Consequences of Defending Behavior on Status and Affection: The Effects of Gender and KiVa

Kim Zunderdorp

University of Groningen, the Netherlands

Gijs Huitsing

University of Groningen, the Netherlands

René Veenstra

University of Groningen, the Netherlands

Abstract

This longitudinal study examined whether defending influences social status (i.e. acceptance and popularity) and whether this relationship is moderated by the gender of victims, the gender of defenders, and the gender of bystanders who evaluate the defending behavior. It was also examined whether children in KiVa-schools benefited more from defending in terms of social status. Multivariate regression analyses on a large sample, representative for grades seven to nine in Finland (*N*=12,058), demonstrated that defending mainly led to peer acceptance by boys when boys are defended. When girls are defended, defenders' peer acceptance by boys decreased. Defending led to decreases in popularity according to girls when girls were defended, but not when boys were defended. Defending had little effect on peer acceptance by girls and popularity according to boys. Overall, KiVa seemed to affect the evaluation of defenders positively. The results indicate that the consequences of defending are context-dependent.

Key words: bullying, defending, social status, acceptance, popularity, gender.

Consequences of Defending Behavior on Status and Affection: The Effects of Gender and KiVa

Introduction

Students' roles in bullying situations has a profound effect on their psychosocial adjustment. Victims are, for example, at risk for rejection, depression, and social anxiety (Hawker & Boulton, 2000; Salmivalli, 2010). Bullies too are at risk for anxiety, depression and rejection, although they can also often perceived as cool (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000; Salmivalli, 2010). Because defending is generally perceived as a positive behavior, research has focused on the relationship between defending and positive psychosocial outcomes. Generally, these studies found a positive association between defending and social status (Caravita, Di Blasio, & Salmivalli, 2009; e.g. Pöyhönen, Juvonen, & Salmivalli, 2010; Salmivalli, Lagerspetz, Bjorkqvist, Osterman, & Kaukiainen, 1996). One common explanation for this finding is that peers might reward defenders for the prosocial behavior that they demonstrate. However, this relationship has not been studied longitudinally (Salmivalli, 2010). In this study, we examine whether defending leads to higher social status.

Moreover, the consequences of defending for students' social status may not be the same for all students. Based on previous research indicating the importance of gender in bullying episodes (Veenstra, Lindenberg, Munniksma, & Dijkstra, 2010), we propose that gender may be one of the factors that has an influence on the consequences of defending. Though previous studies have examined the influence of the gender of defenders on the relationship between defending and social status (e.g. Pöyhönen et al., 2010), to our knowledge no other study has also included the influence of the gender of the victims and the bystanders who evaluate the defending behavior. Therefore, we adopt a similar methodology in this study as used in the study of Veenstra and colleagues (2010) and we examine whether the consequences of defending on social status differ depending on the gender of the victim,

the gender of the defender, and the gender of the bystanders by whom the defending behavior is evaluated. Contrary to the study of Veenstra and colleagues (2010), we focus on defending rather than bullying and victimization and we adopt a longitudinal approach.

We also propose that the consequences of defending depend on the context in which defending occurs. The Finnish KiVa anti-bullying program is aimed at creating an environment where bullying is not tolerated and where defending is rewarded (Kärnä et al., 2011a). In this study, we aim to examine whether the consequences of defending on social status differ between schools where the KiVa anti-bullying program was implemented compared to schools where it was not.

The data used to answer these research questions stems from a longitudinal sample of Finnish students aged 13-15, of which half were randomly assigned to a control condition and the other half to a condition with the KiVa anti-bullying program. Previous research on defending was mostly carried out on cross-sectional samples of younger students, aged 4-13 (see Salmivalli, 2010 for an overview), and most research on the effectiveness of KiVa has so far been performed on samples of students aged 10-12 (e.g. Kärnä et al., 2011b). Thus, in this study we test hypotheses on a sample of a population that has not been studied extensively.

Theory

Goals of defenders and their peers

According to the goal-framing approach (Lindenberg, 2001), behavior is usually performed to attain a goal and the evaluation of behavior depends on whether it aids or thwarts goal attainment. Knowledge about the major goals of students might therefore give us insight into why some students defend. Most students find social status important in life (Buhrmester, 1990; LaFontana & Cillessen, 2010). It is important to recognize that the term social status tends to be used to refer to two different concepts, namely affection or sociometric popularity and status or perceived popularity (Cillessen & Rose, 2005). Affection

is a dyadic concept at the relationship level about good and valuable relationships. It is often operationalized as the degree to which students are liked by their peers (i.e. peer acceptance, e.g. Sainio, Veenstra, Huitsing, & Salmivalli, 2011). Students high on peer acceptance are generally prosocial. The other concept, perceived popularity, represents the degree to which a student is visible and central in the classroom. Therefore, perceived popularity can be seen as a relative measure. An increase in the popular status of one student is at the expense of the popularity of another. Students high on popularity are socially sophisticated, and they combine prosocial with antisocial actions to achieve and maintain their popularity (Cillessen & Rose, 2005).

Students might defend in order to obtain both affection and status. Previous studies have found that defenders are well-liked by their peers in general (Caravita et al., 2009; Monks, Ruiz, & Val, 2002; Pöyhönen et al., 2010; Salmivalli et al., 1996). Also, several studies reported that defenders are perceived by their peers as popular (Pöyhönen et al., 2010; Sainio et al., 2011). However, Caravita and colleagues (2009) found a positive association between defending and perceived popularity in their mid-childhood sample (ages 8-10) but not in their adolescent sample (ages 11-14).

Overall, these results seem to indicate that there is a positive association between defending and social status. However, to our knowledge, this relationship has not been studied longitudinally. A recent longitudinal study has indicated that prosocial behavior, of which defending is a subtype, leads to increased social status (Caputi, Lecce, Pagnin, & Banerjee, 2012). Therefore, in this study we hypothesize that defending leads to social status.

Explaining the relationship between defending and social status: influences of gender

Why would defending lead to peer acceptance? Defenders exhibit prosocial behavior by comforting victimized students. With their behavior, defenders indicate that they care for victims, which is likely to lead to acceptance by victims. Thus, at the relationship level,

defending would lead to an increase in defender's peer acceptance. But what about the larger peer group? Are defenders accepted by the larger peer group? If this is true, why would bystanders like defenders?

We propose that a self-categorization process may explain why bystanders accept defenders (Stets & Burke, 2000). Bystanders of bullying situations might categorize themselves in the same group as the victims because they might feel as if they might become the next victim of the bully. Therefore, when defenders comfort victimized students, bystanders might feel as if the defenders would defend them too if they were victimized. As such, bystanders will accept defenders.

We also propose that gender influences the self-categorization process. For students, gender is an important social category (Stets & Burke, 2000). Gender has been shown to influence peer interactions in childhood and preadolescence (Maccoby, 1988). For example, helping by girls led to an increase in peer acceptance by other girls, whereas this was not the case for peer acceptance by boys (Dijkstra, Lindenberg, & Veenstra, 2007). Therefore, bystanders might be more likely to categorize themselves in the same group as victims if they have the same gender as the victim. Only if bystanders categorize themselves in the same group as victimized peers, they will feel as if defenders might defend them too. Therefore, if bystanders have the opposite gender of victims, they are not likely to feel that they belong to the same group as the victim. Thus, bystanders will not feel as if the defenders might defend them too. Consequently, bystanders will not, or at least to a lesser degree, accept defenders. This results in the first set of hypotheses: (1a) defending boys leads to a stronger increase in peer acceptance by boys than defending girls and (1b) defending girls leads to a stronger increase in peer acceptance by girls than defending boys.

A different social process explains why defending leads to perceived popularity: peers admire defenders who stand up against the bully. Bullies are generally perceived as popular in

the peer group (Salmivalli, 2010). Because defending not only includes comforting victimized peers but also standing up to bullies, defending may be regarded as a courageous act. Defending thereby increases the social visibility of defenders in their peer group and defenders will be perceived as more socially dominant. Therefore, the popularity of students may increase by defending victimized peers.

However, we expect that the increase in perceived popularity will be stronger if defenders are boys rather than girls. Studies on gender roles and helping have indicated that boys are encouraged more than girls to undertake chivalrous and heroic actions, i.e., actions where risk is involved and where the weaker members of a group are defended (e.g. Eagly & Crowley, 1986). Defending can be considered heroic behavior, as students who defend victims run the risk of becoming victims themselves when bullies retaliate. Moreover, boys tend to use more direct means of aggression whereas girls are more likely to use indirect means of aggression (Björkqvist, Lagerspetz, & Kaukiainen, 1992; Card, 2010). Boys are thus more visible in their aggressiveness than girls. Therefore, it seems plausible to assume that the means of defending mirror the means of bullying; boys will defend in more visible ways than girls and male defenders are perceived as more socially dominant than female defenders. Thus, the second set of hypotheses is: male defenders will increase more in perceived popularity than female defenders according to both boys (2a) and girls (2b).

Classroom context

The KiVa anti-bullying program aims to change the classroom norm to one where defending is stimulated and bullying is condemned (Kärnä et al., 2011a). Defending is promoted and bystanders are stimulated to side with victims, rather than bullies. The KiVa anti-bullying program obtains this via interventions aimed at creating awareness and increasing the empathy, self-efficacy and anti-bullying attitudes of students.

It seems plausible that the KiVa anti-bullying program will influence the previously identified social processes that underlie the relationship between defending and social status. First, we expect that the KiVa anti-bullying program will strengthen the effect that defending has on peer acceptance because KiVa strives to increase empathy towards victims (Kärnä et al., 2011a). This increased empathy might ensure that bystanders categorize themselves in the same group as the victims, which strengthens the degree to which bystanders identify with victims. Therefore, bystanders can expect that they will be supported and liked by peers when defending victimized students in schools where the KiVa anti-bullying program was implemented (KiVa-schools), whereas this might not be the case in schools were KiVa was not implemented (control schools). Thus, we expect that (3a) defending leads to a stronger increase in peer acceptance by boys and girls in KiVa-schools compared to control-schools.

We also expect that the KiVa anti-bullying program will influence the relationship between defending and popularity. Another aim of KiVa is to strengthen the anti-bullying attitudes of the students (Kärnä et al., 2011a). Defending thus might be perceived as more norm-conforming behavior in KiVa-schools than in control schools. Defenders act in accordance with the injunctive norm in KiVa-schools and might thus be perceived as popular. Moreover, the program increases awareness for bullying situations and to the roles that classmates can have in bullying situations. Therefore, defenders might be perceived as more socially visible and dominant in their class in KiVa-schools than in control schools. Hence, bystanders will perceive defenders as more popular in KiVa-schools than in control schools. Therefore, we expect that (3b) defending leads to a stronger increase in perceived popularity according to both boys and girls in KiVa-schools compared to control schools.

Method

The KiVa anti-bullying program

The Finnish Ministry of Education and Culture funded the development and initial evaluation of a new anti-bullying program named KiVa, an acronym for Kiusaamista Vastaan, "against bullying" (Kärnä et al., 2011a). The program was developed at the University of Turku, in collaboration with the Department of Psychology and the Centre for Learning Research. It has been implemented in grades 1-9 (ages 7-15). The current study uses the data gathered in grades 7-9 (ages 13-15). In these grades, the KiVa program included universal and indicated interventions in order to decrease bullying. For the universal interventions, four themes are described in the teachers' manual that can be introduced to students, as series of lessons or as whole theme days. The recommended time to be dedicated to the Kick-Off session, the four themes, and the concluding session, is 13 to 23 hours altogether.

A unique feature of KiVa is the virtual learning environment involved, called KiVa Street. This is an Internet forum where the students sign in and navigate to visit different places. For instance, they can go to a library and find information about bullying, or they can enter a movie theatre and watch short films about bullying. KiVa Street aims at providing knowledge, skills, and motivation to change one's own behavior related to bullying.

Furthermore, KiVa provides prominent symbols such as bright vests for the recess supervisors to enhance their visibility and signal that bullying is taken seriously in the school and posters to remind students and school personnel about the KiVa program. Schools get presentation graphics they can use to introduce the program for the whole personnel and for parents. Parents also receive a guide that includes information about bullying and advice about what parents can do to prevent and reduce the problem.

For the indicated interventions, a team of three teachers (or other school personnel), along with the classroom teacher, addresses each case of bullying that comes to attention. Cases are handled through a set of individual and small group discussions with the victims and with the bullies, and systematic follow-up meetings. In addition, the classroom teacher

meets with 2 to 4 prosocial and high-status classmates and encourages them to support the victimized student.

During the evaluation study, support was provided to teachers and schools to implement the program with fidelity. In addition to two full days of face-to-face training, networks of school teams were created, consisting of three school teams each. The network members met three times during the school year, with one person from the KiVa project guiding the network. The goal of the network meetings was to motivate the network members to implement the program and to help them overcome any possible obstacles in the process.

Data collection

To recruit schools for the implementation of KiVa in grades 1-3 and 7-9, letters were sent in the fall of 2006 to all 3,418 schools providing basic education in mainland Finland. These included both Finnish-language and Swedish-language schools, because the basic education in Finland is given in both official languages. The letter included information about the goals and content of the KiVa anti-bullying program and an enrolment form. The volunteering schools were stratified by province and language and schools providing special education only were excluded from the project. In total, 78 schools participated in the KiVa project in grades 7-9 and were randomly assigned to the intervention or control condition (39 each).

Data were collected in three waves: May 2008, December 2008/January 2009, and May 2009. The current study uses data collected in the first and the third wave. Four control schools did not provide any data at all and one intervention school only participated in the first wave of data collected. These schools were therefore dropped from the analyses, resulting in 38 intervention schools and 35 control schools.

No pre-test measurements were available for the students who were in grade 7 during the intervention year (i.e. in wave 3), because they were not yet in the schools participating in

the study. Therefore, from the total sample of 19,191 students, 5,433 respondents were dropped from the analyses. Another 1,700 students were dropped from the analyses due to various reasons (lack of consent, invalid data etc.). This resulted in a sample of 12,058 students (50.0% boys).

Procedure

Students filled out Internet-based questionnaires in the schools' computer labs during regular school hours. The process was administered by the teachers, who were supplied with detailed instructions about two weeks prior to data collection. The teachers were told to act in such ways that the confidentiality of the response was secured to a maximum extent, and students were assured that their answers would not be revealed to teachers or parents. In addition, teachers were offered support through phone or e-mail prior to and during data collection.

Teachers distributed individual passwords to the students, who used them to log in to the questionnaire. At the beginning of the session, the term *bullying* was defined for the students in the way formulated in the Olweus' bully/victim questionnaire (Olweus, 1996), which emphasizes the repetitive nature of bullying and the power imbalance between the bully and the victim. Additionally, to remind the students of the meaning of bullying, a short version of the definition appeared on the upper part of the computer screen when the students responded to a bullying-related question. The order of questions, items, and scales was extensively randomized to alleviate any systematic order effect.

Measures

Pre-test defending of boys and of girls. The respondents were presented with eleven items from the Olweus bully/victim questionnaire to determine whether they were victimized (Olweus, 1996). If they indicated on any of the eleven items that they were victimized at least once or twice a month, they were asked whether they were defended. If this was the case and

if the defenders were classmates of the respondents, the respondents were presented with a roster with all the names of their classmates. They were asked “By which classmates are you defended?” Respondents could nominate an unlimited number of same-sex and cross-sex peers. In total, 1,281 students (10.6%) were allowed to nominate defenders, and 1,150 students (9.5%) nominated one or more defenders. From these nominations, proportion scores were calculated for the proportion of boys each student defended and the proportion of girls each student defended. These proportion scores were standardized for the whole sample.

Pre-test and post-test peer acceptance and perceived popularity by boys and by girls. All respondents were asked to nominate the classmates they liked the most and the classmates they thought were the most popular in their class. The respondents could nominate an unlimited number of same-sex and cross-sex peers. From these nominations, proportion scores were calculated for the proportion of ‘like most’- and ‘most popular’-nominations each student received from boys and from girls separately. These proportion scores were standardized.

Analyses

First, several descriptive statistics were computed. Means and standard deviations for the main study variables were calculated and t-tests were conducted to identify differences between boys and girls and between KiVa-schools and control schools (see Table 1). Moreover, correlations between the main study variables were computed for boys and for girls separately and the differences between boys and girls were tested (see Table 2). Consequently, four multiple regression analyses were conducted in order to test the hypotheses. For the first two models (see Table 3), the dependent variables were post-test peer acceptance by boys and post-test peer acceptance by girls. The independent variables were pre-test peer acceptance by boys and pre-test peer acceptance by girls, pre-test defending of boys and pre-test defending of girls. In the last two models (see Table 4), the dependent

variables were post-test popularity by boys and post-test popularity by girls. The independent variables were pre-test popularity by boys and pre-test popularity by girls, pre-test defending of boys and pre-test defending of girls. We also controlled in all models for gender and whether students attended a KiVa-school or a control school. Additionally, in each of the models, interaction effects between the pre-test variables and gender and KiVa-school were included, as well as three-way interactions (i.e., pre-test variables x gender x KiVa). From the complete models, non-significant parameters were excluded from the analyses via backward selection, in order to obtain parsimonious models (Veenstra et al., 2010). Main effects, even if not significant, were always included in the model when significant interaction effects were included in the model. Only the final models are presented.

Results

Descriptive statistics

Table 1 presents the means and standard deviations of the main variables of this study. T-tests were used to analyze differences between KiVa-schools and control schools for boys and girls combined as well as separately and between boys and girls within each type of school. On average, boys accepted boys more than girls accepted boys at the post-test, both in control schools (M=0.26 vs. 0.11, respectively, p<0.01) and in KiVa-schools (M=0.30 vs. 0.13, p<0.01). Similarly, girls accepted girls more than boys accepted girls at the post-test, both in control schools (post-test: M=0.30 vs. 0.11, p<0.001) and in KiVa-schools (post-test: M=0.34 vs. 0.11, p<0.001).

Boys accepted boys in KiVa-schools at the post-test more than boys in control schools (M=0.30 vs. 0.26, p<0.01) but they equally accepted girls in KiVa-schools as in control schools at the post-test (M=0.11 vs. 0.11, p=0.96). Girls accepted boys and girls at the post-test more in KiVa-schools than in control schools (boys: M=0.13 vs. 0.11, p<0.01; girls: M=0.34 vs. 0.30, p<0.01).

On average, boys were more popular than girls according to boys at the post-test, both in control schools (M=0.10 vs. 0.05, p<0.01) and in KiVa-schools (M=0.11 vs. 0.05, p<0.01). Similarly, girls were more popular than boys according to girls at the post-test, both in control schools (M=0.11 vs. 0.08, p<0.01) and in KiVa-schools (M=0.12 vs. 0.09, p<0.01).

Boys perceived students as equally popular in KiVa-schools as in control schools (boys: M=0.11 vs. 0.10, p=0.07; girls: M=0.09 vs. 0.08, p=0.17). Girls too perceived students as equally popular in KiVa-schools as in control schools (boys: M=0.05 vs. 0.05, p=0.87; girls: M=0.12 vs. 0.11, p=0.01).

Boys were more defended by boys than by girls in control schools (M=0.03 vs. 0.01, p<0.01) and in KiVa-schools (M=0.03 vs. 0.01, p<0.01), whereas girls were defended more by girls than by boys in control schools (M=0.04 vs. 0.01, p<0.01) and in KiVa-schools (M=0.04 vs. 0.01, p<0.01).

[Table 1 about here]

The correlations between the study variables are given in Table 2. For boys and for girls, there was a positive association between pre-test defending of boys and post-test acceptance by boys (for boys: r=0.10, p<0.01; for girls: r=0.15, p<0.01), but not between pre-test defending of boys and post-test acceptance by girls (for boys: r=0.01, p=0.60; for girls: r=0.01, p=0.27). Also, for boys and for girls, the correlation between pre-test defending of girls and post-test acceptance by girls was positive (for boys: r=0.05, p<0.01; for girls: r=0.07, p<0.01) but there was no significant correlation between pre-test defending of girls and post-test acceptance by boys (for boys: r=0.00, p=0.84; for girls: r=-0.01, p=0.39).

[Table 2 about here]

The correlation between pre-test defending of boys and post-test popularity by boys was stronger for girls than for boys, though they did not differ significantly (r=0.08 vs. 0.05, z=1.17, p=0.09). The correlation between pre-test defending of boys and post-test popularity

by girls was significantly stronger for girls than for boys (r=0.08 vs. 0.03, z=3.08, p<0.01). The correlation between pre-test defending of girls and post-test popularity by boys did not differ significantly between boys and girls (r=0.03 vs. r=0.01, z=1.37, p=0.17). The correlation between pre-test defending of girls and post-test popularity by girls did not differ significant between boys and girls either (r=0.03 vs. r=0.03, z=0.27, p=0.78).

Testing the hypotheses

Hypothesis 1 stated that defending boys would lead to a stronger increase in acceptance by boys than defending girls (1a) and that defending girls would lead to a stronger increase in peer acceptance by girls than defending boys (1b). The main effects of the pre-test variables defending boys and defending girls in Table 3 were analyzed to test these hypotheses. The results were consistent with hypothesis 1a. Defending boys led to a significant increase in acceptance by boys (b=0.04, p<0.01), whereas defending girls led to a significant decrease in acceptance by boys (b=-0.04, p<0.01).

[Table 3 about here]

[Figure 1 about here]

The results were not in line with hypothesis 1b (see Table 3). Neither defending boys nor girls (defending girls: b=-0.02, p=0.17) had a significant impact on acceptance by girls.

[Figure 2 about here]

Hypothesis 2 stated that male defenders will increase more in perceived popularity than female defenders according to both boys (2a) and girls (2b). The combination of the pre-test variables and the interaction effects with gender in Table 4 showed that the data rejected hypothesis 2a. In fact, neither defending boys (b=-0.00, p=0.86) nor defending girls had a significant impact on popularity by boys. The interaction effects with gender were not significant either. The difference between male and female defenders in popularity according to boys in control schools was also depicted in Figure 3. This figure depicted that in control

schools, students who defended a lot were on average equally popular according to boys as students who hardly defended. The effects of defending on popularity according to boys were the same for male and female defenders, indicated by the fact that the slopes of the lines for male and female defenders in control schools were the same. However, regardless of the proportion of defended victimized peers, boys were more popular according to boys than girls. Therefore, the line for boys was shifted upwards compared to the line for girls.

[Figure 3 about here]

The data were not in line with hypothesis 2b either (see Table 4). For boys, defending girls led to a stronger decrease in popularity according to girls than for girls (b=-0.09 vs. -0.02, p<0.01). This was also depicted in Figure 5, in which can be seen that students in control schools who hardly defended were more popular according to girls than students who defended a lot. Moreover, boys who hardly defended were more popular in control schools than girls who hardly defend. However, boys who defended much in control schools were less popular than girls who defended much. Moreover, defending had a stronger detrimental effect on the popularity according to girls for male defenders than for female defenders, indicated by the fact that the slope for male defenders in control schools was steeper than the slope for female defenders.

However, defending boys did not have an impact on popularity by girls, regardless of whether the defender was male or female (b=0.02 vs. -0.01, p=0.17). This was depicted in Figure 4. Though boys who defended much seemed to be more popular according to girls than boys who defended little, this difference was not significant. Also, though it seems that girls who defended much seemed to be less popular than girls who defended little, the difference was not significant. The difference between male and female defenders was not significant either.

[Table 4 about here]

[Figure 4 about here]

[Figure 5 about here]

Hypothesis 3a stated that defending would lead to a stronger increase in peer acceptance by boys and by girls in KiVa-schools than in control-schools. Interactions between the pre-test defending variables, gender and KiVa were required to test this hypothesis. As could be seen in Table 3, the data were partially in line with hypothesis 3a. In control schools, defending girls had a significant negative effect on acceptance by boys, whereas in KiVa-schools this negative effect was canceled out (b=-0.04 vs. 0.01, p<0.01). This was also depicted in Figure 1. In control schools, students who defended girls were less accepted by boys than students who did not defend girls. Boys were more accepted by other boys than girls, so therefore the line of boys was shifted upwards compared to the line of girls. However, in KiVa-schools defending did not affect acceptance by boys anymore. The slopes of the lines of the KiVa-schools was nearly flat, compared to the negative slopes of the lines of control schools. Moreover, in KiVa-schools boys were accepted more by other boys than by girls. Therefore, the line of boys is shifted upwards compared to the line of the girls.

For acceptance by girls, a similar pattern emerged. Though neither in KiVa-schools nor in control schools defending girls affected acceptance by girls, the difference in the effect of defending girls on acceptance by girls between KiVa-schools and control schools was significant (b=0.01 vs. -0.02 , p=0.03). This could also be seen in Figure 2. In control schools, students who defended were slightly more accepted by girls compared to students who did not defend, though this difference was not significant. Girls accepted other girls more than boys, therefore the line of girls was shifted upwards compared to the line of boys. In KiVa-schools, students who defended much seem to be more accepted than students who defend little, though this difference was not significant either. The difference between the slopes was significant, however. Similarly to control schools, in KiVa-schools girls accepted other girls

more than boys. Therefore, the line for girls was shifted upwards compared to the line for boys. Defending boys did not affect acceptance by girls in KiVa-schools or in control schools.

Hypothesis 3b stated that defending would lead to a stronger increase in perceived popularity according to boys and by girls in KiVa-schools than in control schools. As could be seen in Table 4, defending led to a significant increase in popularity by boys in KiVa-schools, whereas this was not the case in control schools (b=0.04 vs.-0.00, p=0.03). This could also be seen in Figure 3. For control schools, students who defended much did not differ in popularity according to boys from students who defend little. Boys found other boys more popular than girls, therefore the line of boys was shifted upwards compared to the line of girls. However, in KiVa-schools students who defended much were more popular according to boys than students who defended little. Therefore, the lines for KiVa-schools had a steeper slope. Similar to control schools, boys were more popular according to other boys than girls. Therefore, the line of boys was shifted upwards compared to the line of girls. Defending girls did not impact popularity by boys, regardless of the gender of the defender.

Defending boys in KiVa-schools only led to a stronger increase in popularity by girls compared to control schools if the defender was female (b=0.07 vs. -0.01, p=0.01) rather than male (b=0.01 vs. 0.02). This could also be seen in Figure 4. In control schools, boys who defended much were slightly more popular according to girls than boys who defended little. However, this difference was not significant. This did not change in KiVa-schools. Though defending boys had a slight positive effect on the popularity according to girls, this effect was not significant. However, students were more popular in KiVa-schools than in control schools and therefore the line is shifted upwards slightly. Girls who defended much in control schools were slightly less popular according to girls than girls who defended little, though again this difference was not significant. However, the KiVa program had a large effect on girls. In

KiVa-schools, girls who defended much were more popular according to girls than girls who defended little.

Finally, for male defenders, defending girls led to a weaker decrease in popularity by girls in KiVa-schools than in control schools (b=-0.06 vs. -0.09, p=0.03). For female defenders, defending girls did not affect popularity by girls in KiVa-schools compared to a significant negative effect in control schools (b=0.01 vs. -0.02, p=0.03). This could be seen in Figure 5. In control schools, students who defended girls much were less popular according to girls than students who defended girls little. This was especially the case for boys, whose line was steeper. However, the KiVa anti-bullying program weakened this effect. Boys who defended girls much were still less popular according to girls than boys who did not defend girls, but this difference was smaller than in control schools. However, in KiVa-schools, girls who defended girls did not differ from girls who did not defend on popularity according to girls; the small difference between girls who defended and girls who did not was not significant in KiVa-schools.

Discussion

Because social status is a major goal for all students (Cillessen & Rose, 2005) , bystanders may include their assessment of the consequences of defending behavior on their social status in deciding whether to intervene in a bullying situation. Therefore, several studies have looked into the relationship between defending and social status (Caravita et al., 2009; Pöyhönen et al., 2010; Salmivalli et al., 1996). To our knowledge, this study is the first longitudinal study that examines whether defending leads to social status and what effects the gender of the victims, defenders and bystanders have on this relationship.

Gender effects on the relationship between defending and social status

First, we hypothesized that defending boys would lead to a stronger increase in peer acceptance by boys. Our data were consistent with this hypothesis. However, the data were

not in line with our expectation that defending girls would lead to a stronger increase in peer acceptance by girls than defending boys. In fact, neither defending boys nor defending girls led to a change in peer acceptance by girls. According to hypothesis 2, male defenders would increase more in perceived popularity than female defenders according to boys and girls. The data were not in line with this hypothesis either. In fact, in most cases defending did not affect perceived popularity. Only defending girls led to a decrease in popularity according to boys, especially for male defenders.

These findings may be explained by the age of the respondents in the current study. Adolescence is a time in which many physical and social changes take place. For example, being popular becomes increasingly important in adolescence compared to childhood (LaFontana & Cillessen, 2010). Exhibiting antisocial behavior that challenges adults' norms and values becomes a successful strategy to gain social status (Cillessen & Mayeux, 2004; Moffitt, 1993). Thus defending, a prosocial behavior, might not be evaluated positively by adolescent peers. Moreover, adolescents become more interested in romantic relationships (Collins, Welsh, & Furman, 2009). Antisocial behavior may be a way for boys to signal their masculinity, which makes them more attractive as romantic partners and thus more popular. Defending may therefore not lead to popularity for adolescent males.

Interestingly, the current study is not in line with the gender-homophily mechanism, which suggests that, e.g., girls would accept prosocial boys better than antisocial boys because they are similar to them (Dijkstra, Cillessen, Lindenberg, & Veenstra, 2010). Rather, our results on peer acceptance by boys seem to be more in line with research about norms (Young & Sweeting, 2004). Femininity is associated with kindness and friendliness whereas masculinity is associated with aggression and dominance. In our study, female defenders seem to act gender-typical and thus gain peer acceptance by boys whereas male defenders

seem to act gender-atypical and lose peer acceptance by boys. The results were less clear on other outcome variables.

The effects of KiVa on the relationship between defending and social status

Another aim of this study was to investigate whether the classroom context affects the relationship between defending and social status. The KiVa anti-bullying program creates an environment where bullying is not tolerated and defending is promoted. Therefore, we expected that defending would lead to stronger increases in social status in KiVa-schools than in control schools (hypothesis 3). In most cases, KiVa indeed seemed to positively affect the relationship between defending and social status. This suggests that KiVa succeeds in the aim to make defending more accepted in classrooms. These findings are in agreement with social misfit theory, which hypothesizes that the classroom norm, especially the norm set by popular group members, influences the association between behavior and social status (e.g. Boivin, Dodge, & Coie, 1995; Dijkstra, Lindenberg, & Veenstra, 2008; Sentse, Scholte, Salmivalli, & Voeten, 2007). However, our findings also indicate that continued attention is warranted to ensure that defending is appreciated by bystanders. For example, KiVa does not seem to affect that defending boys does not lead to acceptance by girls.

Strengths and limitations

This study has many strengths. First, this study is to our knowledge the first study that longitudinally examined the relationship between defending and social status. This allowed us to control for the pre-test level of social status, which is most likely the best predictor of the post-test level of social status. Thereby, though we were not able to rule out that the relationships we found between defending and social status were caused by an intervening variable, we can be more confident in our conclusion that defending indeed affects social status. Second, to our knowledge no other study had looked at the gender effects of the victims, defenders and bystanders on the relationship between defending and social status.

Third, we were able to strictly test whether the KiVa anti-bullying program affected the relationship between defending and social status because our data was gathered from a large sample obtained via a strict experimental design with validated measures. Fourth, to our knowledge no other study had examined the relationship between defending and social status in an adolescent age-group. During adolescence, defending seems to decrease (Kärnä et al., 2011a). Moreover, many physical and social changes occur. Therefore, a unique contribution of this study is the replication of the positive association between defending and social status in an adolescent sample.

However, this paper has also some weaknesses. First, the measures for peer acceptance and perceived popularity were obtained by summing the 'like most' nominations the students received from all peers and by summing the 'most popular' nominations the students received from all peers. However, Sainio and colleagues (2011) have shown that it is important to separate nominations by victims from nominations by the larger peer group. For example, whereas defenders were accepted by their victims, they were not necessarily accepted by the larger peer group as well. Future research should take this into consideration.

Second, the assumptions of the regression analyses have been violated. The data in the current study were not independent. Children were part of classrooms which were part of schools. Therefore, the results should be interpreted with caution. However, due to the large sample size in our study, we are confident our results are still interpretable.

Third, future research could take the social status of the victims and the bullies into account. Defenders associate themselves with victimized peers by defending them. Therefore, adolescents who defend low-status victims may in fact decrease in social status. Moreover, bystanders may have less sympathy for victims who are low on social status than for victims who are high on social status. Thus, defending low-status victims may have detrimental effects to the social status of defenders.

Furthermore, the social status of the bully may also influence the relationship between defending and the peer acceptance of defenders. Peers who exhibit norm-conforming behavior are perceived as more popular than peers who exhibit norm-deviating behavior and the class norm seems to be greatly influenced by high-status peers (Dijkstra et al., 2008). Therefore, standing up to high-status bullies may have perverse effects on social status whereas standing up to low-status bullies may have beneficial effects on social status. The moderating effect of the social status of victims and bullies may have disguised the relationship between defending and social status of defenders in this study. Future research should investigate this further.

Fourth, the mechanisms that we identified in our theoretical elaboration have not been tested directly. A qualitative study on the effects of defending on social status may provide new insights into the relationship between defending and social status. For example, do students actively exhibit defending behavior in order to gain social status or is it a byproduct of defending? Why do onlookers appreciate defending behavior? Is this because they sympathize with the victim, because they feel as if the defender may defend them too, because defenders exhibit 'cool' behavior, or are there other mechanisms in play?

Fifth, we have only investigated whether defending leads to social status. Thereby, we have not paid attention whether social status may also be an antecedent to defending. It seems plausible that defenders need to have high social status in order to stand up to bullies, who are often high on social status themselves (Salmivalli, 2010). Future research might explore this further.

Concluding, there does not seem to be a determinate relationship between defending and social status. Rather, the effects of defending on social status are context-dependent. This suggests that intervention programs need to adopt tailor-made interventions to ensure that all types of defending behavior are positively evaluated. The KiVa anti-bullying program seems to be quite successful in this respect.

References

Björkqvist, K., Lagerspetz, K. M. J., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior, 18*(2), 117-127.

Boivin, M., Dodge, K., & Coie, J. (1995). Individual-group behavioral similarity and peer status in experimental play groups of boys: The social misfit revisited. *Journal of Personality and Social Psychology, 69*(2), 269-279.

Buhrmester, R. D. (1990). Intimacy of friendship, interpersonal competence, and adjustment during preadolescence and adolescence. *Child Development, 61*(4), 1101-1111.

Caputi, M., Lecce, S., Pagnin, A., & Banerjee, R. (2012). Longitudinal effects of theory of mind on later peer relations: The role of prosocial behavior. *Developmental Psychology, 48*(1), 257-270.

Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2009). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18*(1), 140-163.

Card, N. A. (2010). Antipathetic relationships in child and adolescent development: A meta-analytic review and recommendations for an emerging area of study. *Developmental Psychology, 46*(2), 516-529.

Cillessen, A., & Mayeux, L. (2004). From censure to reinforcement: Developmental changes in the association between aggression and social status. *Child Development, 75*(1), 147-163.

Cillessen, A., & Rose, A. (2005). Understanding popularity in the peer system. *Current Directions in Psychological Science, 14*(2), 102-105.

Collins, W. A., Welsh, D. R., & Furman, W. (2009). Adolescent romantic relationships. *Annual Review of Psychology, 60*, 631-652.

Dijkstra, J. K., Cillessen, A. H. N., Lindenberg, S., & Veenstra, R. (2010). Same-gender and cross-gender likeability: associations with popularity and status enhancement: The TRAILS study. *Journal of Early Adolescence, 30*(6), 773-802.

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*(8), 1289-1299.

Dijkstra, J. K., Lindenberg, S., & Veenstra, R. (2007). Same-gender and cross-gender peer acceptance and peer rejection and their relation to bullying and helping among preadolescents: Comparing predictions from gender-homophily and goal-framing approaches. *Developmental Psychology, 43*(6), 1377-1389.

Eagly, A. H., & Crowley, M. (1986). Gender and helping-behavior: A meta-analytic review of the social psychological literature. *Psychological Bulletin, 100*(3), 283-308.

Hawker, D., & Boulton, M. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 41*(4), 441-455.

Kaltiala-Heino, R., Rimpela, M., Rantanen, P., & Rimpela, A. (2000). Bullying at school: An indicator of adolescents at risk for mental disorders. *Journal of Adolescence, 23*(6), 661-674.

Kärnä, A., Voeten, M., Little, T. D., Alanen, E., Poskiparta, E., & Salmivalli, C. (2011a). *Effectiveness of the KiVa antibullying program: Grades 1-3 and 7-9.* Unpublished manuscript.

Kärnä, A., Voeten, M., Little, T. D., Poskiparta, E., Kaljonen, A., & Salmivalli, C. (2011b). A large-scale evaluation of the KiVa antibullying program: Grades 4-6. *Child Development, 82*(1), 311-330.

LaFontana, K. M., & Cillessen, A. H. N. (2010). Developmental changes in the priority of perceived status in childhood and adolescence. *Social Development, 19*(1), 130-147.

Lindenberg, S. (2001). Social rationality versus rational egoism. In J. Turner (Ed.), *Handbook of sociological theory* (pp. 635-668). New York: Kluwer Academic/Plenum.

Maccoby, E. E. (1988). Gender as a social category. *Developmental Psychology, 24*(6), 755-765.

Moffitt, T. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*(4), 674-701.

Monks, C., Ruiz, R. O., & Val, E. T. (2002). Unjustified aggression in preschool. *Aggressive Behavior, 28*(6), 458-476.

Olweus, D. (1996). *The Revised Olweus Bully/Victim Questionnaire*. Bergen, Norway: University of Bergen.

Pöyhönen, V., Juvonen, J., & Salmivalli, C. (2010). What does it take to stand up for the victim of bullying? The interplay between personal and social factors. *Merrill-Palmer Quarterly, 56*(2), 143-163.

Sainio, M., Veenstra, R., Huitsing, G., & Salmivalli, C. (2011). Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development, 32*(2), 144-151.

Salmivalli, C. (2010). Bullying and the peer group: A review. *Aggression and Violent Behavior, 15*(2), 112-120.

Salmivalli, C., Lagerspetz, K., Bjorkqvist, K., Osterman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*(1), 1-15.

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*(6), 1009-1019.

Stets, J., & Burke, P. (2000). Identity theory and social identity theory. *Social Psychology Quarterly, 63*(3), 224-237.

Veenstra, R., Lindenberg, S., Munniksma, A., & Dijkstra, J. K. (2010). The complex relation between bullying, victimization, acceptance, and rejection: Giving special attention to status, affection, and sex differences. *Child Development, 81*(2), 480-486.

Young, R., & Sweeting, H. (2004). Adolescent bullying, relationships, psychological well-being, and gender-atypical behavior: A gender diagnosticity approach. *Sex Roles, 50*(7-8), 525-537.

Table 1: Means and standard deviations of main study variables for boys (*N*=6,035) and girls (*N*=6,023).

Variable	KiVa-schools	Control schools	KiVa-schools		Control schools	
			Boys	Girls	Boys	Girls
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Pre-test defending of boys	0.02_{a} (0.07)	0.02_{a}(0.07)	0.03_{b}(0.08)	0.01_{c}(0.04)	0.03_{b} (0.08)	0.01_{c}(0.05)
Pre-test defending of girls	0.02_{a} (0.06)	0.02_{a}(0.07)	0.01_{b}(0.04)	0.04_{c}(0.08)	0.01_{b} (0.04)	0.04_{c}(0.09)
Pre-test acceptance by boys	0.27_{a} (0.25)	0.24_{b}(0.25)	0.39_{c}(0.25)	0.13_{d}(0.16)	0.36_{e} (0.27)	0.11_{f}(0.16)
Pre-test acceptance by girls	0.24_{a} (0.24)	0.23_{b}(0.24)	0.10_{c}(0.15)	0.39_{d}(0.23)	0.11_{c} (0.16)	0.35_{e}(0.24)
Post-test acceptance by boys	0.22_{a} (0.22)	0.19_{b}(0.22)	0.30_{c}(0.24)	0.13_{d}(0.16)	0.26_{e} (0.25)	0.11_{f}(0.16)
Post-test acceptance by girls	0.22_{a} (0.23)	0.21_{b}(0.23)	0.11_{c}(0.16)	0.34_{d}(0.24)	0.11_{c} (0.17)	0.30_{e}(0.25)
Pre-test popularity by boys	0.12_{a} (0.20)	0.11_{a}(0.20)	0.17_{b}(0.23)	0.06_{c}(0.14)	0.15_{d} (0.23)	0.07_{c}(0.15)
Pre-test popularity by girls	0.12_{a} (0.21)	0.12_{a}(0.22)	0.10_{b}(0.19)	0.15_{c}(0.23)	0.09_{b} (0.19)	0.14_{c}(0.23)
Post-test popularity by boys	0.08_{a} (0.16)	0.08_{a}(0.16)	0.11_{b}(0.18)	0.05_{c}(0.11)	0.10_{b} (0.18)	0.05_{c}(0.13)
Post-test popularity by girls	0.10_{a} (0.20)	0.10_{b}(0.19)	0.09_{bc}(0.18)	0.12_{d}(0.21)	0.08_{c} (0.18)	0.11_{ad}(0.20)

Note. Means that do not share subscripts were significantly different in a t-test at α=0.01. The means and standard deviations presented here are the means and standard deviations of the study variables before standardization.

Table 2: Bivariate correlations between main study variables for boys (*N*=6,035) and girls (*N*=6,023).

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Pre-test defending of boys	-	0.04	0.24_a	0.03	0.15_a	0.01	0.12	0.10_a	0.08	0.08_a
2. Pre-test defending of girls	0.05	-	0.06	0.18	-0.01	0.07	0.02	0.06_a	0.01	0.03
3. Pre-test acceptance by boys	0.17_a	0.02	-	0.18_a	0.38	0.10_a	0.39_a	0.33_a	0.26_a	0.28_a
4. Pre-test acceptance by girls	0.06	0.16	0.26_a	-	0.10	0.37	0.09_a	0.21_a	0.04_a	0.12_a
5. Post-test acceptance by boys	0.10_a	0.00	0.38	0.13	-	0.17_a	0.23_a	0.20_a	0.35	0.29_a
6. Post-test acceptance by girls	0.01	0.05	0.17_a	0.41	0.22_a	-	0.01_a	0.07_a	0.08_a	0.20_a
7. Pre-test popularity by boys	0.08	0.06	0.33_a	0.32_a	0.17_a	0.24_a	-	0.60	0.48	0.45
8. Pre-test popularity by girls	0.02_a	0.13_a	0.17_a	0.36_a	0.08_a	0.25_a	0.59	-	0.42	0.62
9. Post-test popularity by boys	0.05	0.03	0.21_a	0.20_a	0.32	0.28_a	0.47	0.42	-	0.49_a
10. Post-test popularity by girls	0.03_a	0.03	0.15_a	0.29_a	0.15_a	0.43_a	0.47	0.59	0.52_a	-

Note. Correlations of girls are presented above the diagonal, correlations of boys are presented below the diagonal. The correlations with gender are computed on the complete sample. All variables are standardized. All correlations larger than 0.04 are significant at α=0.01. Correlations that differ significantly between boys and girls at α=0.01 are denoted with subscript a.

Table 3: Peer acceptance by boys and girls at the posttest.

	Acceptance by boys at posttest [a]		Acceptance by girls at posttest [a]	
	B	*SE*	*B*	*SE*
Constant	**-0.18****	0.02	**0.21****	0.01
Boy	**0.30****	0.02	**-0.44****	0.02
KiVa-schools	**0.06****	0.02	**0.05****	0.02
Pretest variables:				
Acceptance by boys [a]	**0.39****	0.02		
Acceptance by girls [a]			**0.33****	0.01
Defending a boy [a]	**0.04****	0.01		
Defending a girl [a]	**-0.04****	0.01	-0.02	0.01
Interactions with boy				
Acceptance by boys	**-0.07***	0.03		
Acceptance by girls			**0.06****	0.02
Defending a boy				
Defending a girl				
Interactions with KiVa				
Acceptance by boys	0.05	0.03		
Acceptance by girls			**0.10****	0.02
Defending a boy				
Defending a girl	**0.05****	0.02	**0.03***	0.02
Interactions with boy and KiVa				
Acceptance by boys	**0.10***	0.04		
Acceptance by girls				
Defending a boy				
Defending a girl				
R^2 (*adj.*)	0.27		0.33	
N	12,058		12,058	

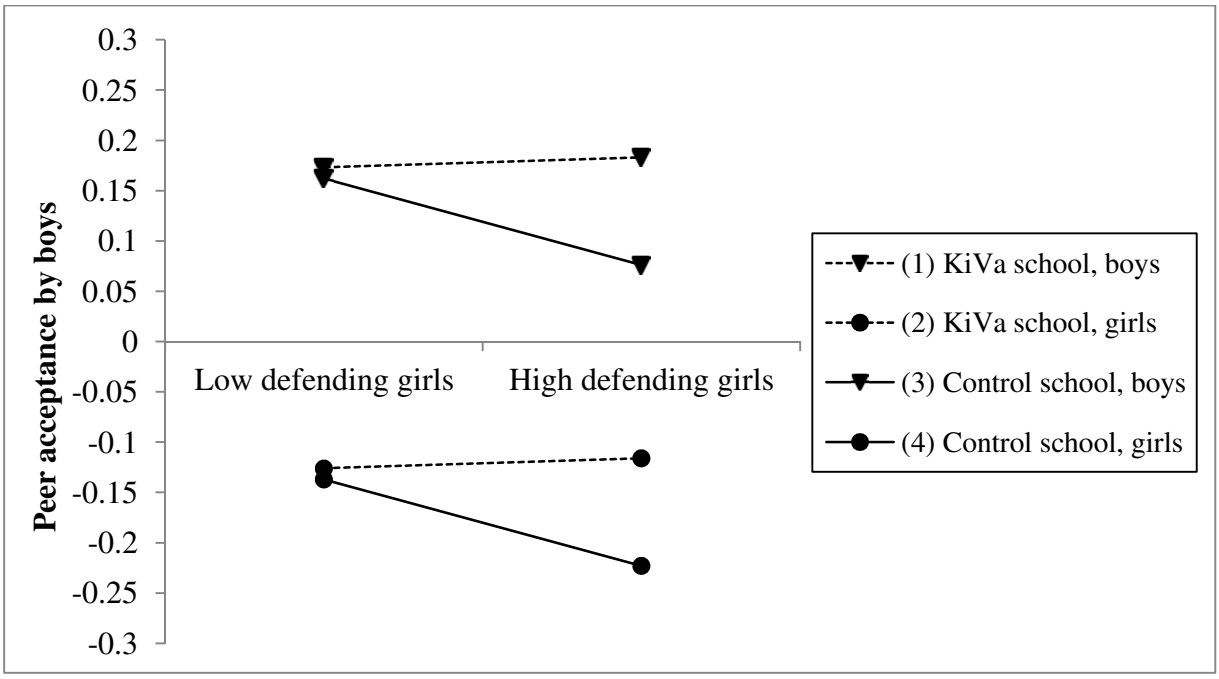
* $p < 0.05$; ** $p < 0.01$, [a] This variable is standardized

Table 4: Perceived popularity according to boys and girls at the posttest

	Popularity by boys at posttest [a]		Popularity by girls at posttest [a]	
	B	*SE*	*B*	*SE*
Constant	**-0.05****	0.01	-0.01	0.01
Boy	**0.09****	0.02	**-0.04****	0.02
KiVa-schools	0.01	0.02	**0.04****	0.02
Pretest variables:				
Popularity by boys [a]	**0.48****	0.01		
Popularity by girls [a]			**0.58****	0.01
Defending a boy [a]	-0.00	0.01	-0.01	0.02
Defending a girl [a]			**-0.02***	0.01
Interactions with boy				
Popularity by boys				
Popularity by girls				
Defending a boy			0.03	0.03
Defending a girl			**-0.07****	0.02
Interactions with KiVa				
Popularity by boys				
Popularity by girls			**0.06****	0.02
Defending a boy	**0.04***	0.02	**0.08***	0.03
Defending a girl			**0.03***	0.02
Interactions with boy and KiVa				
Popularity by boys				
Popularity by girls				
Defending a boy			**-0.09****	0.03
Defending a girl				
R^2 (*adj.*)	0.25		0.37	
N	12,058		12,058	

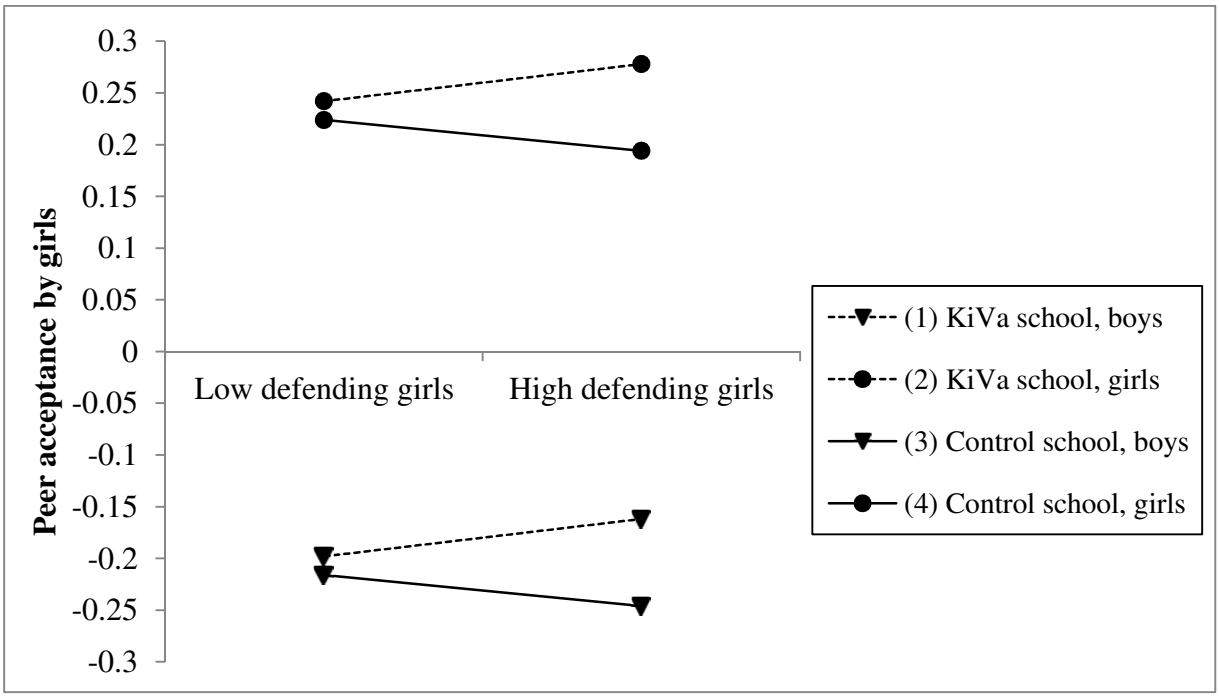
* p <0 .05; ** p < 0.01, [a] This variable is standardized

Figure 1: Graphical presentation of the effects of defending girls and the classroom context on peer acceptance by boys at the post-test



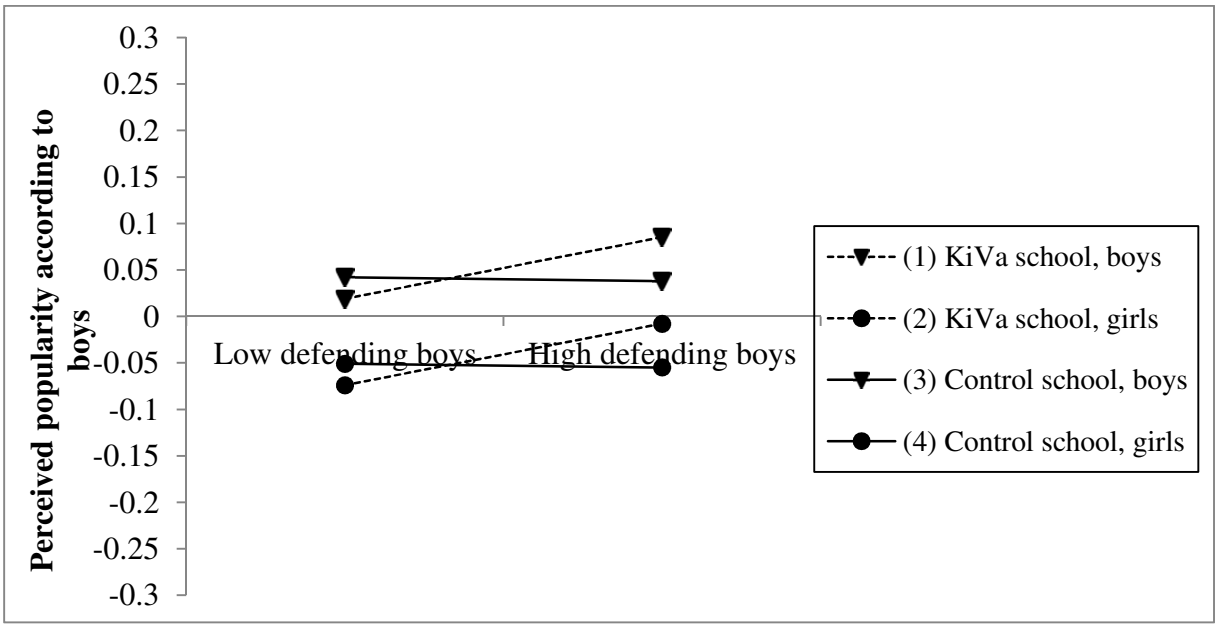
Note. Peer acceptance by boys at the pre-test was held constant at the mean level. The figure shows that in control schools boys and girls who defended girls were less accepted by boys than students who did not defend girls. In KiVa-schools, the negative effect of defending on acceptance by boys was eliminated. Boys and girls who defended girls much equally accepted by boys as students who did not defend girls. Moreover, the figure shows that boys accepted other boys more than girls. Therefore, the lines of boys were shifted upwards compared to the lines of girls. This applied to control schools as well as to KiVa-schools.

Figure 2: Graphical presentation of the effects of defending girls and the classroom context on peer acceptance by girls at the post-test



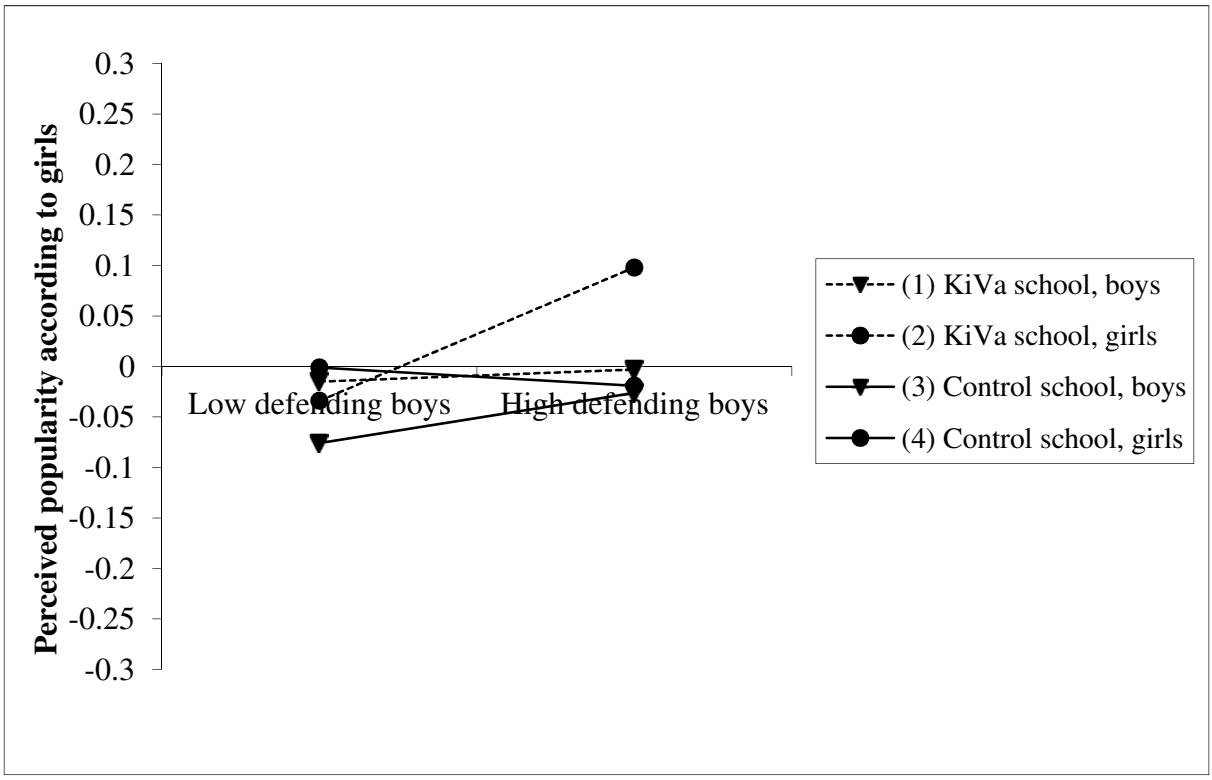
Note. Peer acceptance by girls at the pre-test was held constant at the mean level. The figure shows that neither in the KiVa-schools nor in control schools defending girls had an effect on peer acceptance by girls, although the difference between KiVa-schools and control schools is significant. Though it seemed that in control schools boys and girls who defended were slightly less accepted by girls than students who did not defend, this difference was not significant. Also, though it seemed that in KiVa-schools boys and girls who defended were more accepted by girls than students who did not defend, this difference was not significant. However, the difference between KiVa-schools and control schools was significant. Moreover, the figure shows that girls accepted other girls more than boys. Therefore, the lines of girls were shifted upwards compared to the lines of boys. This applied to control schools as well as to KiVa-schools.

Figure 3: Graphical presentation of the effects of defending boys and the classroom context on perceived popularity according to boys at the post-test



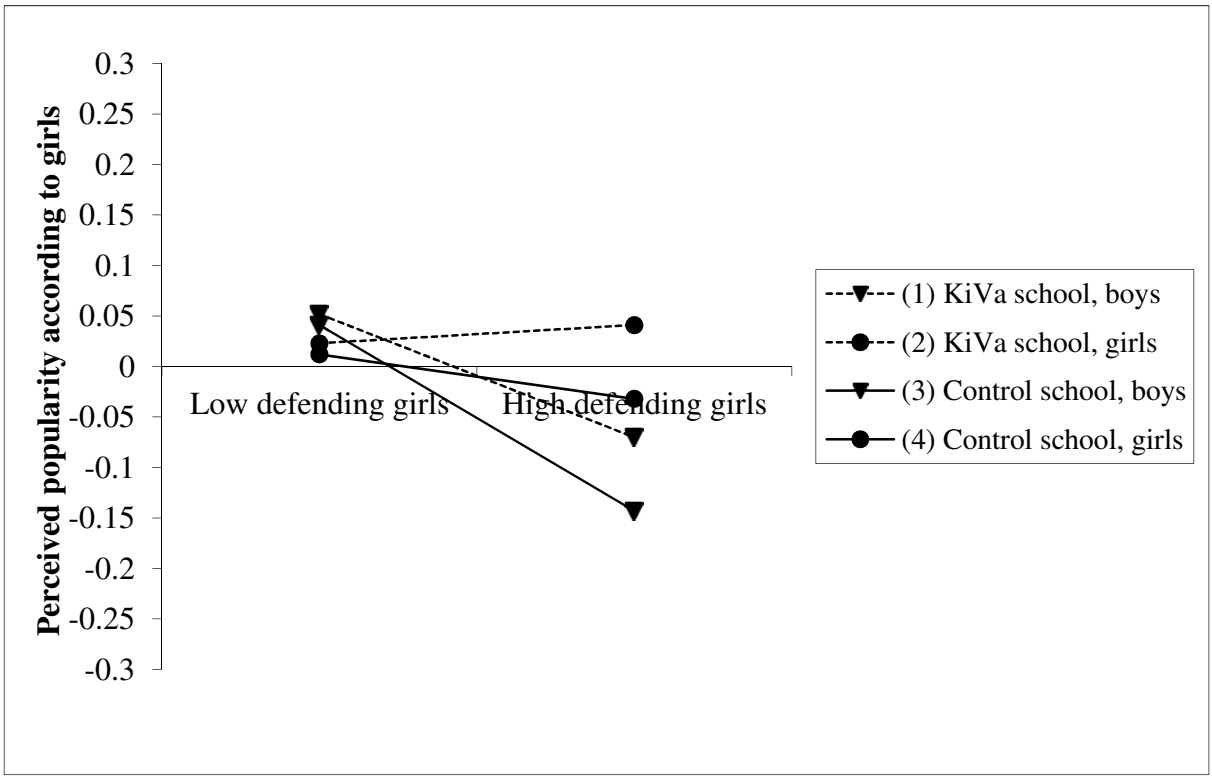
Note. Perceived popularity by boys at the pre-test was held constant at the mean level. This figure shows that in control schools, boys and girls who defended were according to boys equally popular as students who did not defend. However, boys were more popular according to other boys than girls. Therefore, the line of boys was shifted upwards compared to the line of girls. In KiVa-schools however, boys and girls who defended were according to boys more popular than students who did not defend. Still, boys were more popular according to other boys than girls. Therefore, the line of boys was shifted upwards compared to the line of girls.

Figure 4: Graphical presentation of the effects of defending boys and the classroom context on perceived popularity according to girls at the post-test



Note. Perceived popularity by girls at the pre-test was held constant at the mean level. Defending girls was also held constant at the mean level. This figure shows the unique effect of the KiVa anti-bullying program on popularity according to girls of female defenders. In control schools, girls who defended boys were slightly less accepted by girls than girls who did not defend boys, though this difference was not significant. However, in KiVa-schools, girls who defended boys were more accepted than girls who did not defend boys. Both the difference between the KiVa-schools and the control schools and the increase between low and high levels of defending was the strongest in this group. For boys in control schools, defending boys led to higher popularity according to girls than not defending girls. Though this was still the case in KiVa-schools, the difference between these groups became smaller.

Figure 5: Graphical presentation of the effects of defending girls and the classroom context on perceived popularity according to girls at the post-test



Note. Perceived popularity by girls at the pre-test was held constant at the mean level. Defending boys was also held constant at the mean level. This figure shows that defending girls negatively affected popularity according to girls, except the situation when girls defended girls in KiVa-schools. In control schools, boys who defended girls were less popular according to boys than boys who did not defend girls. Though this effect was weaker in KiVa-schools, the effect was still present there. Girls who defended girls in control schools were according to girls less popular than girls who did not defend girlas, though this effect was weaker than for boys in control schools. However, in KiVa-schools, girls who defended girls were according to girls more popular than girls who did not defend girls.