bullying program followed children from the start of the intervention for 2 years, resulting in five data waves in the RCT. In this study, we used data from the baseline assessment (T1 = May 2012 – or if measurements were not available, the second assessment: T2 = October 2013) and the 1-year follow-up (T3 = May 2013). We focused on children from grades three and four (Dutch grades five and six) in the implementation year, because this was the target sample of the intervention (T1 $M_{age} = 8.67$, SD = 0.68; T3 $M_{age} = 9.70$, SD = 0.69).

The sample used in the subsequent analyses consisted of 4356 students in 245 classrooms in 99 schools (49% boys; see the CONSORT flow diagram in the Appendix). There were 2954 students in 166 classrooms in 65 intervention schools (68% of the total sample), and the remaining 1402 students came from 79 classrooms in 34 control schools (32% of the total sample). Students were 80.6% Dutch, 2.9% Moroccan, 2.1% Turkish, 2.4% Surinamese, and 1.0% Dutch Antilleans. The remaining 11.1% of children reported another Western (5.9%) or non-Western (5.2%) ethnicity.

Procedure

Information about the study and consent forms were sent to parents prior to intervention implementation and assessment. Parents who did not want their child to participate in the assessment were asked to return the form. Students were informed at school about the research and gave oral assent. Schools, parents and students could withdraw from participation at any time. Students did not participate when parents did not provide consent, when they did not want to participate themselves, or when they were unable to complete the questionnaire. Non-response rates were low (T1 = 2.1%; T3 = 1.9%), largely because the data were collected digitally and students who incidentally missed the scheduled day of data collection could participate on another day within a month.

Individual internet-based questionnaires were completed during regular school hours with primary teachers present to answer questions and assist students when necessary. The order of questions and instruments used was randomized to avoid the possibility that presentation of questions systematically affected results.

The KiVa Intervention

The KiVa intervention is based on the assumption that bullying is a group process rather than an incident between bullies and victims (Salmivalli 2010). KiVa puts emphasis on the idea that altering the behavior of bystanders could solve bullying situations, for instance, by discouraging assisting of the bullies or by promoting defending of victims. KiVa aims to raise empathy for victims of bullying, promote defending behaviors among bystanders, and increase teachers' awareness of and intervention in bullying incidents. The whole-school intervention includes components for teachers and students (Kärnä et al. 2011). There are universal actions that target all students, including student lessons (implemented by teachers, with discussions, group work, exercises, and role-playing) and a computer game in which children can test their knowledge about bullying and enhance their defending skills (Poskiparta et al. 2012). For solving bullying situations, the KiVa program includes indicated actions, such as a KiVa-team of specialized school personnel that facilitates discussion meetings with students (Garandeau et al. 2014; Van der Ploeg et al. 2016).

Measures

To assess victimization and psychological and school adjustment, we relied on information obtained at the baseline assessment (T1) before the intervention was implemented and the data at the 1-year follow-up (T3). There are two exceptions; depressive symptoms and social anxiety were only included in the data collection from T2 onwards, because the baseline questionnaire would otherwise have been too long and too focused on negative topics. At T2, the data were obtained in October, shortly after the start of the school year, and we assume that the intervention did not yet affect these outcomes.

Self-reported victimization

Students were provided a definition of bullying and they were subsequently asked to respond to a global question on victimization from the Revised Olweus Bully/Victim questionnaire (Olweus 1996): "How often have you been bullied at school in the past two months?" Children answered on a five-point scale (0 = not at all, 1 = once or twice, 2 = two or three times a month, 3 = about once a week, 4 = several times a week).

Depressive symptoms

We used a 9-item scale, derived from the Major Depression Disorder Scale (Chorpita et al. 2000), to measure children's depressive symptoms. Students responded on a 4-point Likert-type scale (0 = never, 3 = always) to items such as "I feel that nothing is much fun anymore" and "I have no energy for things". The scores for the 9 items formed a reliable scale and were averaged (Cronbach's $\alpha^{T2} = .80$; $\alpha^{T3} = .83$).

Social anxiety

We used a 7-item scale, derived from Social Phobia Screening Questionnaire (Furmark et al. 1999), to measure children's social anxiety. Students responded on a 5-point Likert-type scale (0 = never, 4 = always) to items such as "I am scared to talk to someone whom I don't know" and "I am scared to be together with others during the break". The scores for the 7 items formed a reliable scale and were averaged (Cronbach's $\alpha^{T2} = .78$; $\alpha^{T3} = .80$).

Self-esteem

We used a 5-item scale to measure children's self-esteem. Items were derived from the Rosenberg self-esteem scale (Rosenberg 1965). Only the positively formulated items were used to make the questions applicable for this age group. Students responded on a 5-point Likert- type scale (0 = never, 4 = always) to items such as "I feel that I have a number of good qualities" and "I feel that I am a person of worth, at least on an equal plane with others". The scores for the 5 items formed a reliable scale and were averaged (Cronbach's $\alpha^{T1} = .81$; $\alpha^{T3} = .85$).

School well-being

We used a 7-item scale to measure students' well-being at school (Kärnä et al. 2011). Students responded on a 4-point Likert-type scale (0 = never, 3 = always) to items reflecting general liking of school (e.g., "I like it at school") and feelings of safety (e.g., "I feel safe at school"). The scores for the 7 items formed a reliable scale and were averaged (Cronbach's $\alpha^{T1} = .74$; $\alpha^{T3} = .85$).

Control variables

All models included sex (girl = 0, boy = 1), grade (grade 3 = 0, grade 4 = 1), and intervention status of the school (control school = 0, intervention school = 1) as control variables.

Data Analyses

To answer our research questions, we performed longitudinal multilevel regression analysis using MLwiN 2.35 (Rasbash et al. 2017). We used a model with four levels, with the measurement waves (level 1) nested in students (level 2), nested in classrooms (level 3), and in schools (level 4). Multilevel analyses enable us to test the specific questions about individuals and the relevance of their context for student adjustment. Between baseline and follow-up, the classroom composition changed for a part of the sample and we used the classroom structure of the follow-up as nesting for level 3.

In the analyses, students' psychological adjustment (depressive symptoms, social anxiety, self-esteem) and school adjustment (school well-being) were the dependent variables. First, we computed empty models with variation at all levels to inspect how the variance was distributed over students, classrooms, and schools. The empty models serve as a reference model for the explained variance and a test of the model components using the decrease in deviance. The decrease in deviance has approximately a X^2 distribution with the number of degrees of freedom equal to the added parameters of the model.

In the models, we included main effects and their interaction with time to handle the longitudinal model with measurement waves nested in students. Because we were primarily interested in students' psychosocial and school adjustment at the follow-up, the conditional main effects in the model refer to Wave 3, where we included interactions with a time dummy for Wave 1 to separate baseline (BL; T1 for self-esteem and school well-being, T2 for depression and social anxiety) and follow-up scores (FU) on the dependent variables. Thus, we were able to investigate the relation of victimization with children's adjustment both cross-sectionally (at BL) and after 1 year (examining outcomes at FU, taking BL into account). The intercept for control schools at the follow-up can be obtained with the *Intercept*. Students' scores at control schools at the baseline are obtained by combining the estimate for the intercept with the "Intercept × BL" interaction. The variable *Intervention* provides the contrast between students in intervention and control schools at FU, and the interaction of *Intervention* with BL can be used to calculate differences between control and intervention schools at baseline.

Similarly, the effect of victimization on the outcome variables at BL and FU was included in the model to estimate its effect on the adjustment outcomes in control schools, as well as its interaction with BL to calculate the effect at baseline. The cross-level interaction of victimization by intervention specifically tests our hypothesis if remaining or new victims in a favorable school environment are less well-adjusted after being targeted by the

Table 1 Descriptive statistics and correlations between main outcome variables and predictors

	M	SD	1	2	3	4	5	6	7
1. Depressive Symptoms FU	0.64	(0.53)							
2. Social Anxiety FU	0.94	(0.76)	.37**						
3. Self-Esteem FU	3.07	(0.83)	−.34**	−.18**					
4. School Well-Being FU	2.10	(0.57)	−.34**	−.15**	.41**				
5. Intervention	68%		−.04**	−.01	.02	.05**			
6. Victimization BL	1.39	(1.49)	.19**	.09**	−.15**	−.21**	.01		
7. Victimization FU	0.91	(1.26)	.30**	.14**	−.18**	−.34**	−.07**	.33**	
8. Boy	49%		−.04*	−.18**	.10**	−.03*	–	.00	−.01
9. Grade 4 (Grade 3 = ref.)	52%		−.05**	−.01	.03	−.01	–	−.04**	−.06**

BL baseline, *FU* follow-up

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

intervention for 1 year ("Victimization × Intervention"). The three-way interaction of victimization, intervention status, and BL was used to calculate this effect at baseline. We included sex (individual level) and grade (individual level, because children can be in mixed-grade classrooms) as control variables. To facilitate the interpretation of the results, all continuous variables were grand-mean centered before they were entered into the multilevel model.

Results

Descriptive statistics and correlations between the adjustment outcomes (only at FU) and predictor variables are in Table 1. Students, on average, had low levels of depressive symptoms ($M = 0.64$, SD = 0.53) and social anxiety ($M = 0.94$, SD = 0.76), moderate levels of school well-being ($M = 2.10$, SD = 0.57), and relatively high levels of self-esteem ($M = 3.07$, SD = 0.83). Victimization decreased strongly between BL and FU. As shown in the correlation part of Table 1, victimization was related to all adjustment variables at both the baseline and at the 1-year follow-up. The intervention was unrelated to victimization at BL, but it was related to less victimization at FU, consistent with past RCT data on KiVa (Veenstra 2015). After 1 year of intervention, children in the intervention condition had, on average, lower levels of depressive symptoms and higher levels of school well-being. Boys had, on average, better psychosocial outcomes than girls (i.e., lower levels of depressive symptoms and social anxiety, better self-esteem,), but they had lower levels of school well-being. Children in higher grades (i.e., grade 4 compared with grade 3) had lower levels of victimization and depressive symptoms. Finally, all the indicators of adjustment were moderately related with each other.

We calculated intraclass correlations (ICCs) of all outcome variables, which provide estimates of the proportion of variance due to differences between students, classrooms, and schools (see Table 2). The ICCs indicate that the majority of the variability existed between the waves. The ICCs indicate that the variation at the student level and higher ranged from 5.5% for depression to 8.9% for school well-being. The classroom-level variance was highest for school well-being and somewhat higher than the school-level variance, with the latter being almost negligible.

Table 2 Variance estimates and intraclass correlations for dependent variables

	Variances				Intraclass correlations		
	Wave	Student	Class	School	ICC_1	ICC_2	ICC_3
Depressive symptoms	0.274	0.010	0.003	0.003	5.5%	2.1%	1.0%
Social anxiety	0.538	0.030	0.008	0.008	7.9%	2.7%	1.4%
Self-esteem	0.617	0.026	0.007	0.006	5.9%	2.0%	0.9%
School well-being	0.278	0.013	0.009	0.005	8.9%	4.6%	1.6%

Wave-level $N = 8712$, student-level $N = 4356$; classroom-level $N = 245$; school-level $N = 99$

ICC Intraclass correlation. ICC_1 = proportion of total variance at the student level and higher; ICC_1 = (Student + Class + School variances)/(Wave + Student + Class + School variances)., ICC_2 = proportion of total variance at the classroom and school level, ICC_3 = proportion of total variance at school level

The multilevel models presented in Table 3 tested the individual × environment interaction by regressing the adjustment variables on individual-level victimization, school-level intervention condition, and cross-level interactions between the two. The first column of Table 3 shows that boys ($b = -.025$, $p = .02$) and children in grade 4 ($b = -.041$, $p < .01$) had lower levels of depressive symptoms than girls and children in grade 3, respectively. Simple slopes were derived in Fig. 1a to obtain the effects for victimization on depressive symptoms, with lines distinguishing children in control and intervention schools at both BL and FU assessments. Figure 1a shows that at BL

Table 3 Estimated effects for outcomes after 1 year of implementing the intervention

	Depressive symptoms		Social anxiety		Self-esteem		Well-being at school	
	Est.	SE	Est.	SE	Est.	SE	Est.	SE
Fixed effects								
Intercept	−0.047	(0.024)*	0.083	(0.037)*	−0.004	(0.037)	0.147	(0.027)**
Intercept × BL	−0.023	(0.026)	−0.060	(0.036)†	−0.034	(0.039)	0.031	(0.025)
Intervention	−0.048	(0.027)†	−0.009	(0.041)	0.074	(0.041)†	0.057	(0.031)†
Intervention × BL	0.059	(0.031)†	−0.094	(0.044)*	0.009	(0.048)	−0.047	(0.031)
Victimization	0.103	(0.011)**	0.064	(0.015)**	−0.077	(0.016)**	−0.141	(0.011)**
Victimization × BL	−0.025	(0.014)†	0.003	(0.020)	0.042	(0.022) †	0.041	(0.014)**
Victimization × intervention	0.028	(0.013)*	0.026	(0.019)	−0.058	(0.020)**	−0.012	(0.013)
Victimization × intervention × BL	−0.044	(0.017)**	−0.054	(0.025)*	0.030	(0.027)	0.017	(0.017)
Boy	−0.025	(0.011)*	−0.286	(0.016)**	0.098	(0.018)**	−0.072	(0.011)**
Grade 4 (Grade 3 = ref.)	−0.041	(0.013)**	−0.026	(0.021)	0.024	(0.022)	−0.034	(0.016)*
Variance components								
Level 4: school	0.003	(0.001)	0.009	(0.003)	0.005	(0.003)	0.005	(0.002)
Level 3: classroom	0.001	(0.001)	0.007	(0.004)	0.007	(0.004)	0.007	(0.002)
Level 2: student	0.009	(0.002)	0.025	(0.004)	0.026	(0.005)	0.010	(0.002)
Level 1: time	0.258	(0.004)	0.513	(0.008)	0.602	(0.010)	0.252	(0.004)
Deviance difference	χ^2 (df = 9) = 688**		χ^2 (df = 9) = 623**		χ^2 (df = 9) = 285**		χ^2 (df = 9) = 957**	

Main effects for intercept, intervention, victimization, and their interaction refer to follow-up

Decrease in deviance is based on a comparison with the empty model

BL baseline

†$p < .10$, *$p < .05$, **$p < .01$

(straight lines), non-victimized students in control and intervention schools had comparable levels of depressive symptoms (Difference = .012, $p = .67$). At FU (dotted lines), there was a marginal effect of the intervention that showed that non-victimized intervention-students had, on average, fewer depressive symptoms that non-victimized students from control schools ($b = -.048$, $p = .08$). The effect of victimization on depressive symptoms at BL was comparable in magnitude (Difference = .016, $p = .85$) for control schools ($b = .078$, $p < .01$; straight gray line, small triangle) and intervention schools ($b = .062$, $p < .01$; straight black line, small squares). At the FU, however, the effect of victimization on depressive symptoms was stronger at intervention schools ($b = .131$, $p < .01$; dotted black line, large squares) than at control schools ($b = .103$, $p < .01$; dotted gray line, large triangles). The significantly different strength of these slopes (Difference = .028, $p = .03$) is in line with our hypothesis that victimization in schools with salient anti-bullying norms is more detrimental for the mental health of those who are victimized after the intervention. The inclusion of the individual × environment interaction made a significant improvement to the model fit (χ^2 [df = 2] = 6.5, $p = .04$). The model explained 6.6% of the variation in depressive symptoms.

The second column of Table 3 provides the results for social anxiety. Boys had lower levels of social anxiety than girls ($b = -.286$, $p < .01$), whereas comparable scores were found for children in grades 3 and 4. In Fig. 1b, simple slopes are given for the effect of victimization on social anxiety. At BL, students in intervention schools had lower levels of social anxiety (Difference = −.103, $p < .01$) than students in control schools, but this difference disappeared at the FU ($b = -.009$, $p = .82$). Victimization at BL was marginally more strongly related to social anxiety (Difference = −.028, $p = .08$) in control schools ($b = .067$, $p < .01$) than in intervention schools ($b = .039$, $p < .01$). At the FU, this effect was reversed, with the effect of victimization on anxiety being stronger in intervention schools ($b = .090$, $p < .01$) than in control schools ($b = .064$, $p < .01$), although this hypothesized difference did not reach statistical significance ($b = .026$, $p = .17$). The inclusion of the individual × environment interaction made no improvement to the model fit (χ^2 [df = 2] = 4.0, $p = .14$). The model explained 5.1% of the variation in social anxiety.

The third column of Table 3 shows the results for self-esteem. Boys had, on average, higher self-esteem than girls ($b = .098$, $p < .01$), whereas children in grades 3 and 4 had comparable levels of self-esteem. Students in intervention schools had somewhat more self-esteem at both BL ($b = .082$, $p = .06$) and FU ($b = .074$, $p = .07$) assessments. The effect of victimization on self-esteem was negative in both intervention ($b = -.063$, $p < .01$) and control schools ($b = -.035$, $p < .01$) at BL, but comparable in strength (Difference = .028, $p = .14$). Consistent with our hypothesis, at FU, victimization was more strongly negatively related to self-esteem in intervention schools ($b = -.135$, $p < .01$) than in control schools ($b = -.077$, $p < .01$; Difference = −.058, $p < .01$). The individual × environment interaction made a significant improvement to the model fit (χ^2 [df = 2] = 10.4, $p < .01$). The model explained 2.4% of the variation in self-esteem.

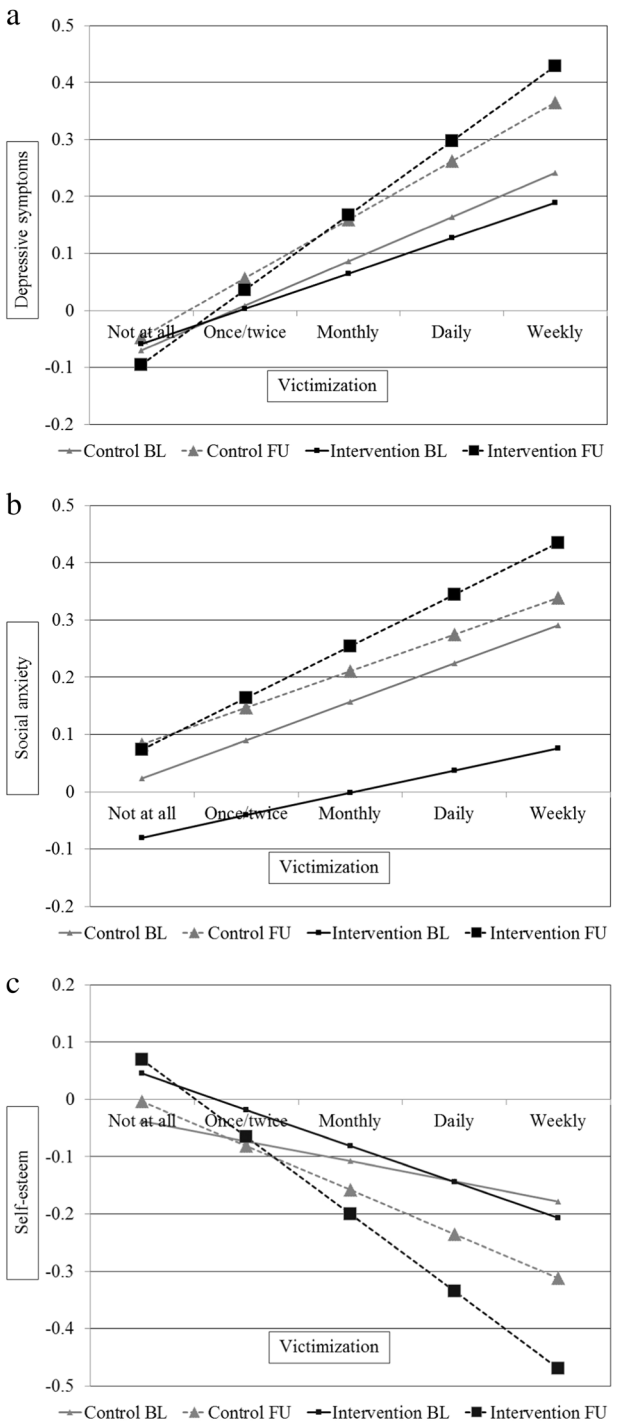

Fig. 1 **a** Depressive symptoms (grand-mean centered) predicted by victimization, intervention status, and their interaction, with separate lines for time (fitted lines reflect all others variables at the reference category, i.e., girls and grade 3). **b** Social anxiety (grand-mean centered) predicted by victimization, intervention status, and their interaction, with separate lines for time (fitted lines reflect all others variables at the reference category, i.e., girls and grade 3). **c** Self-esteem (grand-mean centered) predicted by victimization, intervention status, and their interaction, with separate lines for time (fitted lines reflect all others variables at the reference category, i.e., girls and grade 3)

The final column of Table 3 shows that boys ($b = -0.072$, $p < .01$) and children in grade 4 ($b = -0.034$, $p < .05$) had lower well-being at school than girls and children in grade 3, respectively. Students in intervention and control schools at BL had comparable levels of school well-being (Difference = 0.010, $p = .73$), where students in intervention schools had at FU somewhat higher school well-being ($b = 0.057$, $p = .07$). Contrary to our hypothesis, victimization had similar negative effects on school well-being for students in intervention and control schools at FU (Difference = −0.012, $p = .36$). The inclusion of the individual × environment interaction did not contribute to a better model fit (χ^2 [df = 2] = 1.0, $p = 0.61$). The model explained 10.2% of the variation in school well-being.

Discussion

This study extends past analyses of individual × treatment effects (Juvonen et al. 2016) by investigating the possible paradox that a school-wide anti-bullying program reducing victimization can adversely affect the mental health of those who are victimized in spite of salient anti-bullying norms. Several theories were used to derive the hypothesis that victimization in schools with a salient school-wide anti-bullying intervention has a stronger negative impact on victims' psychological and school adjustment than victimization in schools that apply care as usual. Although the results of this study varied somewhat across the outcomes, there was support for our person × environment interaction: When schools implemented an anti-bullying intervention that emphasizes anti-bullying norms, those who remained or became victimized reported more depression and lower self-esteem 1 year after the intervention. Consistent with the person-group dissimilarity model (Wright et al. 1986), we presume these findings reflect the fact that bullied youth stand out more and feel worse about themselves when victimization decreases.

It is important to recognize that while the KiVa program had overall positive effects in making schools healthier (by decreasing victimization), there is a group of youth who remain at high risk: some of them continue to be victimized, while others become targets in spite of the intervention. It is easier to think about reasons why some children continue to be victimized than why others become targets. One reason for the continued victimization could be that not all victims benefit from the program equally. Some children may have more difficulty creating or sustaining positive relationships with peers, because they are in such a disadvantageous position that peers do not want to be associated with them. For example, it can be a threat to affiliate with unpopular children, because this enhances the risk of decreasing a child's own status (Juvonen and Galván 2008). Siding with

victims might also evoke retaliation by bullies (Huitsing et al. 2014). Therefore, children with a very low social standing may have additional challenges to overcome when they deviate more from what is normative (Kaufman et al. 2018). Additionally, specific reactions to bullying are known to elicit negative responses from others (Hodges and Perry 1999). For example, internalizing problems, such as depressive symptoms, might especially hinder social interactions and decrease victims' potential to recruit supportive peers, fostering a negative, vicious cycle contributing to stable victimization (Reijntjes et al. 2010). When positive overtures from peers are not reciprocated, the victims with internalizing problems are likely to remain victimized even after an effective anti-bullying intervention.

Because the new or remaining victims in our sample were likely to make negative upward comparisons with victims who were helped (social comparison theory, Festinger 1954), it is also likely that they made more self-blaming attributions (attibutional theory, Graham and Juvonen 1998; Schacter and Juvonen 2015; Weiner 1986). This, in turn, may lead to negative self-perceptions with detrimental effects on victims' mental health. That is, in contexts where fewer students are bullied, it is easier to blame oneself and feel depressed. Recent findings also show that victimized youth with friends who have had similar experiences feel less distressed (Schacter and Juvonen 2018). When an intervention decreases victimization experiences, it might be even harder for victimized youth to find friends who shared their plight. Although we were unable to directly test these proposed mechanisms, the results of the current study nevertheless add to recent findings demonstrating that youth who continue to be victimized in classroom with reduced rates of victimization have poorer psychological and social adjustment (Garandeau et al. 2018).

Although the victimization × intervention effects on all adjustment outcomes were in the expected direction, we only found that individual × environment interactions had significant effects on depressive symptoms and self-esteem, and not on social anxiety and school well-being. These findings might be explained by students' self-evaluations. Students experiencing high levels of depressive symptoms are more likely to exhibit a negative cognitive regulation style, characterized by a perceived lack of control, and youth with low self-esteem may similarly make internal attributions and feel that they deserve the bad things that happen to them. These feelings of personal deservingness and lack of control may be particularly likely to arise when students are victimized in schools with salient anti-bullying norms (Schacter and Juvonen 2015). Social anxiety and school well-being, however, may be less directly related to negative self-evaluation styles, and may have more to do with overestimating external social threats (Garnefski and Kraaij 2016). They both measure feelings of unsafety which captures, to a certain extent, something about the context and not (only) about the child.

In addition to individual × environment interactions, we found evidence for the overall effectiveness of the KiVa anti-bullying program. The KiVa intervention schools produced a general reduction in victimization levels (see also: Kärnä et al. 2011; Nocentini and Menesini 2016; Veenstra 2015). We also found marginally significant main effects of the intervention on depressive symptoms, self-esteem, and school well-being. After 1 year of implementing the intervention, the average adjustment of students in intervention schools was somewhat better than it was for students in control schools. This finding is in line with previous studies on the KiVa intervention in other countries that showed positive effects on reductions in social anxiety (Williford et al. 2012) and improved school well-being, achievement, and motivation (Salmivalli et al. 2011). Also, a study based on the Finnish RCT data shows that students who were victimized at baseline reported more caring school climate, higher self-esteem, and less depression in intervention schools at the follow-up (Juvonen et al. 2016). Thus, it is vital to put the current negative individual × environment effects into this larger perspective: while the KiVa intervention has been shown to benefit students by decreasing the rates of victimization and psychologically benefitting some of the youth victimized prior to the intervention, there is a small group of children who remain at risk of victimization, depression, and low self-esteem.

Indeed, the adverse effects for new or remaining victims are applicable to a relatively small group of vulnerable children. A recent study using latent class trajectory models documented that only 3.5% of the children in Dutch KiVa schools were persistent victims over the course of 2 years, and that 15.3% of the children experienced decreasing victimization (Kaufman et al. 2018). Although the adverse effects of being victimized in schools that use visible anti-bullying measures are applicable to a small percentage of the children (i.e., those who are targeted post-intervention), this small group of children is at high risk, given the long-term mental health effects of prolonged peer victimization (Sheppard et al. 2016).

Limitations and Future Research

Although this study provides an important test of the hypothesis that victim-supportive environments can have adverse effects for the victimized, it has also its limitations. Most importantly, we could not examine the explicitness of the anti-bullying norms in the 245 classrooms involved in this study. Rather, we presumed that the norms are highly salient in the intervention settings, although some variation is expected based on the fidelity of implementation of the

program (Haataja et al. 2014). An alternative way to capture these norms is to measure them explicitly, by evaluating descriptive (i.e., the average behavior in a group) or injunctive (i.e., the average attitude in a group) norms, or the norm salience, referring to the association between behavior and social status (Veenstra et al. 2018). The differences in the salience of social norms in control and intervention schools can further be investigated based on program implementation data (e.g., student lessons, computer game, indicated actions). Similarly, we do not have specific information about how control schools dealt with the "care as usual" approach. We also did not directly test elements of the theories that were used to derive the main hypothesis for this study. For example, it would be important to test if victims' attributions mediate the link between victimization and mental health problems (Perren et al. 2013), and whether attribution styles can be targeted by anti-bullying interventions. Similarly, a further step would be to test if victims in intervention schools who were helped by the program are indeed less likely to side with victims who were not helped. In addition, we used only self-report data, which may contribute to shared-method variance. In light of investigating changes over the course of an intervention, however, peer-reports also have their limitations as they rely strongly on reputations (Olweus 2010). Nevertheless, it would be interesting to know whether teachers or peers observe decreased victimization in order to disentangle whether students' continued (self-reported) victimization is in part a product of their negative self-schemas or maladaptive attributions. Finally, we took a variable-centered approach to the relation between victimization and mental health that did not allow us to disentangle persistent victims (children who were victimized at both baseline and follow-up) from new victims (children who were only victimized at follow-up) post-intervention. A person-centered approach would be suitable here (see, e.g., Garandeau et al. 2018).

The findings of this study contribute to the research literature on individual × environment influences and document that school contexts can further exacerbate the stress of already vulnerable victims. While the KiVa intervention effectively reduces mental health problems for those who were victimized before the intervention (Juvonen et al. 2016), it is critical to develop methods to help those who either become targets or continued to be victimized. Future research may investigate the effectiveness of additional efforts for victims. This could entail training teachers to become more cognizant of the specific mental health needs of those who continue to be victimized, or training teachers to implement tailored indicated actions that best fit the situation around each victim (Garandeau et al. 2018; Van der Ploeg et al. 2016). For example, different strategies may be performed for highly rejected victims versus neglected victims. It may also be investigated if teachers can relieve the consequences of victimization by discussing attribution strategies with specific students who may be most at risk—e.g., talking to continued victims about how it is not their fault that they are bullied. Additionally, teachers can be provided with information on the social structure of the classroom to facilitate appropriate responding to students in need (Huitsing and Veenstra 2012). Support for victims from well-liked, popular students may be more effective than recruiting "average" students. Research into such additional tailored intervention efforts may improve the plight of those who are daily and persistently victimized. Even in interventions that are highly successful in reducing the problems associated with bullying and victimization, continuous efforts should be dedicated to children who are nevertheless victimized, despite the general positive effects of the intervention.

Funding The implementation and evaluation of KiVa in the Netherlands has been financed by grants from the Dutch Ministry of Education (Onderwijs Bewijs, ODB10025) to R.V. Further funding came from NWO PROO 411-12-027 and NWO VICI 453-14-016 to R.V. The funders had no role in the analyses, decision to publish, or preparation of the manuscript.

Author Contributions G.H.: designed and executed the study and data collection, conducted the data analyses, and wrote the paper; G.L.: assisted in the data analysis and collaborated in the writing and editing of the final manuscript; BO contributed to the data collection and collaborated in the writing and editing of the final manuscript; H.S., C. S., & J.J.: collaborated in the writing and editing of the final manuscript; R.V.: collaborated with the design of the study, the data analyses, and the writing and editing of the final manuscript.

Data Availability All data are owned by the University of Groningen. Data will be made publicly available through DANS Netherlands (Data Archiving and Networked Services; https://dans.knaw.nl/).

Compliance with Ethical Standards

Conflict of Interest G.H. and R.V. coordinated the implementation and evaluation of KiVa in the Netherlands. Program dissemination is done by a company (www.kivaschool.nl). C.S. led the development of the KiVa program and its implementation in Finland. The remaining authors declare that they have no conflicts of interest.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The Dutch law did not require IRB permission for this kind of research, and an Internal Review Board was not established at the Department of Sociology at the time of data collection (2012-2014).

Informed Consent Passive informed consent was obtained from parents/caretakers of all individual participants included in the study.

References

Arseneault, L. (2018). Annual research review: the persistent and pervasive impact of being bullied in childhood and adolescence: implications for policy and practice. *Journal of Child Psychology and Psychiatry*, *56*, 405–421. https://doi.org/10.1111/jcpp.12841.

Brendgen, M., Vitaro, F., Barker, E. D., Girard, A., Dionne, G., Tremblay, R. E., & Boivin, M. (2013). Do other people's plights matter? A genetically informed twin study of the role of social context in the link between peer victimization and children's aggression and depression symptoms. *Developmental Psychology*, *49*, 327–340. https://doi.org/10.1037/a0025665.

Chorpita, B. F., Yim, L., Moffitt, C., Umemoto, L. A., & Francis, S. E. (2000). Assessment of symptoms of DSM-IV anxiety and depression in children: A revised child anxiety and depression scale. *Behavior Research and Therapy*, *38*, 835–855. https://doi.org/10.1016/S0005-7967(99)00130-8.

Copeland, W. E., Wolke, D., Angold, A., & Costello, E. J. (2013). Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. *JAMA Psychiatry*, *70*, 419–426. https://doi.org/10.1001/jamapsychiatry.2013.504.

Dijkstra, J. K., Lindenberg, S., & Veenstra, R. (2008). Beyond the class norm: bullying behavior of popular adolescents and its relation to peer acceptance and rejection. *Journal of Abnormal Child Psychology*, *36*, 1289–1299. https://doi.org/10.1007/s10802-008-9251-7.

Evans, C. B. R., Fraser, M. W., & Cotter, K. L. (2014). The effectiveness of school-based bullying prevention programs: a systematic review. *Aggression and Violent Behavior*, *19*, 532–544. https://doi.org/10.1016/j.avb.2014.07.004.

Farrington, D. P., & Ttofi, M. M. (2009). School-based programs to reduce bullying and victimization. *Campbell Systematic Reviews*, *2009*, 6.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, *7*, 117–140.

Furmark, T., Tillfors, M., Everz, P. O., Marteinsdottir, I., Gefvert, O., & Fredrikson, M. (1999). Social phobia in the general population: Prevalence and sociodemographic profile. *Social Psychiatry and Psychiatric Epidemiology*, *34*, 416–424. https://doi.org/10.1007/s001270050163.

Garandeau, C. F., Lee, I. A., & Salmivalli, C. (2018). Decreases in the proportion of bullying victims in the classroom: Effects on the adjustment of remaining victims. *International Journal of Behavioral Development*, *42*, 64–72. https://doi.org/10.1177/0165025416667492.

Garandeau, C. F., Poskiparta, E., & Salmivalli, C. (2014). Tackling acute cases of school bullying in the KiVa anti-bulying program: A comparison of two approaches. *Journal of Abnormal Child Psychology*, *42*, 981–991. https://doi.org/10.1007/s10802-014-9861-1.

Garandeau, C. F., Vartio, A., Poskiparta, E., & Salmivalli, C. (2018). School bullies' intention to change behavior following teacher interventions: Effects of empathy arousal, condemning of bullying, and blaming of the perpetrator. *Prevention Science*, *17*, 1034–1043. https://doi.org/10.1007/s11121-016-0712-x.

Garnefski, N., & Kraaij, V. (2016). Specificity of relations between adolescents' cognitive emotion regulation strategies and symptoms of depression and anxiety. *Cognition and Emotion*. https://doi.org/10.1080/02699931.2016.1232698

Graham, S., & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis. *Developmental Psychology*, *34*, 587–599. https://doi.org/10.1037//0012-1649.34.3.587.

Graham, S., Juvonen, J., (2001). An attributional approach to peer victimization. In J. Juvonen, S. Graham (Sds.) Peer harassment in school: The plight of the vulnerable and victimized (pp. 49–72). New York, NY: Guilford Press.

Haataja, A., Voeten, M., Boulton, A. J., Ahtola, A., Poskiparta, E., & Salmivalli, C. (2014). The KiVa antibullying curriculum and outcome: does fidelity matter? *Journal of School Psychology*, *52*, 479–493. https://doi.org/10.1016/j.jsp.2014.07.001.

Haselager, G. J. T., Hartup, W. W., van Lieshout, C. F. M., & Riksen-Walraven, J. M. A. (1998). Similarities between Friends and Nonfriends in middle childhood. *Child Development*, *69*, 1198–1208. https://doi.org/10.2307/1132369.

Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, *41*, 441–455. https://doi.org/10.1017/S0021963099005545.

Hodges, E. V., & Perry, D. G. (1999). Personal and interpersonal antecedents and consequences of victimization by peers. *Journal of Personality and Social Psychology*, *76*, 677–685. https://doi.org/10.1037/0022-3514.76.4.677.

Huitsing, G., Snijders, T. A. B., Van Duijn, M. A. J., & Veenstra, R. (2014). Victims, bullies, and their defenders: a longitudinal study of the coevolution of positive and negative networks. *Development and Psychopathology*, *26*, 645–659. 10.107/S0954579414000297.

Huitsing, G., & Veenstra, R. (2012). Bullying in schools: participant roles from a social network perspective. *Aggressive Behavior*, *38*, 494–509. https://doi.org/10.1002/ab.21438.

Huitsing, G., Veenstra, R., Sainio, M., & Salmivalli, C. (2012). "It must be me" or " It could be them?": the impact of the social network position of bullies and victims on victims' adjustment. *Social Networks*, *34*, 379–386. https://doi.org/10.1016/j.socnet.2010.07.002.

Juvonen, J., Galván, A., (2008). Peer influence in involuntary social groups: Lessons from research on bullying. In M. J. Prinstein, K. A. Dodge, (Eds.), *Peer influence processes among youth* (pp. 225–244). New York, NY: Guilford Press.

Juvonen, J., Schacter, H. L., Sainio, M., & Salmivalli, C. (2016). Can a school-wide bullying prevention program improve the plight of victims? evidence for risk×intervention effects. *Journal of Consulting and Clinical Psychology*, *84*, 334–344. https://doi.org/10.1037/ccp0000078.

Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011). A large-scale evaluation of the KiVa antibullying program: Grades 4–6. *Child Development*, *82*, 311–330. https://doi.org/10.1111/j.1467-8624.2010.01557.x.

Kaufman, T. M. L., Kretschmer, T., Huitsing, G., & Veenstra, R. (2018). Why does a universal anti-bullying program not help all children? explaining persistent victimization during an intervention. *Prevention Science*. https://doi.org/10.1007/s11121-018-0906-5

Kretschmer, T., Veenstra, R., Branje, S., Reijneveld, S. A., Meeus, W. H. J., Deković, M., & Oldehinkel, A. J. (2018). How competent are adolescent bullying perpetrators and victims in mastering normative developmental tasks in early adulthood? *Journal of Abnormal Child Psychology*, *46*, 41–56. https://doi.org/10.1007/s10802-017-0316-3.

Lazarsfeld, P. F., Merton, R. K., (1954). Friendship as social process: a substantive and methodological analysis. In: M. Berger, T. Abel, C. Page (Eds.), *Freedom and control in modern society* (pp. 18–66). New York, NY: Van Nostrand.

Lodder, G. M. A., Scholte, R. H. J., Cillessen, A. H. N., & Giletta, M. (2016). Bully Victimization: Selection and Influence Within Adolescent Friendship Networks and Cliques. *Journal of Youth and Adolescence*, *45*, 132–144. https://doi.org/10.1007/s10964-015-0343-8.

McDougall, P., & Vaillancourt, T. (2015). Long-term adult outcomes of peer victimization in childhood and adolescence. *American Psychologist*, *70*, 300–310. https://doi.org/10.1037/a0039174.

McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: homophily in social networks. *Annual Review of Sociology*, *27*, 415–444. https://doi.org/10.1146/annurev.soc.27.1.415.

Morrow, M. T., Hubbard, J. A., & Sharp, M. K. (2018). Preadolescents' daily peer victimization and perceived social competence: moderating effects of classroom aggression. *Journal of Clinical Child & Adolescent Psychology*. https://doi.org/10.1080/15374416.2017.1416618

Mynard, H., & Joseph, S. (2000). Development of the multidimensional peer-victimization scale. *Aggressive Behavior*, *26*, 169–178. https://doi.org/10.1002/(SICI)1098-2337(2000)26:2<169::AID-AB3>3.0.CO;2-A.

Nocentini, A., & Menesini, E. (2016). KiVa anti-bullying program in italy: evidence of effectiveness in a randomized control trial. *Prevention Science*, *17*, 1012–1023. https://doi.org/10.1007/s11121-016-0690-z.

Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Malden, MA: Blackwell.

Olweus, D. (1996). *The revised Olweus bully/victim questionnaire*. Bergen, Norway: Research Center for Health Promotion (HEMIL Center), University of Bergen.

Olweus, D., (2010). Understanding and researching bullying: Some critical issues. In S. R. Jimerson, S. M. Swearer, D. L. Espelage (Eds.), *Handbook of bullying in schools: an international perspective* (pp. 9–33). New York, NY: Routledge.

Perren, S., Ettekal, I., & Ladd, G. W. (2013). The impact of peer victimization on later maladjustment: Mediating and moderating effects of hostile and self-blaming attributions. *Journal of Child Psychology and Psychiatry*, *54*, 46–55. https://doi.org/10.1111/j.1469-7610.2012.02618.x.

Poskiparta, E., Kaukiainen, A., Pöyhönen, V., Salmivalli, C., (2012). Anti-bullying computer game as part of the kiva program: students' perceptions of the game. In A. Costabile, B. Spears (Eds.), *The impact of technology on relationships in educational settings: international perspective* (pp. 158–168). New York, NY: Routledge.

Rasbash, J, Steele, F, Browne, W. J., & Goldstein, H. (2017). *A useras guide to MLwiN, v3.00*. Bristol, UK: University of Bristol, Centre for Multilevel Modelling.

Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect*, *34*, 244–252. https://doi.org/10.1016/j.chiabu.2009.07.009.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior*, *15*, 112–120. https://doi.org/10.1016/j.avb.2009.08.007.

Salmivalli, C. (2018). Peer victimization and adjustment in young adulthood: commentary on the special section. *Journal of Abnormal Child Psychology*, *46*, 67–72. https://doi.org/10.1007/s10802-017-0372-8.

Salmivalli, C., Garandeau, C. F., Veenstra, R., (2011). KiVa anti-bullying program: Implications for school adjustment. In A. M. Ryan, G. W. Ladd (Eds.), *Peer relationships and adjustment at school* (pp. 279–307). Charlotte, NC: Information Age Publishing.

Salmivalli, C., Kärnä, A., & Poskiparta, E. (2011). Counteracting bullying in Finland: The KiVa program and its effects on different forms of being bullied. *International Journal of Behavioral Development*, *35*, 405–411. https://doi.org/10.1177/0165025411407457.

Schacter, H. L., & Juvonen, J. (2015). The effects of school-level victimization on self-blame: Evidence for contextualized social cognitions. *Developmental Psychology*, *51*, 841–847. https://doi.org/10.1037/dev0000016.

Schacter, H. L., & Juvonen, J. (2018). Dynamic changes in peer victimization and adjustment across middle school: Does friends' victimization alleviate distress? *Child Development*. https://doi.org/10.1111/cdev.13038

Sentse, M., Dijkstra, J. K., Salmivalli, C., & Cillessen, A. H. N. (2013). The dynamics of friendships and victimization in adolescence: a longitudinal social network perspective. *Aggressive Behavior*, *39*, 229–238. https://doi.org/10.1002/ab.21469.

Sentse, M., Scholte, R., Salmivalli, C., & Voeten, M. (2007). Person-group dissimilarity in involvement in bullying and its relation with social status. *Journal of Abnormal Child Psychology*, *35*, 1009–1019. https://doi.org/10.1007/s10802-007-9150-3.

Sheppard, C. S., Giletta, M., & Prinstein, M. J. (2016). Peer victimization trajectories at the adolescent transition: associations among chronic victimization, peer-reported status, and adjustment. *Journal of Clinical Child and Adolescent Psychology*. https://doi.org/10.1080/15374416.2016.1261713. *in press*.

Sijtsema, J. J., Rambaran, A. J., & Ojanen, T. J. (2013). Overt and relational victimization and adolescent friendships: Selection, deselection, and social influence. *Social Influence*, *8*, 177–195. https://doi.org/10.1080/15534510.2012.739097.

Van der Ploeg, R., Steglich, C., & Veenstra, R. (2016). The Support Group Approach in the Dutch KiVa anti-bullying programme: Effects on victimisation, defending, and well-being at school. *Educational Research*, *3*, 221–236. https://doi.org/10.1080/00131881.2016.1184949.

Veenstra, R. (2015). *Signaleren en tegengaan van pesten: Het KiVa antipestprogramma. Eindrapportage voor Onderwijs Bewijs* [Signaling and reducing bullying in schools: The KiVa anti-bullying program. Final report for education effectiveness research). The Hague: Ministry of Education, Culture and Science. Retrieved May 1, 2018 http://tinyurl.com/KiVa-onderwijsbewijs.

Veenstra, R., Dijkstra, J. K., Kreager, D. A., (2018). Pathways, networks, and norms: a sociological perspective on peer research. In W. M. Bukowski, B. Laursen, K. H. Rubin (Eds.), *Handbook of peer interactions, relationships, and groups*. 2nd edition (pp. 45–63,. New York, NY: Guilford.

Volk, A. A., Dane, A. V., & Marini, Z. A. (2014). What is bullying? a theoretical redefinition. *Developmental Review*, *34*, 327–343. https://doi.org/10.1016/j.dr.2014.09.001.

Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York, NY: Springer-Verlag.

Williford, A., Boulton, A., Noland, B., Little, T. D., Karna, A., & Salmivalli, C. (2012). Effects of the KiVa anti-bullying program on adolescents' depression, anxiety, and perception of peers. *Journal of Abnormal Child Psychology*, *40*, 289–300. https://doi.org/10.1007/s10802-011-9551-1.

Wright, J. C., Giammarino, M., & Parad, H. W. (1986). Social status in small groups: individual-group similarity and the social "misfit". *Journal of Personality and Social Psychology*, *50*, 523–536.

Yeager, D. S., Fong, C. J., Lee, H. Y., & Espelage, D. L. (2015). Declines in efficacy of anti-bullying programs among older adolescents: Theory and a three-level meta-analysis. *Journal of Applied Developmental Psychology*, *37*, 36–51. https://doi.org/10.1016/j.appdev.2014.11.005.