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Does Defending Help? The Role of Peer Defending in Reducing Victimization and Enhancing Victims' Psychological Adjustment

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Although many antibullying programs encourage students to defend victimized peers, there is little empirical evidence that being defended actually helps victims of bullying by diminishing victimization and improving their psychological adjustment (i.e., self-esteem, depressive symptoms, and loneliness) over time. Therefore, the current longitudinal study examines whether defended victims experience a stronger within-person decrease in victimization and psychological problems over time than nondefended victims, while distinguishing between bully- and victim-oriented defending and evaluating the effect of the number of defenders. Among $n = 6,470$ Finnish fourth- to ninth-grade students, surveys were administered in September/October (T1), January (T2), and April. A total of $n = 1,493$ and $n = 1,303$ students indicated that they were victimized by their peers at T1 and T2, respectively; 75.1% of the T1 victims and 70.6% of the T2 victims reported being defended. Descriptive statistics indicated that defended victims were less frequently victimized and experienced fewer psychological problems than nondefended victims at most time points (cross-sectional associations). However, longitudinal findings consistently indicated that defended victims did not experience stronger within-person decreases in victimization and psychological problems than nondefended victims. No significant interaction effects with gender and age were detected. Thus, the benefits of being defended for victims of bullying may be more limited than often assumed, at least in the longer term.

Public Significance Statement

Many antibullying interventions encourage students to defend victims of bullying, but whether being defended reduces victimization and improves victims' psychological adjustment remains understudied. The present study revealed that defended victims are less frequently victimized and have fewer psychological problems than nondefended victims (concurrent effect). However, no significant longitudinal effects of being defended were detected. It is possible that the benefits of defending emerge very quickly or that better adjusted youth are more likely to be defended. Future work should study which factors optimize the potential benefits of being defended.


Keywords: peer victimization, defending, depressive symptoms, loneliness, self-esteem

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Many antibullying interventions aim to decrease bullying and improve victimized students' psychological adjustment by encouraging bystanders to defend victims (Gaffney et al., 2021). *Defending* refers to prosocial actions intended to help victims of bullying, which

can include both victim-oriented behaviors (e.g., comforting victims) and bully-oriented behaviors (e.g., trying to stop the bully; Lambe & Craig, 2020). Defending behaviors signal to victims that others care about their situation, which should logically help them cope with their

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The study analysis code is available on <https://github.com/lydialaninginga-wijnen/datapaperdevpsychdefending.git>, and pseudonymized data will be publicly available upon project completion (end of 2025).

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plight (Cohen & Wills, 1985) and thus diminish their psychological problems—including depressive symptoms, loneliness, and low self-esteem (Salmivalli et al., 2021). Moreover, defending should—ideally—discourage the bullying behavior and therefore reduce victimization over time (Salmivalli et al., 2011). Surprisingly, there is a lack of longitudinal studies examining whether being defended actually helps victims of bullying by reducing victimization and psychological problems (see Laninga-Wijnen et al., 2023, for one exception). Therefore, this study aimed to examine whether defended victims experience a decrease in victimization and psychological problems over time, considering different ways in which victims can be defended (i.e., bully-oriented and victim-oriented ways).

Does Being Defended Diminish Victimization?

When bullying happens, bystanders are often present (Craig et al., 2000). These bystanders can play a pivotal role in the (dis)continuation of the bullying situation. If they assist the bully or walk away, they may encourage the bullies to continue. Bystanders may also choose to *defend* victims. Following social protection theory (Hodges & Perry, 1999), defending behaviors signal that at least some peers do not condone the bullying. Therefore, bullies may be less likely to target those protected by peers, for fear of retaliation. Moreover, bullying is often displayed to gain higher status (de Vries et al., 2021). Targeting victims who have a shielding network of peers around them may prevent bullies from reaching these goals (Caravita & Cillessen, 2012). Thus, being defended could help decrease victimization.

Only a few studies have examined whether defended victims were more likely than nondefended victims to decrease in victimization. In a naturalistic observation study in elementary schools, bullies ceased their behavior almost immediately in about two thirds of the bullying incidents where defending attempts were made (Hawkins et al., 2001). However, this does not necessarily imply that defending is successful at putting an end to bullying (Healy, 2020). When no one defends the victim, the bullying may also cease *naturally* after a few minutes in many cases. Moreover, it is unknown whether the bullying resumed the following day or week (Healy, 2020).

Other studies examined whether classroom mean levels of defending were associated with reduced bullying or victimization across longer time spans. Higher classroom levels of defending related to decreased bullying perpetration in elementary school students (Saarento et al., 2015). Yet, other longitudinal studies on ninth to 10th graders (Nocentini et al., 2013) and elementary school students (Laninga-Wijnen et al., 2021) detected no significant link between classroom defending and victimization over time. Notably, these studies did not directly compare changes in victimization for defended versus nondefended victims.

Evaluations of interventions may also provide insight into the effectiveness of defending. An intervention study of Dutch elementary school students found—paradoxically—that victims *without* a support group (i.e., a group of peers who were asked to defend and support victims) reported a decrease in victimization at the end of the school year, whereas victims *with* a support group did not experience such a decrease. A third of the victims with a support group even increased in victimization (Van der Ploeg et al., 2016). Furthermore, a recent meta-analysis has shown that interventions that include informal peer involvement (such as group discussions) and encouragement of

defending are effective in reducing victimization—however, interventions that do not include encouragement of peer defending are even more effective (Gaffney et al., 2021). It is unknown, however, whether the encouragement of peer defending did actually *increase* defending. Thus, potential beneficial effects of defending may have been undetected in these studies.

To our knowledge, the only longitudinal study that directly investigated whether being defended was associated with decreased victimization found that defended victims did not differ from nondefended victims in relative changes in victimization across the school year in a sample of Dutch elementary school students (Laninga-Wijnen et al., 2023). This previous study used one item about general defending to identify nondefended victims (no defenders) and defended victims (victims with one or more defenders) and did not distinguish within-person from between-person effects—that is, they examined whether defended victims showed a stronger relative decrease in victimization than nondefended victims.

Thus, research on the longer term effects of being defended on victimization is scarce yet urgently needed given the widespread emphasis on encouraging peer defending in antibullying programs. Therefore, the present article offers a methodologically rigorous investigation of the effect of defending on victimization. Our study will extend upon the only existing longitudinal study on this question (Laninga-Wijnen et al., 2023) in various ways. First, we will examine whether being defended predicts *within-person changes* in victimization levels, that is, whether students score lower in victimization compared to their *prior* victimization levels (rather than whether they decrease more strongly relative to *other students*; Laninga-Wijnen et al., 2023). Second, we will examine the effects not only of being defended in general but also of being defended in victim- and bully-oriented ways, which could deliver important insights: Given that bully-oriented defending is directed at bullies (e.g., telling the bullies to stop their behavior), it could decrease victimization more than victim-oriented defending (which may not even be visible to bullies). Last, we will not only focus on the distinction between having no defender versus having at least one but also evaluate the role of the *number* of defenders. When predicting victimization, the number of defenders may especially matter for bully-oriented defending: Bullies are often popular and typically operate in groups (Salmivalli et al., 2011), which is why the intervention of multiple peers may be necessary to make bullies stop. This reasoning aligns with social impact theory (Latane & Wolf, 1981), which argues that the impact of a behavior on others' attitudes and behaviors depends on several conditions, including *the number of people* endorsing the behavior. Applied to the bullying context, it predicts that the higher the number of defenders, the more impactful their defending will be. Consequently, for bully-oriented defending, we will first examine whether being defended (vs. nondefended) predicts within-person decreases in victimization and, second, whether having more bully-oriented defenders diminishes victimization.

Even though most previous work did not detect a significant effect of being defended on victimization, we hypothesized a beneficial effect of being defended on victimization. We expected this on theoretical grounds, but also because our study focuses on within-person effects, investigates different types of defending separately, and evaluates the role of the number of defenders, potentially enabling us to better capture effects.

Does Being Defended Improve Victims' Psychological Adjustment?

In line with the stress-buffering hypothesis (Cohen & Wills, 1985), being defended can be expected to protect victims against developing psychological problems. First, being defended may help victims in restoring self-esteem: Defending behaviors signal to victims that other peers consider them “worthy enough” to take the risk of standing up to their perpetrator or to take time to comfort them. Second, by showing victims that others care about them, defending likely promotes adaptive appraisals and coping (Cohen & Wills, 1985) and therefore might decrease victims' depressive symptoms (Schacter & Juvonen, 2015). Last, defending may diminish victims' loneliness by showing them that other peers stand by their side.

Only a few studies have examined the role of being defended in victims' psychological adjustment, and most are cross-sectional. Two studies with children and early adolescents indicated that being defended was concurrently associated with lower depression (Ma & Chen, 2019; Sainio et al., 2011) and higher self-esteem (Sainio et al., 2011) among victims. However, another cross-sectional study found no effect of being defended on adolescent victims' internalizing distress (Jones et al., 2015). Importantly, the positive association between being defended and victims' psychological functioning found in the first two studies could also indicate that better adjusted victims are more likely to be defended (Laninga-Wijnen et al., in press). Longitudinal studies enable testing the temporal precedence of these effects. The only longitudinal study on this topic demonstrated that defended victims had a stronger increase in feelings of belonging in their classroom relative to nondefended victims; however, being defended was unrelated to relative changes in victims' self-esteem and depressive symptoms (in elementary school; Laninga-Wijnen et al., 2023). This study focused on the effect of being defended in general (vs. not being defended) and analyzed between-person changes in psychological problems.

Our study will expand upon prior research by examining the longitudinal effects of specific types of being defended (victim- and bully-oriented ways) on *within-person* changes in psychological adjustment. Furthermore, we will consider both the role of (a) being defended versus nondefended and (b) the number of defenders in predicting within-person changes in psychological problems. Based on social impact theory (Latane & Wolf, 1981), it can be argued that the higher the number of students showing disapproval of the bullying, or the higher the number of students who try to comfort the victim, the more likely it is that the victim feels taken seriously and cared for, which should decrease their psychological problems. Consequently, we hypothesize that being defended, both in bully- and victim-oriented ways, protects victims against the development of psychological problems (depressive symptoms, loneliness, and low self-esteem). For both types of defending, the *number* of defenders may be especially important.

The Effect of Being Defended on Psychological Adjustment Through Diminished Victimization

An additional way in which we extend upon prior work is by examining whether the effects of being defended on psychological adjustment can be explained by decreased victimization. Specifically, if being defended buffers against increases in psychological problems, it is likely that it partially occurs through a decrease in victimization

experienced by defended victims. The reduced frequency of being bullied (or its cessation) may lower victims' stress, which may help them recover from any psychological distress they experienced (Cohen & Wills, 1985). We examined this for both victim- and bully-oriented defending yet expected to detect a mediating effect only for bully-oriented defending, as it is more likely to result in decreased victimization.

The Present Study

In a sample of victims, we examined whether being defended predicted decreases in victimization and psychological problems. We were interested in the effects of being defended throughout one academic year. Students filled in a questionnaire at the start of the school year (September/October [T1]), in January (T2), and in April (T3). We examined whether being defended at T1 predicted within-person changes in victimization and psychological problems from T1 to T2 in a sample of *students victimized at T1* and whether being defended at T2 predicted within-person changes in victimization and psychological problems from T2 to T3 among *students victimized at T2*. We split the school year into two time periods, for two reasons. First, victims can be defended at one but not another time point (Laninga-Wijnen et al., 2023). Second, prior work with comparable assessment points within one school year showed that students' victimization and psychological adjustment followed a quadratic trend: Students reported more psychological problems and victimization in the winter as compared to the earlier and later time points (Kaufman et al., 2022; Laninga-Wijnen et al., 2023).¹ Splitting the school year enables accounting for such effects.

Main Hypotheses

For both T1 and T2 victims, we hypothesized that being defended would relate to more beneficial within-person changes (i.e., a stronger within-person decrease or a less strong increase) in *victimization*. We hypothesized the effect to be stronger for bully-oriented defending than for victim-oriented defending. We also expected that the *number* of bully-oriented defenders would be more strongly related to changes in victimization than having at least one bully-oriented defender versus none. Next, for both T1 and T2 victims, we hypothesized that being defended would relate to more favorable within-person changes (i.e., a stronger decrease or a less strong increase) in loneliness, self-esteem, and depressive symptoms between the two time points. We explored the relative contribution of victim-oriented and bully-oriented defending in this change, and we expected that for both types of defending, especially the *number* of defenders would matter.

Finally, we hypothesized that the role of being defended in bully-oriented ways on the development of psychological problems could be—at least partially—explained by decreased victimization. This mediation effect was tested for victims at T1: We examined whether being defended at T1 predicted changes in victimization from T1 to T2 and whether this, in turn, predicted changes in psychological

¹ To our knowledge, no study has examined possible reasons for this quadratic trend in psychological functioning and victimization across a school year. For instance, it could be that students experience more psychological problems and engage in more negative peer interactions during winter (the so-called “winter-dip”). Yet, the quadratic trend could also suggest different phases in peer relationship formation across the school year.

problems from T2 to T3. This enabled us to analyze the temporal precedence of effects.

Covariates

Research shows that girls are more likely to develop psychological problems (Breslau et al., 2017) and that there is an adverse effect of friendship support on psychological problems for victimized girls but not for victimized boys (Schacter & Juvonen, 2020). One explanation for this is that girls are more likely to ruminate after experiencing a stressful event (Rose & Rudolph, 2006). A similar phenomenon might occur when being defended: Girls are more likely than boys to use victim-oriented defending strategies (e.g., Lambe & Craig, 2020), which could involve corumination (Rose & Rudolph, 2006). Therefore, we controlled for (interactions with) victims' gender when examining the role of being defended in within-person changes in victimization and psychological adjustment.

Furthermore, the prevalence of internalizing symptoms increases with age (Cole et al., 2002). From a developmental perspective, peers become increasingly important in adolescence as compared to childhood, and due to the sharp decline in adult and teacher supervision (Laursen & Veenstra, 2021)—including in bullying situations—the defending behaviors of peers may be a crucial predictor of decreased victimization at a later age (Salmivalli et al., 2021). Moreover, peers play an increasingly important role in fulfilling adolescents' need to belong, particularly for those experiencing victimization (Fite et al., 2024). As a result, peer defending may have a stronger influence on adolescents' psychological adjustment compared to that of younger children. Therefore, we controlled for age and analyzed interaction effects between being defended and age in predicting the within-person development of victimization and psychological adjustment. Finally, we included *being liked* as a covariate, as students who are being defended are generally more well-liked (Rambaran et al., 2022), and well-liked students tend to have better psychological adjustment (see Veenstra & Laninga-Wijnen, 2022).

Method

Participants

Data were obtained from a Finnish sample of fourth- to ninth-grade students who took part in the large-scale Success factors that Optimize the Long-term Impact of Defending project, which aims to identify the success factors that optimize the long-term impact of defending. Data were collected across two academic years (2022–2023 and 2023–2024) at T1, T2, and T3. A total of $n = 6,470$ students from 51 schools participated in at least one wave of the project, from which we selected two subsamples: students victimized at T1 and students victimized at T2. Students were selected as “victims” if they indicated that they had been victimized at least once or twice in the last couple of months on at least one of the five victimization items (see our Measures for a full description of these items). Second, as a validity check, we excluded students as victims if they—on follow-up items about being defended—consistently indicated that nobody was mean to them or bullied them (cf. Laninga-Wijnen et al., in press).

Based on these criteria, at T1, $n = 1,493$ victims were selected, stemming from 517 classrooms ($M = 2.88$ victims per classroom) across the 51 schools ($M = 29.27$ victims per school). Moreover, 846 victims identified as girls (56.7%), and the average age at the

start of the study was $M_{\text{age}} = 12.77$ ($SD = 1.72$). At T2, there were $n = 1,303$ victims from 475 classrooms ($M = 2.74$ victims per classroom) across the 46 schools ($M = 28.33$ victims per school). They were $M = 12.81$ years of age ($SD = 1.65$), and $n = 766$ identified as girls (58.8%). Our two subsamples of victims partially overlapped: 47.6% of our selected victims at T1 were also selected as victims at T2.

Procedure

Online questionnaires were completed during regular teaching hours, supervised by teachers who had been thoroughly instructed prior to data collection. Students were told that their answers would be handled confidentially and that their participation was voluntary. The order of administered scales was nonrandomized to assure that the defending items were administered *after* the victimization items. The ethical board of the University of Turku (Turku, Finland) has approved this study.

Measures

Self-Reported Victimization at T1, T2, and T3

A definition of bullying was presented:

It is bullying when someone is intentionally and repeatedly hurt. It is difficult for the bullied person to defend himself/herself. Bullying can be: saying mean things; calling nasty names; leaving someone outside the group; hitting, pushing, telling mean things or telling lies; other acts that offend another. It is also bullying when a pupil is repeatedly teased in a mean and offensive way. Friendly and playful teasing is not bullying, nor when two roughly equally strong pupils argue or fight.

Then, the frequency of victimization at each of the three waves (T1, T2, and T3, respectively) was assessed with the sentence “Have you been bullied at school like this during the last couple of months?” followed by five self-reported items tapping physical, verbal, relational, and material forms of school victimization. These items have been validated and found to be reliable in previous studies on children and adolescents (Laniga-Wijnen et al., 2024). Sample items are “I was called nasty names or laughed in my face” and “I was hit, kicked, or pushed.” Youth answered the items on a 5-point Likert scale, with 0 = *not at all*, 1 = *once or twice*, 2 = *two or three times a month*, 3 = *about once a week*, and 4 = *several times a week*. The items at T1 and T2 were used to select our samples of victims (as described above) at T1 and T2, respectively. Moreover, items at T1, T2, and T3 were used to examine changes in victimization frequency over time in these samples of victims. Reliability was adequate, with $\omega_{T1} = .66$, $\omega_{T2} = .73$, and $\omega_{T3} = .79$ for victims at T1 and $\omega_{T2} = .69$ and $\omega_{T3} = .78$ for victims at T2. We calculated averages of the five victimization items across waves for descriptive purposes.

Being Defended at T1 and T2

We designed a new measure to assess the extent to which victims felt they were being defended in various (e.g., victim-oriented and bully-oriented) ways by their classmates. For more details on questionnaire development, we refer the reader to Laninga-Wijnen et al. (in press). The questionnaire started with the sentence “When someone was mean to me or bullied me,” which was followed by eight items. Three items assessed victim-oriented defending, such as

“one or more of my classmates tried to comfort me.” Five items asked about bully-oriented defending (e.g., “one or more of my classmates asked others for help so that they could jointly stop the bully” or “one or more of my classmates pushed the bully away”). We coded items in such a way that victimized participants could either score a 0 (*no*) or 1 (*yes*) on these items. A confirmatory factor analysis for categorical items indicated that a two-factor solution was preferred, with comparative fit index (CFI) = .997, Tucker–Lewis index (TLI) = .996, root-mean-square error of approximation (RMSEA) = .032, and standardized root-mean-squared residual (SRMR) = .050 for victims at T1 and CFI = .996, TLI = .994, RMSEA = .035, and SRMR = .050 for victims at T2. The three victim-oriented items loaded on one factor and the five bully-oriented items on another. The ordinal α coefficients were $\alpha = .91$ at T1 and T2 for being defended in victim-oriented ways and $\alpha = .84$ and $\alpha = .87$ at T1 and T2, respectively, for being defended in bully-oriented ways.

We created three binary measures of being defended. First, based on all items, we created a general “being defended” variable, on which participants could score a 0 (*having no defender across all defending items*) or a 1 (*having at least one defender on at least one defending item*). Similarly, we created binary variables for being defended in victim- and bully-oriented ways, respectively.

To test hypotheses about the number of defenders, we used defending-specific follow-up items; that is, if students indicated that they had been defended in a specific way, they were presented with a list of their classmates and requested to indicate those who defended them in that way.² Based on these items, edgelist were generated for each cohort, containing one column with the identification number of nominators and one column with the identification numbers of nominees. We used these edgelist to identify the number of *unique defenders* for each victim across the various items. We did this again for (a) all items, (b) victim-oriented items, and (c) bully-oriented items. If students indicated on all items that they had not been defended, follow-up questions were not presented to them. In this case, the number of defenders was set to 0.

Self-Esteem at T1, T2, and T3

Self-esteem was assessed with 10 items (Rosenberg, 1965), scored on a 4-point Likert scale, varying from 0 = *strongly disagree* to 3 = *strongly agree*. Example items were “I feel that I have a number of good qualities” and “I have positive thoughts about myself.” Five items were measured in such a way that high scores reflected low self-esteem (i.e., “I consider myself as a failure”). Confirmatory bifactor analyses (cf. McKay et al., 2014) indicated proper fit across waves for both victims at T1 and victims at T2 (with all CFI > .979, TLI > .970, RMSEA < .063, and SRMR < .031). Reliability was high across waves for T1 and T2 victims (ω s > .86). For descriptive purposes, a scale was generated by averaging the answers on the five high self-esteem items and five reverse-coded low self-esteem items.

Depressive Symptoms at T1, T2, and T3

Depressive symptoms have been assessed with a shortened version of the Major Depressive Disorder Scale, part of the Revised Child Anxiety and Depression Scale (Chorpita et al., 2000). Students were asked, “How often did you experience the following

feelings in the past month?” followed by seven more specific items, including “I felt sad and empty.” Six items were adapted from the Major Depressive Disorder Scale based on factor loadings of $\geq .39$ in prior work (Chorpita et al., 2000). We included one additional item: “I felt unhappy” (Lundervold et al., 2013). Answers could be provided on a 4-point scale, with higher values indicating greater depressive symptoms (0 = *never*, 1 = *sometimes*, 2 = *often*, 3 = *always*). A confirmatory factor analysis in which all items loaded on one factor yielded suboptimal fit in some waves, and adding residual covariances did not solve the issue. Prevalences per item indicated that many students reported—to some degree—issues with sleeping (e.g., across waves, over 70% of the students scored a 1 or 2 on that item)—suggesting that this item was not discriminatory enough to assess depressive symptoms. Therefore, it was excluded from factor analyses. Then, the factor analyses yielded proper fit across waves for T1 and T2 victims (with all CFI > .971, TLI > .946, RMSEA < .092, and SRMR < .027). The reliability of the scale was high (ω > .87 across waves and T1 and T2 victims). For descriptive purposes, a scale was generated by averaging item responses.

Loneliness at T1, T2, and T3

We measured loneliness using items from the subscale of peer-related loneliness of the Loneliness and Aloneness Scale for Children and Adolescents (Marcoen et al., 1987). To prevent an overly lengthy questionnaire, we selected eight of the original 12 items based on the highest factor loadings (Marcoen et al., 1987). Example items were “I feel excluded by my classmates,” “I feel alone at school,” and “I feel sad because I have no friends.” Students rated the items from 0 = *never* to 3 = *always*. The reliability was high (ω > .90), and confirmatory factor analysis indicated that items loaded on one factor with acceptable fit across waves for T1 and T2 victims (with all CFI > .971, TLI > .956, RMSEA < .073, and SRMR < .028). For descriptive purposes, a scale has been generated by averaging the answers to items.

Covariates

Likeability was assessed at T1 for T1 victims and at T2 for T2 victims. It was operationalized as the proportion of incoming nominations on the peer-report question “Who do you like most in your classroom?” by dividing the number of received nominations by the number of potential nominators. This item has been often used in age groups comparable to our study and shows discriminant validity (Gorman et al., 2011). Next, based on all three waves, we created a gender variable. For those who were inconsistent in their answers, their most frequently mentioned answer was considered as the gender they most identified with. Girls were set as the reference category, and victims that did not identify as boy or girl (or were inconsistent in their answers) were set as missing due to their low number ($n = 44$ for victims at T1, $n = 31$ for victims at T2).

² We instructed students to report whether they were being defended by classmates, because previous work indicated that almost 95% of the defending takes place within one’s own classroom (Sainio et al., 2011).

Analytic Strategy

Missing Data

We compared complete and incomplete cases on demographic information and main variables used in the present study, both in the data set containing victims at T1 (48.9% fully complete cases) and in the data set containing victims at T2 (55.6% fully complete cases). Both at T1 and T2, victims with partially missing data had fewer victim-oriented defenders and were older than victims who had no missing data. Victims at T2 with partially missing data reported higher victimization frequency than complete cases. There were no significant differences between partially incomplete and complete cases in victimization frequency, number of bully-oriented defenders, being liked, depressive symptoms, self-esteem, and loneliness. In the main analyses, we applied full information maximum likelihood to address missing data.

Measurement Invariance

Longitudinal measurement invariance tests correcting for the clustering of individuals in classrooms were conducted to investigate configural (i.e., equality of factor structure), metric (i.e., equality of factor loadings), and scalar measurement invariance (i.e., equality of intercepts) of victimization and the indicators of psychological adjustment across the three waves. Measurement invariance across age was tested as well. Scalar measurement invariance was tenable across outcomes and T1 and T2 victims, with adequate model fit for victimization (CFI > .937, TLI > .894, RMSEA < .070, SRMR < .045) and psychological adjustment (CFI > .948, TLI > .936, RMSEA < .056, SRMR < .072). Full results are available upon request.

The Role of Being Defended in Victimization

We estimated a series of multiple-indicator Latent Change Score Models (LCSM; Hertzog & Nesselroade, 2003) in lavaan in R (v4.3.1). This type of modeling comprises intra- and interindividual differences with respect to the initial level and change of outcome variables. To test our hypothesis that being defended would predict favorable changes (stronger decrease, less strong increase) in victimization for victims at T1 and T2, we ran three LCSM in our sample of victims at T1 (predicting change in victimization from T1 to T2) and three LCSM in our sample of victims at T2 (predicting change in victimization from T2 to T3). We ran these LCSM twice: first using general defending (based on all items) as a predictor and then using specific (victim- and bully-oriented) types of defending as predictors.

In the first LCSM (Model 1), we included “being defended” as a predictor of latent change in victimization. In the second LCSM (Model 2), we added covariates (e.g., age, gender, being liked) as predictors. This second model enabled us to test the hypothesis that being defended would lead to more favorable changes in victimization compared to not being defended for victims at T1 and T2. In the second LCSM containing the specific victim- and bully-oriented types of being defended, we also tested the hypothesis that bully-oriented defending would be more effective than victim-oriented defending by testing differences in regression slopes for statistical significance (if both would be significantly predictive). In the third LCSM (Model 3), we tested for interactions between gender and

being defended and interactions between age and being defended in predicting the latent change in victimization.

Next, we tested the hypothesis that for bully-oriented defending, the *number of defenders* would be more strongly predictive of decreases in victimization than having a bully-oriented defender versus not. For this, we conducted an additional series of LCSM, which included the number of defenders as a predictor rather than the categorical distinction of being defended versus not. If these new LCSM explained more variance in changes in victimization than the LCSM including the categorical bully-oriented defending predictors, we assumed that the number of defenders mattered more for reducing victimization.

The Role of Being Defended in Psychological Problems

To test the hypothesis that defended victims would experience a more beneficial development in loneliness, self-esteem, and depressive symptoms than nondefended victims, we estimated—for each psychological adjustment indicator—a series of LCSM comparable to those described above for victimization. In case both victim- and bully-oriented defending significantly predicted psychological adjustment, we tested whether the regression slopes were significantly different. Next, we ran an additional series of LCSM, which included the *number of defenders* as a predictor of change in psychological problems, and evaluated whether it explained more variance than having at least one defender versus not.

Mediating Role of Victimization in Predicting Psychological Problems of Defended Victims

To test the third hypothesis that the role of being defended in victims’ psychological problems would be explained by changes in victimization, we estimated, for T1 victims, a Latent Change Score Mediation Model, where being defended at T1 was a predictor of change in victimization from T1 to T2, which in turn predicted change in psychological problems from T2 to T3. The significance of indirect effects was evaluated with bias-corrected bootstrapping.

Model Estimation, Fit Statistics, and Alpha Correction

In all analyses, we controlled for the clustering of students within classrooms using cluster-robust standard errors, and we applied effect coding for the measurement models to ensure that the averages of latent factors equal the observed averages. The robust maximum likelihood estimation method was applied to adjust test statistics and standard errors if the multivariate normality assumption was violated. Model fit was assessed using the CFI, the TLI, the RMSEA, and the SRMR.

As preregistered, the statistical significance was determined based on one-tailed *p* values for directional hypotheses about the effects of being defended on victimization (reported in Model 2). For all other effects (e.g., covariates or interaction effects), two-tailed *p* values were used to determine significance. To reduce risk for false discovery rates, we applied the false discovery rate-controlling procedure to determine statistical significance (Benjamini & Hochberg, 1995). We applied this correction for all specific outcomes (victimization, loneliness, depressive symptoms, and self-esteem) separately and for T1 victims and T2 victims separately. As a result, to test the hypothesis that *for T1 and T2 victims, being defended would relate*

to more favorable within-person changes (i.e., a stronger decrease or less strong increase) in loneliness between two time points, we conducted six tests (for being defended in general, victim-oriented, and bully-oriented ways and for the categorical indicator of being defended and the number of defenders) for T1 victims and six tests for T2 victims.³

Transparency and Openness

This study is a registered report, implying that the theoretical background and intended method and design have been pre-registered and peer-reviewed. All deviations from Part I of the registered report are disclosed in Supplemental Material 1. Analyses scripts have been openly published on <https://github.com/LydiaLaniNgawijnen/datapaperdevpsychdefending.git> (and pseudonymized data will be shared after project completion).

Results

Descriptive Results

Prevalences of the categorical indicators of being defended indicated that most victims were being defended and that being defended in a victim-oriented way was most prevalent. Specifically, 1,121 out of the 1,493 (75.1%) T1 victims indicated on at least one defending item that they had been defended: 945 had been defended in at least one victim-oriented way, and 853 had been defended in at least one bully-oriented way (45.3% were defended in both bully- and victim-oriented ways). At T2, 920 out of the 1,303 victims (70.6%) indicated on at least one defending item that they had been defended: 745 had been defended in at least one victim-oriented way, and 693 had been defended in at least one bully-oriented way (39.8% had been defended in both ways).

Nonimputed averages, standard deviations, and ranges of continuous study variables are provided in Table 1 for both defended and nondefended victims at T1 and T2. Both defended and nondefended victims decreased in victimization over time, with defended victims being lower than nondefended victims in victimization at all time points. Defended victims were relatively stable in psychological problems, whereas nondefended victims slightly decreased in psychological problems. Nondefended victims, however, scored higher than defended victims on psychological problems at all time points, although not all differences reached significance.

Table 2 displays Pearson (continuous variables) and Kendall (continuous and nominal variables) correlations and Cramer's V (nominal variables)—for T1 victims below the diagonal and T2 victims above the diagonal. Correlations between being defended and victimization frequency, depressive symptoms, and self-esteem were very weak and mostly nonsignificant. Correlations between being defended and loneliness were weakly negative. Identifying as a boy and being older were negatively related to being defended. Cramer's V for the link between being defended in victim-oriented ways and bully-oriented ways was $V = .47$ for victims at T1 and $V = .48$ for victims at T2. The Pearson correlation coefficients for number of bully-oriented and number of victim-oriented defenders were $r = .63$ and $r = .67$ for victims at T1 and T2, respectively. These indices suggest that the correlations between the two types of defending were not overly strong; thus, the two types of defending could be included in the same LCSM without causing multicollinearity issues.

Does Being Defended Diminish Victimization?

We ran a series of LCSM to examine whether defended victims would experience more favorable changes in victimization (i.e., a stronger decrease or less strong increase) than nondefended victims. Specifically, we examined the role of both our categorical indicator of being defended and the number of defenders for both general and specific types of defending at both T1–T2 and T2–T3. In Table 3, we provide a summary of all prospective effects obtained in Model 2 (i.e., main effects of being defended and covariates) and Model 3 (i.e., interaction terms) for victims at T1. Because the effects were highly similar for T1 and T2 victims, we included the effects of being defended on victimization for victims at T2 in the Appendix. In Supplemental Tables S1, S5, S9, and S13, we provide a full overview of both prospective and concurrent effects for both T1 and T2 victims, including model fits. To keep the results section concise, effects of covariates are also interpreted in Supplemental Material 2.

As part of the LCSM, for descriptive purposes, we first estimated the *unconditional* changes in victimization. Victimized students at T1 significantly decreased in victimization between T1 and T2 from $M = 0.75$ to $M = 0.56$, with $m \Delta \text{Vict} = -0.19$, $SE = 0.02$, $p < .001$. Across models, the effects of initial victimization on changes in victimization (i.e., $\text{Victimization T1} \rightarrow \Delta \text{Victimization}$) were significantly negative, indicating that—given all variables in the model—with every unit of increase in initial victimization, students were more likely to decrease⁴ in victimization over time. Results indicated that being defended was *unrelated* to within-person changes in victimization. These results were consistent across (a) general and specific types of being defended, (b) the categorical indicator of being defended and the number of defenders, and (c) T1 and T2 victims (for T2 victims, see Table A1). For T1 victims, two out of the six tested interaction effects with age were significant (fourth column, lower part of Table 3). With increasing age, having more bully-oriented defenders related to a *less strong decrease* in victimization ($\beta = 0.15$), whereas having more victim-oriented defenders related to a *stronger decrease* in victimization ($\beta = -0.22$). Standardized effects of interactions can be interpreted as *small*, following the criteria of Gignac and Szodorai (2016). Moreover, these interactions explained only 1.9% of the variance in victimization. The two interaction effects were not replicated for T2 victims (Table A1), and all other interactions with age were nonsignificant, suggesting that the moderating effect of age was not a robust finding. There were no significant interactions with gender either.

Altogether, these analyses do not support our hypothesis that being defended would relate to stronger within-person decreases in victimization. Moreover, these findings are not in line with our

³ Per series of six tests, p values were ordered from smallest to largest, ranking them from $i = 1$ to $i = 6$. A threshold of significance (critical value) was established according to the following formula: critical value (p_i) = $ilm \times Q$, with m = number of tests and Q = percentage of false discoveries, which was 10% for directional hypotheses and 5% for nondirectional hypotheses. For the hypothesis described above, this procedure resulted in the following critical values for one-tailed p values for victims at T1 and T2, respectively: $p(1) \leq .017$, $p(2) \leq .033$, $p(3) \leq .050$, $p(4) \leq .067$, $p(5) \leq .083$, $p(6) \leq .100$. For interaction effects, critical values of two-tailed p values were $p(1) \leq .008$, $p(2) \leq .017$, $p(3) \leq .025$, $p(4) \leq .033$, $p(5) \leq .042$, and $p(6) \leq .050$.

⁴ To be precise, the effect could also mean that with every unit of increase in initial victimization, students were less likely to *increase* in victimization. Yet, given that unconditional change points to a strong declining trend, we use the term “decrease” because this likely applies to most students.

Table 1
Means (Standard Deviations) and Range of Continuous Variables of This Study

Variable	Victims at T1 (<i>n</i> ≈ 1,493)			Range	Victims at T2 (<i>n</i> ≈ 1,303)			Range
	Defended	Nondefended	Total		Defended	Nondefended	Total	
	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)		<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	<i>M</i> (<i>SD</i>)	
Number of defenders	3.21 (2.59)	0.00 (0.00)	2.36 (2.62)	0.00–33.00	3.11 (2.50)	0.00 (0.00)	2.15 (2.53)	0.00–20.00
Number of bully-oriented defenders	2.22 (2.49)	0.00 (0.00)	1.63 (2.35)	0.00–33.00	2.30 (2.58)	0.00 (0.00)	1.59 (2.40)	0.00–20.00
Number of victim-oriented defenders	2.51 (2.24)	0.00 (0.00)	1.88 (2.22)	0.00–23.00	2.37 (2.22)	0.00 (0.00)	1.64 (2.14)	0.00–19.00
Victimization frequency T1	0.72 (0.64) _a	0.84 (0.81) _b	0.75 (0.69)	0.20–4.00	0.57 (0.68) _a	0.55 (0.65) _a	0.57 (0.67)	0.00–4.00
Victimization frequency T2	0.54 (0.62) _a	0.61 (0.83) _b	0.55 (0.68)	0.00–4.00	0.72 (0.67) _a	0.88 (0.89) _b	0.77 (0.75)	0.20–4.00
Victimization frequency T3	0.48 (0.67) _a	0.60 (0.91) _a	0.51 (0.74)	0.00–4.00	0.55 (0.72) _a	0.70 (0.86) _b	0.59 (0.77)	0.00–4.00
Depressive symptoms T1	1.03 (0.61) _a	1.16 (0.77) _b	1.06 (0.66)	0.00–3.00				
Depressive symptoms T2	1.04 (0.66) _a	1.04 (0.76) _a	1.04 (0.69)	0.00–3.00	1.07 (0.67) _a	1.19 (0.81) _b	1.10 (0.71)	0.00–3.00
Depressive symptoms T3	0.98 (0.68) _a	1.04 (0.80) _a	1.00 (0.71)	0.00–3.00	1.03 (0.68) _a	1.08 (0.78) _a	1.04 (0.71)	0.00–3.00
Self-esteem T1	1.63 (0.56) _a	1.51 (0.55) _b	1.60 (0.56)	0.00–3.00				
Self-esteem T2	1.66 (0.58) _a	1.64 (0.61) _a	1.66 (0.59)	0.00–3.00	1.64 (0.56) _a	1.52 (0.62) _b	1.61 (0.58)	0.00–3.00
Self-esteem T3	1.67 (0.60) _a	1.60 (0.62) _a	1.66 (0.61)	0.00–3.00	1.64 (0.59) _a	1.58 (0.63) _a	1.62 (0.60)	0.00–3.00
Loneliness T1	0.99 (0.73) _a	1.32 (0.89) _b	1.07 (0.79)	0.00–3.00				
Loneliness T2	1.01 (0.78) _a	1.25 (0.85) _b	1.07 (0.80)	0.00–3.00	1.05 (0.75) _a	1.36 (0.89) _b	1.14 (0.81)	0.00–3.00
Loneliness T3	0.98 (0.77) _a	1.17 (0.90) _b	1.03 (0.81)	0.00–3.00	1.02 (0.76) _a	1.20 (0.87) _b	1.07 (0.80)	0.00–3.00
Age	12.53 (1.71) _a	13.47 (1.58) _b	12.77 (1.72)	9.29–17.73	12.58 (1.68) _a	13.35 (1.45) _b	12.81 (1.65)	9.74–17.73
Being liked	0.17 (0.16) _a	0.12 (0.14) _b	0.16 (0.16)	0.00–1.00	0.16 (0.15) _a	0.13 (0.16) _b	0.15 (0.15)	0.00–1.00
Number of boys	387	216	603		308	198	506	

Note. Averages with distinct subscripts in the same row differ significantly from each other. T1 = Wave 1; T2 = Wave 2; T3 = Wave 3.

expectations that bully-oriented defending would relate to victimization changes more strongly than victim-oriented defending and that the *number* of bully-oriented defenders would relate to changes in victimization more strongly than the *categorical distinction* of having at least a bully-oriented defender versus not (i.e., models including the *number* of defenders explained about 1% additional variance but still produced nonsignificant results).

Although no hypotheses were formulated regarding concurrent effects, some are worth mentioning. Victims defended in general and victim-oriented ways were less frequently victimized than victims who were not defended in general or victim-oriented ways. No significant concurrent effects emerged for being defended in bully-oriented ways (Supplemental Tables S1, S5, S9, and S13).

Does Being Defended Decrease Psychological Problems?

We ran another series of LCSM to examine whether defended victims would experience more favorable changes in psychological problems than nondefended victims. In Tables 4–6, we present a summary of all prospective effects obtained in Model 2 (including main effects) and Model 3 (including interaction effects) for *victims at T1*. Effects for T1 and T2 victims were highly similar; therefore, we included effects of being defended on psychological adjustment for victims at T2 in the Appendix. A full overview of effects can be found in Supplemental Tables S2–S4, S6–S8, S10–S12, and S14–S16.

In Tables 4–6, the nonsignificant δ s (*m* Δ) suggest that T1 victims did not significantly change in the three indicators of psychological adjustment. Moreover, being defended was not significantly predictive of changes in the three indicators of psychological adjustment. This was consistent across types of defending, the categorical indicator of being defended (vs. not) and the number of defenders, and for T1 and T2 victims (Tables 4–6 and Tables A2–A4). There were no significant interactions with gender and age across outcomes, except for self-esteem. That is, for victims at T1, one out of six tested interaction

effects with gender was significant. Specifically, victimized boys who had (more) defenders at T1 had less favorable changes in self-esteem between T1 and T2 than victimized girls who had (more) defenders ($\beta = -0.14$ for number of general defenders, a small effect). This effect was not replicated for victims at T2 (Table A3). Moreover, there were no other interaction effects (with gender or age) predicting latent change in depressive symptoms, self-esteem, or loneliness. Thus, our hypothesis that being defended benefits victims' psychological adjustment over time should be rejected in favor of the null hypothesis.

Concurrently, having (more) defenders was related to lower depression, loneliness, and higher self-esteem—for all types of defending, for both T1 and T2 victims (see Supplemental Material 2). Boys who had (more) defenders reported lower depression and loneliness and higher self-esteem than girls who had (more) defenders; this again was consistent across types of defending and T1 and T2 victims. Older defended victims experienced higher depressive symptoms and lower self-esteem than younger defended victims. These effects were mostly consistent across types of defending, but they were only present for the categorical distinction of being defended versus not (thus, not for the *number* of defenders).

Mediation Effects

We preregistered to test for mediation to examine whether a decrease in victimization would explain beneficial effects of being defended on psychological adjustment. Given that we (a) did not find a significant effect of being defended on changes in victimization or psychological problems, we considered it unlikely that we would detect mediation effects. We nevertheless ran all mediation analyses. As anticipated, all mediation effects were small (varying from 0.00 to -0.004), and all bootstrapped confidence intervals contained zero. Thus, for victims at T1, being defended at T1 was not indirectly related to psychological adjustment between T2 and

Table 2
Correlations Between Being Defended, Victimization, Psychological Adjustment, and Covariates for Victims at T1 (Lower Diagonal) and Victims at T2 (Upper Diagonal)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Def bul-or way	—	.48	.73	.83	.45	.62	.04	-.01	-.04	-.04	-.04	-.04	-.04	.06	.05	-.16	-.13	-.09	-.09	-.17	-.09
2. Def vic-or way	.47	—	.80	.43	.80	.64	.02	-.08	-.06	-.06	-.03	-.01	-.01	.07	.03	-.11	-.04	-.25	-.17	-.17	.10
3. Def general	.71	.80	—	.60	.64	.72	.02	-.05	-.06	-.04	-.04	-.02	-.02	.08	.04	-.13	-.07	-.18	-.17	-.12	.12
4. Nr. bul-or def	.89	.46	.63	—	.67	.90	.03	.01	-.04	-.08	-.08	-.09	-.09	.09	.06	-.18	-.10	-.18	-.21	.09	.09
5. Nr. vic-or def	.47	.85	.67	.63	—	.85	.00	-.09	-.09	-.08	-.08	-.10	-.10	.11	.07	-.17	-.14	-.16	-.26	.09	.09
6. Nr. general def	.66	.68	.78	.87	.88	—	.02	-.03	-.05	-.09	-.09	-.10	-.10	.10	.06	-.17	-.15	-.07	-.27	.08	.08
7. Victimization T1	.02	-.04	-.05	.04	-.01	.03	—	.42	.44	.21	.21	.21	.21	-.14	-.18	.26	.27	.06	-.03	-.08	-.08
8. Victimization T2	.04	.02	.02	.00	-.03	.00	.52	—	.56	.33	.33	.19	.13	-.17	-.13	.37	.21	.13	.10	-.10	-.10
9. Victimization T3	.03	-.02	-.02	.00	-.07	-.02	.46	.58	—	.29	.29	.35	.35	-.17	-.26	.29	.35	.06	.08	.08	-.07
10. Depression T1	-.04	-.08	-.05	-.06	-.08	-.07	.32	.20	.19	—	—	—	—	-.68	-.60	.55	.46	-.18	.10	.10	-.03
11. Depression T2	.02	.02	.03	.00	-.02	.01	.18	.36	.27	.61	—	.69	—	-.57	-.72	.46	.60	-.22	.14	.14	-.03
12. Depression T3	-.02	.00	-.01	-.03	.00	-.02	.18	.26	.33	.57	.70	—	-.48	-.57	-.72	.46	.60	-.22	.14	.14	-.03
13. Self-esteem T1	.06	.09	.09	.10	.05	.09	-.20	-.11	-.11	-.68	-.51	-.48	—	-.57	-.72	.46	.60	-.22	.14	.14	-.03
14. Self-esteem T2	.00	.04	.01	.04	.04	.04	-.12	-.19	-.14	-.56	-.67	-.56	.71	-.57	-.72	.46	.60	-.22	.14	.14	-.03
15. Self-esteem T3	.02	.06	.05	.04	.03	.04	-.16	-.22	-.30	-.54	-.64	-.74	.66	-.57	-.72	.46	.60	-.22	.14	.14	-.03
16. Loneliness T1	-.17	-.12	-.16	-.15	-.13	-.14	.34	.28	.25	.58	.41	.42	-.49	-.41	-.44	—	-.47	-.41	.21	-.10	.00
17. Loneliness T2	-.13	-.07	-.12	-.12	-.07	-.10	.22	.41	.28	.35	.55	.46	-.31	-.45	-.44	.62	-.42	-.50	.24	-.13	.02
18. Loneliness T3	-.10	-.02	-.08	-.09	-.05	-.07	.21	.31	.34	.38	.46	.61	-.35	-.40	-.52	.53	-.47	-.41	.21	-.10	.00
19. Gender (1 = boy)	-.12	-.29	-.22	-.08	-.22	-.14	.05	-.05	-.05	-.23	-.25	-.26	.26	.25	.25	.20	-.20	-.20	-.02	.02	-.04
20. Age	-.24	-.24	-.23	-.21	-.28	-.27	.04	.02	.05	.15	.12	.15	-.14	-.10	-.14	.03	.03	.09	-.02	-.02	.01
21. Being liked	.13	.15	.14	.09	.13	.12	-.09	-.09	-.01	-.01	.00	.01	.00	.02	-.01	-.13	-.13	-.08	-.07	.00	—

Note. Estimates in bold are significant with $p < .05$. T1 = Wave 1; T2 = Wave 2; Def = being defended versus not; bul-or = bully-oriented; vic-or = victim-oriented; Nr. def = number of defenders; T3 = Wave 3.

Table 3*Latent Change Score Models Testing the Role of Being Defended in Within-Person Changes in Victimization From T1 to T2 for T1 Victims*

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ victimization	-0.19 (0.02)	-0.40	-0.19 (0.02)	-0.40	-0.19 (0.02)	-0.40	-0.19 (0.02)	-0.40
I victimization T1	0.75 (0.02)	1.38	0.75 (0.02)	1.38	0.75 (0.02)	1.38	0.75 (0.02)	1.38
I Δ victimization	0.06 (0.06)	0.14	0.09 (0.07)	0.19	0.07 (0.06)	0.15	0.07 (0.05)	0.15
Victimization T1 \rightarrow Δ victimization	-0.30 (0.07)	-0.35	-0.30 (0.07)	-0.35	-0.30 (0.07)	-0.34	-0.30 (0.07)	-0.34
Being defended \rightarrow Δ victimization	0.01 (0.05)	0.03	-0.02 (0.07)	-0.05	-0.00 (0.01)	-0.03	-0.02 (0.01)	-0.09
Boy \rightarrow Δ victimization	-0.05 (0.04)	-0.11	-0.12 (0.09)	-0.26	-0.05 (0.04)	-0.06	-0.05 (0.04)	-0.11
Age \rightarrow Δ victimization	0.00 (0.01)	0.01	0.04 (0.04)	0.14	-0.00 (0.01)	-0.01	-0.00 (0.01)	-0.01
Liked \rightarrow Δ victimization	-0.11 (0.12)	-0.04	-0.10 (0.12)	-0.03	-0.09 (0.12)	-0.03	-0.08 (0.12)	-0.03
Boy \times Being Defended \rightarrow Δ Victimization			0.10 (0.10)	0.10			0.02 (0.02)	0.07
Age \times Being Defended \rightarrow Δ Victimization			-0.05 (0.04)	-0.15			-0.00 (0.00)	-0.01
R^2 in Δ victimization	12.5%		13.1%		12.5%		12.8%	
Specific								
Victimization T1 \rightarrow Δ victimization	-0.30 (0.07)	-0.35	-0.31 (0.07)	-0.36	-0.30 (0.07)	-0.35	-0.30 (0.07)	-0.35
Being defended in bully-oriented ways \rightarrow Δ victimization	0.05 (0.04)	0.10	0.03 (0.04)	0.07	0.00 (0.01)	0.01	-0.00 (0.01)	-0.02
Being defended in victim-oriented ways \rightarrow Δ victimization	-0.04 (0.05)	-0.09	-0.04 (0.06)	-0.09	-0.02 (0.01)	-0.07	-0.03 (0.01)	-0.13
Boy \rightarrow Δ victimization	-0.06 (0.04)	-0.13	-0.09 (0.08)	-0.20	-0.06 (0.04)	-0.06	-0.07 (0.04)	-0.15
Age \rightarrow Δ victimization	0.00 (0.01)	0.01	0.04 (0.04)	0.16	-0.00 (0.01)	-0.02	-0.01 (0.01)	-0.02
Being liked \rightarrow Δ victimization	-0.11 (0.12)	-0.04	-0.09 (0.12)	-0.03	-0.08 (0.11)	-0.03	-0.04 (0.12)	-0.01
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Victimization			0.04 (0.09)	0.04			0.03 (0.03)	0.10
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Victimization			-0.01 (0.03)	-0.04			0.02 (0.01)	0.15
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Victimization			0.02 (0.10)	0.02			-0.01 (0.03)	-0.04
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Victimization			-0.05 (0.03)	-0.14			-0.03 (0.01)	-0.22
R^2 in Δ victimization	12.7%		13.4%		12.9%		14.8%	

Note. The summarized results for T2 victims are presented in the Appendix. The full results of models presented in this table are portrayed in Supplemental Tables S1, S5, S9, and S13. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; Binary = analysis using the binary indicator of being defended by at least one classmate versus being not defended; *SE* = standard error; *m* Δ victimization = unconditional change in victimization; I = intercept; Δ victimization = latent change in victimization.

T3 via changes in victimization between T1 and T2. The full results of these mediation analyses can be found on (<https://github.com/lydialaningawijnen/dataperdevpsychdefending.git>).

Additional Analyses

Being Defended by Asking Teachers for Help

We ran preregistered additional analyses to examine whether victims whose peers defended them by asking help from teachers experienced more favorable changes in victimization and psychological problems as compared to victims whose classmates did not defend them in such a way. No significant effects for “teacher-related defending” emerged, except for two beneficial effects for victims at T2: Victims whose classmates asked the teacher for help had more favorable changes in loneliness ($\beta = -0.20$) and self-esteem ($\beta = 0.28$) between T2 and T3 (see Supplemental Table S17).

Analyses Excluding Likelihood-Based Outliers

As preregistered, we reanalyzed all of Model 2 and Model 3 for victimization and indicators of psychological adjustment while

excluding likelihood-based outliers. These analyses produced quite similar results as compared to those that included outliers (Supplemental Tables S18–S22).

Discussion

This registered report examined whether being defended benefitted victims of bullying by decreasing their victimization and psychological problems after 3 months. In line with previous cross-sectional work (e.g., Sainio et al., 2011), concurrent effects indicated that defended victims were less frequently victimized and experienced fewer psychological problems than nondefended victims. However, our longitudinal analyses detected no evidence that defended victims had more favorable changes (i.e., a stronger decrease or less strong increase) in victimization and psychological problems over time than nondefended victims. There was no clear indication that the effects of being defended differed depending on gender or age. Thus, although defended victims were concurrently better adjusted than nondefended victims, our study did not show that being defended improved the plight of victims over time.

Table 4

Latent Change Score Models Testing the Role of Being Defended in Within-Person Changes in Depressive Symptoms From T1 to T2 for T1 Victims

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ depressive symptoms	-0.03 (0.02)	-0.06	-0.03 (0.02)	-0.06	-0.03 (0.02)	-0.06	-0.03 (0.02)	-0.06
I depressive symptoms T1	1.06 (0.02)	1.74	1.06 (0.02)	1.74	1.06 (0.02)	1.74	1.06 (0.02)	1.74
I Δ depressive symptoms	0.36 (0.06)	0.69	0.36 (0.08)	0.69	0.39 (0.06)	0.74	0.39 (0.06)	0.74
Depressive symptoms T1 \rightarrow Δ depressive symptoms	-0.34 (0.05)	-0.39	-0.34 (0.05)	-0.39	-0.33 (0.05)	-0.39	-0.33 (0.05)	-0.39
Being defended \rightarrow Δ depressive symptoms	0.03 (0.04)	0.06	0.03 (0.06)	-0.06	0.01 (0.01)	0.06	0.01 (0.01)	0.05
Boy \rightarrow Δ depressive symptoms	-0.14 (0.04)	-0.26	-0.15 (0.08)	-0.28	-0.14 (0.04)	-0.13	-0.13 (0.04)	0.26
Age \rightarrow Δ depressive symptoms	0.01 (0.01)	0.02	0.02 (0.03)	0.06	0.01 (0.01)	0.04	0.01 (0.01)	0.03
Liked \rightarrow Δ depressive symptoms	-0.02 (0.10)	-0.01	-0.02 (0.10)	-0.01	-0.04 (0.10)	-0.01	-0.03 (0.10)	-0.01
Victimization T1 \rightarrow Δ depressive symptoms	0.00 (0.06)	0.01	0.00 (0.08)	0.00	-0.00 (0.08)	-0.00	-0.00 (0.08)	-0.00
Boy \times Being Defended \rightarrow Δ Depressive Symptoms			0.01 (0.09)	0.01			0.00 (0.00)	0.00
Age \times Being Defended \rightarrow Δ Depressive Symptoms			-0.01 (0.03)	-0.04			-0.03 (0.02)	-0.01
R^2 in Δ depressive symptoms	14.7%		14.7%		14.9%		14.8%	
Specific								
Depressive symptoms T1 \rightarrow Δ depressive symptoms	-0.34 (0.05)	-0.39	-0.34 (0.05)	-0.40	-0.33 (0.05)	-0.39	-0.33 (0.05)	-0.40
Being defended in bully-oriented ways \rightarrow δ depressive symptoms	0.03 (0.04)	0.06	0.09 (0.05)	0.16	0.01 (0.01)	0.03	0.00 (0.01)	0.00
Being defended in victim-oriented ways \rightarrow Δ depressive symptoms	0.02 (0.04)	0.04	-0.06 (0.06)	-0.11	0.01 (0.01)	0.03	0.01 (0.01)	0.05
Boy \rightarrow Δ depressive symptoms	-0.13 (0.04)	-0.25	-0.17 (0.08)	-0.32	-0.13 (0.04)	-0.25	-0.13 (0.04)	-0.25
Age \rightarrow Δ depressive symptoms	0.01 (0.01)	0.03	0.02 (0.02)	0.08	0.01 (0.01)	0.03	0.01 (0.01)	0.03
Being liked \rightarrow Δ depressive symptoms	-0.03 (0.10)	-0.01	-0.03 (0.10)	-0.01	-0.03 (0.10)	-0.10	-0.04 (0.10)	-0.01
Victimization T1 \rightarrow Δ depressive symptoms	0.00 (0.06)	0.00	-0.00 (0.08)	-0.00	-0.00 (0.08)	-0.00	-0.00 (0.08)	-0.00
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Depressive Symptoms			-0.12 (0.08)	-0.10			0.01 (0.02)	0.03
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Depressive Symptoms			-0.02 (0.02)	-0.04			-0.00 (0.01)	-0.03
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Depressive Symptoms			0.17 (0.08)	0.13			-0.01 (0.02)	-0.02
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Depressive Symptoms			-0.01 (0.03)	-0.01			0.00 (0.01)	0.02
R^2 in Δ depressive symptoms	14.7%		15.3%		14.8%		14.8%	

Note. The summarized results for T2 victims are presented in the Appendix. The full results of models presented in this table are portrayed in Supplemental Tables S2, S6, S10, and S14. Estimates in bold represent statistically significant effects. T1 = Wave 1; T2 = Wave 2; Binary = analysis using the binary indicator of being defended by at least one classmate versus being not defended; *SE* = standard error; *m* Δ depressive symptoms = unconditional change in depressive symptoms; I = intercept; Δ depressive symptoms = latent change in depressive symptoms.

Does Being Defended Relate to Decreased Victimization and Psychological Problems?

In line with prior findings (e.g., Ma & Chen, 2019; Sainio et al., 2011), concurrent links in our study show that defended victims experienced lower victimization frequency, depressive symptoms, and loneliness and higher self-esteem than nondefended victims. The differences between defended and nondefended victims were consistent across waves. However, contrary to our expectations, we did not find any evidence that defended victims had more favorable *within-person* changes in victimization and psychological problems over time than nondefended victims. This result was consistent across time points (T1–T2 and T2–T3), types of defending (general, victim-, and bully-oriented types), and operationalization of having defenders (i.e., binary variable and number of defenders).

There are several possible reasons why we found concurrent but no prospective effects of being defended. First, the benefits of being defended may only manifest in the short term. Indeed, an observational study revealed that bullying perpetrators ceased their behavior within minutes or even seconds after peer defending had occurred (Hawkins et al., 2001). Moreover, a recent daily diary study (Lanina-Wijnen et al., 2024) of seventh to ninth graders⁵ revealed that students experienced fewer mood problems on days when they were victimized and defended as compared to days when they were victimized *but not* defended. It should be noted

⁵ The sample in this daily diary study partially overlaps with the sample in the present study (all seventh- to ninth-grade students in the Success factors that Optimize the Long-term Impact of Defending project were invited to also participate in this daily diary study).

Table 5

Latent Change Score Models Testing the Role of Being Defended in Within-Person Changes in Self-Esteem From T1 to T2 for T1 Victims

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ self-esteem	0.02 (0.01)	0.06	0.02 (0.01)	0.06	0.02 (0.01)	0.06	0.02 (0.01)	0.06
I self-esteem T1	1.48 (0.03)	2.96	1.48 (0.03)	2.96	1.48 (0.03)	2.96	1.48 (0.03)	2.96
I Δ self-esteem	0.36 (0.06)	1.00	0.32 (0.07)	0.87	0.32 (0.06)	0.88	0.32 (0.06)	0.88
Self-esteem T1 \rightarrow Δ self-esteem	-0.24 (0.03)	-0.33	-0.24 (0.03)	-0.33	-0.25 (0.03)	-0.34	-0.24 (0.03)	-0.34
Being defended \rightarrow Δ self-esteem	-0.06 (0.03)	-0.17	-0.01 (0.03)	-0.03	-0.00 (0.00)	-0.02	0.01 (0.01)	0.09
Boy \rightarrow Δ self-esteem	0.06 (0.03)	0.17	0.13 (0.05)	0.34	0.07 (0.03)	0.20	0.07 (0.026)	0.03
Age \rightarrow Δ self-esteem	-0.01 (0.01)	-0.01	0.01 (0.02)	0.03	-0.00 (0.01)	-0.01	-0.00 (0.01)	-0.01
Liked \rightarrow Δ self-esteem	0.14 (0.08)	0.06	0.14 (0.08)	0.06	0.12 (0.08)	0.05	0.12 (0.08)	0.05
Victimization T1 \rightarrow Δ self-esteem	0.02 (0.04)	0.03	0.02 (0.04)	0.03	0.02 (0.04)	0.03	0.01 (0.04)	0.02
Boy \times Being Defended \rightarrow Δ Self-Esteem			-0.02 (0.02)	-0.06			-0.03 (0.01)	-0.14
Age \times Being Defended \rightarrow Δ Self-Esteem			-0.08 (0.06)	-0.10			-0.00 (0.00)	-0.02
<i>R</i> ² in Δ self-esteem	12.3%		12.7%		11.7%		12.8%	
Specific								
Self-esteem T1 \rightarrow Δ self-esteem	-0.24 (0.03)	-0.34	-0.24 (0.03)	-0.34	-0.25 (0.03)	-0.34	-0.24 (0.03)	-0.34
Being defended in bully-oriented ways \rightarrow Δ self-esteem	-0.07 (0.03)	-0.20	-0.06 (0.04)	-0.06	0.01 (0.01)	-0.05	-0.01 (0.01)	-0.03
Being defended in victim-oriented ways \rightarrow Δ self-esteem	0.02 (0.03)	0.05	0.08 (0.04)	0.23	0.01 (0.01)	0.05	0.02 (0.01)	0.12
Boy \rightarrow Δ self-esteem	0.07 (0.03)	0.19	0.16 (0.06)	0.44	0.08 (0.03)	0.21	0.07 (0.03)	0.19
Age \rightarrow Δ self-esteem	-0.01 (0.01)	-0.03	0.01 (0.02)	0.05	-0.00 (0.01)	-0.01	-0.00 (0.01)	-0.01
Being liked \rightarrow Δ self-esteem	0.14 (0.08)	0.06	0.14 (0.08)	0.06	0.11 (0.08)	0.05	0.12 (0.08)	0.05
Victimization T1 \rightarrow Δ self-esteem	0.02 (0.62)	0.03	0.02 (0.04)	0.03	0.02 (0.04)	0.03	0.02 (0.04)	0.02
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Self-Esteem			-0.02 (0.06)	-0.03			-0.00 (0.02)	-0.02
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Self-Esteem			-0.01 (0.02)	-0.03			-0.00 (0.00)	-0.00
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Self-Esteem			-0.12 (0.06)	-0.14			-0.03 (0.01)	-0.13
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Self-Esteem			-0.02 (0.02)	-0.06			-0.00 (0.00)	0.02
<i>R</i> ² in Δ self-esteem	12.5%		13.4%		11.9%		13.0%	

Note. The summarized results for T2 victims are presented in the Appendix. The full results of models presented in this table are portrayed in Supplemental Tables S3, S7, S11, and S15. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 2; T2 = Wave 2; Binary = analysis using the binary indicator of being defended by at least one classmate versus being not defended; *SE* = standard error; *m* Δ self-esteem = unconditional change in self-esteem; I = intercept; Δ self-esteem = latent change in self-esteem.

that—although the daily diary study did control for mood the previous day—it had a cross-sectional design.

Second, it is possible that no differences in within-person changes were detected because of “ceiling effects.” That is, defended victims had lower baseline levels of victimization and psychological problems than nondefended victims (either due to potential immediate effects described above or because defended and nondefended victims differ from each other in many aspects at baseline already), leaving less room for measurable improvement in these constructs. In contrast to randomized controlled trials, being defended was not an “intervention” to which some victims were randomly assigned to.

Third, the temporal order of effects might be *in the other direction*: Better adjusted victims may be more likely to be defended. Consistent with this reasoning, another study conducted with partially the same sample of fourth to ninth graders found that those experiencing more social or psychological difficulties at the start of the school year were *less* likely to be defended when they were victimized halfway through the school year (in comparison to those experiencing fewer social and psychological difficulties). Victimization frequency was not predictive of being defended, however (Laninga-Wijnen et al., in press).

Fourth, as victimization decreased for both defended and non-defended victims, another possibility is that nondefended victims *indirectly benefited* from the presence of defenders. Specifically, bullies who targeted multiple victims might have encountered the defensive behaviors of their peers for some victims, and this confrontation could have led them to cease bullying altogether, including toward those victims who were not directly defended. Fifth, being defended may have both beneficial and adverse psychological effects, potentially neutralizing each other, resulting in the stability of psychological problems we observed in defended victims. On one hand, being defended may improve victims’ psychological adjustment: Peers show that they care about these victims and could help victims to cope with or reappraise their situation (Cohen & Wills, 1985). On the other hand, being defended may simultaneously elicit less adaptive processes that decrease psychological adjustment: It has been theorized that being defended may increase *learned helplessness* (i.e., victims’ belief that they are dependent on others to solve the bullying situation) and that it emphasizes victims’ vulnerable position, which further damages their reputation (Healy, 2020). Also, victim-oriented defending may evolve into corumination, which also negatively

Table 6*Latent Change Score Models Testing the Role of Being Defended in Within-Person Changes in Loneliness From T1 to T2 for T1 Victims*

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ loneliness	0.00 (0.02)	0.00	0.00 (0.02)	0.00	0.00 (0.02)	0.00	0.00 (0.02)	0.01
I loneliness T1	1.07 (0.02)	1.44	1.07 (0.02)	1.44	1.07 (0.02)	1.44	1.07 (0.02)	1.44
I Δ loneliness	0.51 (0.07)	0.81	0.56 (0.08)	0.88	0.46 (0.06)	0.72	0.46 (0.06)	0.72
Loneliness T1 \rightarrow Δ loneliness	-0.40 (0.06)	-0.46	-0.40 (0.06)	-0.47	-0.39 (0.06)	-0.46	-0.40 (0.06)	-0.46
Being defended \rightarrow Δ loneliness	-0.06 (0.05)	-0.09	-0.11 (0.07)	-0.17	-0.01 (0.01)	-0.03	-0.02 (0.01)	-0.06
Boy \rightarrow Δ loneliness	-0.15 (0.04)	-0.23	-0.22 (0.09)	-0.33	-0.14 (0.04)	-0.22	-0.14 (0.04)	-0.22
Age \rightarrow Δ loneliness	-0.01 (0.01)	-0.01	-0.01 (0.03)	-0.01	-0.00 (0.01)	-0.01	-0.00 (0.01)	-0.01
Liked \rightarrow Δ loneliness	-0.24 (0.14)	-0.06	-0.24 (0.14)	-0.06	-0.25 (0.14)	-0.06	-0.24 (0.14)	-0.06
Victimization T1 \rightarrow Δ loneliness	0.08 (0.11)	0.06	0.08 (0.11)	0.06	0.08 (0.11)	0.08	0.08 (0.11)	0.07
Boy \times Being Defended \rightarrow Δ Loneliness			0.09 (0.09)	0.06			0.02 (0.02)	0.05
Age \times Being Defended \rightarrow Δ Loneliness			-0.00 (0.03)	-0.00			-0.00 (0.00)	-0.01
R^2 in Δ loneliness	16.4%		16.6%		16.4%		16.5%	
Specific								
Loneliness T1 \rightarrow Δ loneliness	-0.39 (0.06)	-0.46	-0.40 (0.06)	-0.46	-0.39 (0.06)	-0.46	-0.39 (0.06)	-0.46
Being defended in bully-oriented ways \rightarrow Δ loneliness	-0.03 (0.04)	-0.05	-0.01 (0.06)	-0.01	-0.02 (0.01)	-0.07	-0.02 (0.02)	-0.08
Being defended in victim-oriented ways \rightarrow Δ loneliness	0.01 (0.05)	0.01	-0.08 (0.07)	-0.12	0.01 (0.01)	0.05	0.01 (0.02)	0.03
Boy \rightarrow Δ loneliness	-0.13 (0.04)	-0.21	-0.21 (0.09)	-0.34	-0.13 (0.04)	-0.20	-0.13 (0.04)	-0.21
Age \rightarrow Δ loneliness	-0.00 (0.01)	-0.00	0.01 (0.03)	0.02	-0.00 (0.01)	-0.00	-0.00 (0.01)	-0.00
Being liked \rightarrow Δ loneliness	-0.25 (0.14)	-0.06	-0.26 (0.14)	-0.06	-0.27 (0.14)	-0.07	-0.26 (0.14)	-0.06
Victimization T1 \rightarrow Δ loneliness	0.07 (0.11)	0.06	0.07 (0.11)	0.06	0.08 (0.11)	0.06	0.08 (0.11)	0.06
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Loneliness			-0.05 (0.09)	-0.03			0.01 (0.02)	0.03
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Loneliness			-0.03 (0.03)	0.06			0.01 (0.01)	0.05
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Loneliness			0.17 (0.10)	0.11			0.00 (0.02)	0.01
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Loneliness			0.01 (0.03)	0.02			-0.01 (0.01)	-0.06
R^2 in Δ loneliness	16.3%		16.7%		16.7%		16.9%	

Note. The summarized results for T2 victims are presented in the Appendix. The full results of models presented in this table are portrayed in Supplemental Tables S4, S8, S12, and S16. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; Binary = analysis using the binary indicator of being defended by at least one classmate versus being not defended; *SE* = standard error; *m* Δ loneliness = unconditional change in loneliness; I = intercept; Δ loneliness = latent change in loneliness.

affects adjustment (Rose, 2021). Future research is needed to disentangle whether being defended may simultaneously trigger both beneficial and adverse processes (thus working as a *double-edged sword*), which may explain the nonsignificant changes in psychological adjustment.

Moreover, defending behaviors may not always be enacted in optimal ways, limiting their potential to decrease victimization and psychological problems. Successfully defending someone likely requires sophisticated social skills (e.g., using the right vocal tone, facial expression, or physical gestures when conveying the message that the bully should stop). Resorting to poorly enacted defending tactics may be met with sarcasm by the bullies, who might then pursue their behavior. Although most Finnish students are enrolled in the KiVa antibullying program in which defending is encouraged (Saarento et al., 2015), there are no clear guidelines regarding optimal defending strategies. Intervention programs using virtual reality elements might help students practice defending their peers, which could lead to more successful defending attempts in real life (Lambe & Craig, 2023). Moreover, our preregistered additional analyses show that having defenders who ask teachers for help was related to

decreased loneliness and increased self-esteem for victims at T2, suggesting that this type of defending might especially be encouraged in interventions.

Furthermore, it could be that defending only provides a temporary relief that is insufficient to heal the psychological wounds caused by the sometimes traumatic and long-lasting experience of victimization (McEwen, 1998; Sheppard et al., 2019). Indeed, previous work found that defended victims still experienced more psychological problems than nonvictims over a 3-month time period (Laniga-Wijnen et al., 2023).

Last, the effects of being defended on victimization may depend on characteristics of the victim, defender, or their classroom. In our study, we focused on two victim characteristics: gender and age, but these played no moderating role in longer term effects (see further explanation below). Another victim characteristic worth investigating is victimization frequency: Peers may make a difference, especially for frequently victimized youth, because these youth may consider their situation as particularly stressful and uncontrollable (Laniga-Wijnen et al., in press). Regarding defender characteristics, being defended by a popular peer may lead to positive outcomes for the

victim, whereas being defended by unpopular classmates might put victims at risk for further victimization (Salmivalli et al., 2021). Moreover, being defended in classrooms in which bullying is considered inappropriate (e.g., high classroom levels of moral disengagement), the defending behaviors of peers may confer more benefits (Garandea et al., 2022).

Altogether, these reasons may explain why the present study (and a previous longitudinal study; Laninga-Wijnen et al., 2023) could not detect significant differences in *changes* in victimization and psychological adjustment between defended and nondefended victims. It is important to keep in mind that these nonsignificant findings do not imply that defending is ineffective in reducing victimization or that youth should refrain from defending. It rather suggests that more research is needed to examine when and how the effects of defending on victims' outcomes can be optimized. However, it is challenging to examine "pure effects" of being defended since victims cannot be randomly assigned to being defended and nondefended, and defended victims did differ from the nondefended ones at baseline in many aspects. Thus, making reliable comparisons of changes over time between these two groups is difficult.

Moderating Effects of Gender and Age

Victims' gender did not moderate the longitudinal effects of defending. This contrasts with a previous study showing an adverse effect of friendship support on depressive symptoms over time for victimized girls, but not for victimized boys (Schacter & Juvonen, 2020). However, the interaction effects in our concurrent analyses are consistent with this previous study, suggesting that boys who are being defended—in both bully- and victim-oriented ways—are better adjusted (lower depressive symptoms and loneliness, higher self-esteem) than defended girls. Thus, gender remains an important variable of interest to be included in future studies.

Interactions with age were also tested to capture any developmental changes in the effects of defending. We had anticipated that being defended would be more likely to decrease victimization and psychological problems among older students, because adolescents attach more value to their peers' opinion and may be more dependent on their peers in bullying situations (due to reduced adult supervision; Laursen & Veenstra, 2021). Although the effects of being defended over time were not moderated by age (with a few negligible exceptions), concurrent interaction effects suggest that having (more) defenders was more strongly related to higher self-esteem and lower depression in younger than in older students. A possible explanation is that older defended victims reported greater victimization frequency than younger defended students and, thus, were exposed to more stressful situations, negatively affecting their psychological functioning. Another reason might be that older victimized students perceive "being defended" as a sign of weakness and may fear that their peers will also perceive it that way. Indeed, previous work has shown that victimized students may perceive help-seeking as an indicator of weakness (Kim & Craig, 2024). Older students may especially be susceptible to this, because they typically strive for independence and autonomy in solving interpersonal conflict (Yeager et al., 2018). Older students may also be more likely to coruminate, which could amplify potential iatrogenic effects of being defended (Schwartz-Mette & Rose, 2012).

Strengths, Limitations, and Future Directions

The current registered report has various strengths, including its thorough and rigorous test of an underinvestigated yet practically relevant question: Does being defended benefit victims by reducing victimization and improving their psychological adjustment? We were the first to consider the role of being defended for different types of defending across various time points within the school year, while considering both having at least one defender versus not and the number of defenders. We also tested for gender and age differences. In addition, we recruited a large sample of students, allowing us to select a large number of victims, and we examined within-person changes using advanced statistical analyses. The study hypotheses, method, and analytic strategy had been preregistered before any data had been collected.

However, the study also has some limitations. First, being defended was assessed with self-reports only, which may be biased by social desirability. Victims of bullying may also suffer from depression, eliciting a more pessimistic view on their situation (Kellij et al., 2022); it could be that they are therefore not able to recognize the attempts classmates made to defend them. At the same time, using self-reports does have benefits, as some defending behaviors may be more covert and thus only be noticed by the victim. In future studies, combining self-reports of being defended with peer reports might provide a more accurate measure. In addition, since an imbalance of power is a defining feature of bullying, meaning that victims are by definition in a vulnerable position, it is questionable whether students who report having a high number of defenders can be considered true bullying victims. Second, we examined the role of being defended in changes in adjustment over a 3-month interval. Many external factors influence students' experiences during this period, making it difficult to isolate the long-term effects of defending. In future research, person-centered approaches could identify profiles of students based on victimization and being defended and explore how transitions between these profiles relate to changes in psychological adjustment.

Third, in addition to examining the effect of being defended on victimization, it may be relevant to examine whether being confronted with peer defending does affect bullies' behavior over time. This would shed light on the possibility that bullies with multiple victims may stop bullying when some of their victims are defended. Fourth, we relied on a novel measure to capture the various ways in which youth were defended. Although this measure is likely more precise than the general defending item used in previous research (e.g., Laninga-Wijnen et al., 2023), its reliability and validity could only be established in the current sample.

Conclusion

The present registered report offered a rigorous investigation of the possible benefits of being defended for victims of bullying over a 3-month period. Concurrently, defended victims experienced lower victimization frequency and psychological problems than nondefended victims. Yet, no evidence was detected that being defended benefited victims over time. Importantly, this does not imply that defending is ineffective, but rather that more research is needed to determine how, when, and for whom defending is most beneficial. Our findings do not indicate that encouraging peer

defending (e.g., as part of an antibullying program) is potentially harmful since defended victims are typically better adjusted than nondefended victims (Laninga-Wijnen et al., in press), and these differences persist across the school year. These concurrent effects could also imply that better adjusted youth are more likely to be defended, suggesting that antibullying interventions should put more emphasis on defending all peers (and not only one's friends, for instance; Laninga-Wijnen et al., in press). Antibullying programs should also take into account developmental changes: Being defended was more strongly associated with lower psychological problems among younger students than among older students. Future studies should explore the quality and effectiveness of defending behaviors, the role of defenders' characteristics, and mechanisms through which peer support can promote victims' well-being in the long term.

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(Appendix follows)

Appendix
Analyses on T2 Victims

Table A1

Latent Change Score Models Testing the Role of Being Defended at T2 in Within-Person Changes in Victimization From T2 to T3 for T2 Victims

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ victimization	-0.16 (0.02)	-0.31	-0.16 (0.02)	-0.31	-0.16 (0.02)	-0.31	-0.16 (0.02)	-0.32
I victimization T2	0.76 (0.02)	1.27	0.76 (0.02)	1.27	0.76 (0.02)	1.27	0.76 (0.02)	1.27
I Δ victimization	0.03 (0.06)	0.05	0.03 (0.07)	0.05	-0.03 (0.05)	-0.07	-0.03 (0.05)	-0.05
Victimization T1 \rightarrow Δ victimization	0.28 (0.09)	0.31	0.28 (0.09)	0.31	0.28 (0.09)	0.31	0.28 (0.09)	0.31
Victimization T2 \rightarrow Δ victimization	-0.37 (0.10)	-0.43	-0.37 (0.10)	-0.43	-0.36 (0.10)	-0.43	-0.36 (0.10)	-0.36
Being defended \rightarrow Δ victimization	-0.08 (0.05)	-0.15	-0.07 (0.06)	-0.15	-0.01 (0.01)	-0.06	0.00 (0.01)	0.01
Boy \rightarrow Δ victimization	-0.04 (0.04)	-0.07	-0.02 (0.07)	-0.04	-0.03 (0.04)	-0.03	-0.03 (0.04)	-0.03
Age \rightarrow Δ victimization	0.01 (0.01)	0.02	-0.02 (0.03)	0.07	0.01 (0.01)	0.03	0.01 (0.01)	0.03
Liked \rightarrow Δ victimization	0.03 (0.11)	0.01	0.04 (0.11)	0.01	0.03 (0.11)	0.01	0.02 (0.11)	0.01
Boy \times Being Defended \rightarrow Δ Victimization			-0.03 (0.09)	-0.03			-0.02 (0.02)	-0.04
Age \times Being Defended \rightarrow Δ Victimization			0.04 (0.03)	0.11			0.01 (0.01)	0.02
R^2 in Δ victimization	14.6%		14.9%		14.6%		15.3%	
Specific								
Victimization T1 \rightarrow Δ victimization	0.28 (0.10)	0.31	0.29 (0.09)	0.31	0.28 (0.09)	0.31	0.29 (0.10)	0.31
Victimization T2 \rightarrow Δ victimization	-0.37 (0.10)	-0.43	-0.37 (0.10)	0.43	-0.36 (0.10)	-0.43	-0.37 (0.10)	-0.43
Being defended in bully-oriented ways \rightarrow Δ victimization	-0.04 (0.05)	-0.08	-0.04 (0.06)	-0.08	-0.01 (0.01)	-0.05	0.00 (0.02)	0.01
Being defended in victim-oriented ways \rightarrow Δ victimization	-0.04 (0.05)	-0.08	0.01 (0.07)	0.01	-0.01 (0.01)	-0.03	-0.00 (0.01)	-0.01
Boy \rightarrow Δ victimization	-0.04 (0.04)	-0.07	0.03 (0.08)	0.06	-0.03 (0.04)	-0.05	-0.03 (0.04)	-0.05
Age \rightarrow Δ victimization	0.01 (0.01)	0.02	-0.02 (0.03)	-0.06	0.01 (0.01)	0.01	0.01 (0.01)	0.03
Being liked \rightarrow Δ victimization	0.03 (0.11)	0.01	0.03 (0.11)	0.01	0.03 (0.11)	0.01	0.02 (0.11)	0.01
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Victimization			-0.01 (0.09)	-0.00			-0.01 (0.03)	-0.04
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Victimization			0.04 (0.03)	0.09			0.01 (0.01)	0.08
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Victimization			-0.11 (0.10)	-0.09			-0.01 (0.03)	-0.02
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Victimization			0.01 (0.03)	0.01			-0.00 (0.01)	-0.00
R^2 in Δ victimization	14.5%		15.2%		14.8%		15.5%	

Note. The full results of models presented in this table are portrayed in Supplemental Material 2. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; T3 = Wave 3; *SE* = standard error; *m* Δ victimization = unconditional change in victimization; I = intercept; Δ victimization = latent change in victimization.

(Appendix continues)

Table A2

Latent Change Score Models Testing the Role of Being Defended at T2 in Within-Person Changes in Depressive Symptoms From T2 to T3 for T2 Victims

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ depressive symptoms	-0.04 (0.02)	-0.08	-0.04 (0.02)	-0.09	-0.04 (0.02)	-0.08	-0.04 (0.02)	-0.09
I depressive symptoms T2	1.10 (0.02)	1.65	1.10 (0.02)	1.65	1.10 (0.02)	1.65	1.10 (0.02)	1.65
I Δ depressive symptoms	0.29 (0.06)	0.59	0.27 (0.06)	0.57	0.28 (0.05)	0.59	0.29 (0.05)	0.60
Depressive symptoms T2 \rightarrow Δ depressive symptoms	-0.28 (0.04)	-0.39	-0.28 (0.04)	-0.39	-0.29 (0.04)	-0.40	-0.28 (0.04)	-0.39
Being defended \rightarrow Δ depressive symptoms	-0.01 (0.04)	-0.01	0.01 (0.05)	0.01	-0.01 (0.01)	-0.05	0.01 (0.01)	0.04
Boy \rightarrow Δ depressive symptoms	-0.13 (0.04)	-0.27	-0.09 (0.06)	-0.18	-0.13 (0.04)	-0.28	-0.13 (0.04)	-0.27
Age \rightarrow Δ depressive symptoms	0.03 (0.01)	-0.12	0.00 (0.02)	0.01	0.03 (0.01)	0.06	0.03 (0.01)	0.07
Liked \rightarrow Δ depressive symptoms	-0.03 (0.09)	-0.01	-0.02 (0.09)	-0.01	-0.02 (0.09)	-0.01	-0.03 (0.09)	-0.01
Victimization T1 \rightarrow Δ depressive symptoms	0.11 (0.06)	0.13	0.11 (0.06)	0.13	0.11 (0.06)	0.13	0.12 (0.06)	0-14
Victimization T2 \rightarrow Δ depressive symptoms	-0.03 (0.07)	-0.03	-0.03 (0.07)	-0.03	-0.02 (0.07)	-0.03	-0.02 (0.07)	-0.03
Boy \times Being Defended \rightarrow Δ Depressive Symptoms			-0.06 (0.08)	-0.06			-0.02 (0.01)	-0.07
Age \times Being Defended \rightarrow Δ Depressive Symptoms			0.04 (0.02)	0.12			0.01 (0.01)	0.09
R^2 in Δ depressive symptoms	14.8%		15.2%		15.2%		15.9%	
Specific								
Depressive symptoms T2 \rightarrow Δ depressive symptoms	-0.28 (0.04)	-0.39	-0.28 (0.04)	-0.39	-0.29 (0.04)	-0.40	-0.28 (0.04)	-0.40
Being defended in bully-oriented ways \rightarrow Δ depressive symptoms	-0.02 (0.04)	-0.03	0.01 (0.05)	0.02	-0.00 (0.01)	-0.01	0.01 (0.02)	0.06
Being defended in victim-oriented ways \rightarrow Δ depressive symptoms	-0.00 (0.04)	-0.00	0.01 (0.05)	0.03	-0.01 (0.01)	-0.05	-0.00 (0.01)	-0.02
Boy \rightarrow Δ depressive symptoms	-0.13 (0.04)	-0.27	-0.07 (0.06)	-0.15	-0.14 (0.04)	-0.28	-0.14 (0.04)	-0.29
Age \rightarrow Δ depressive symptoms	0.03 (0.01)	0.07	-0.01 (0.02)	-0.02	0.03 (0.01)	0.10	0.03 (0.01)	0.10
Being liked \rightarrow Δ depressive symptoms	-0.02 (0.09)	-0.05	-0.02 (0.09)	-0.01	-0.02 (0.09)	-0.01	-0.03 (0.09)	-0.01
Victimization T1 \rightarrow Δ depressive symptoms	0.11 (0.06)	0.13	0.12 (0.06)	0.14	0.11 (0.06)	0.13	0.11 (0.06)	0.13
Victimization T2 \rightarrow Δ depressive symptoms	-0.03 (0.07)	-0.03	-0.03 (0.07)	-0.03	-0.02 (0.07)	-0.03	-0.02 (0.07)	-0.02
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Depressive Symptoms			-0.06 (0.08)	-0.05			-0.03 (0.02)	-0.09
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Depressive Symptoms			0.03 (0.02)	0.07			-0.00 (0.01)	-0.01
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Depressive Symptoms			-0.05 (0.08)	-0.04			-0.00 (0.02)	-0.00
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Depressive Symptoms			0.03 (0.02)	0.09			0.01 (0.00)	0.11
R^2 in Δ depressive symptoms	14.8%		15.6%		15.2%		16.1%	

Note. The full results of models presented in this table are portrayed in Supplemental Material 2. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; T3 = Wave 3; *SE* = standard error; *m* Δ depressive symptoms = unconditional change in depressive symptoms; I = intercept; Δ depressive symptoms = latent change in depressive symptoms.

(Appendix continues)

Table A3*Latent Change Score Models Testing the Role of Being Defended at T2 in Within-Person Changes in Self-Esteem From T2 to T3 for T2 Victims*

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ self-esteem	-0.01 (0.01)	-0.02	-0.01 (0.01)	-0.02	-0.01 (0.01)	-0.02	-0.01 (0.01)	-0.02
I self-esteem T2	1.38 (0.04)	2.73	1.38 (0.04)	2.73	1.38 (0.04)	2.73	1.38 (0.04)	2.72
I Δ self-esteem	0.30 (0.07)	0.86	0.33 (0.07)	0.95	0.30 (0.07)	0.86	0.30 (0.07)	0.85
Self-esteem T2 \rightarrow Δ self-esteem	-0.22 (0.03)	-0.32	-0.22 (0.03)	-0.32	-0.22 (0.03)	-0.32	-0.22 (0.03)	-0.32
Being defended \rightarrow Δ self-esteem	-0.00 (0.03)	-0.01	-0.05 (0.04)	-0.13	0.00 (0.01)	0.02	-0.00 (0.01)	-0.02
Boy \rightarrow Δ self-esteem	0.10 (0.03)	0.28	0.03 (0.04)	0.10	0.10 (0.03)	0.29	0.10 (0.03)	0.29
Age \rightarrow Δ self-esteem	-0.02 (0.01)	-0.09	-0.02 (0.02)	-0.09	-0.02 (0.01)	-0.10	-0.02 (0.01)	-0.10
Liked \rightarrow Δ self-esteem	-0.01 (0.07)	-0.00	-0.01 (0.07)	-0.00	-0.01 (0.07)	-0.01	-0.01 (0.07)	-0.00
Victimization T1 \rightarrow Δ self-esteem	-0.08 (0.04)	-0.13	-0.08 (0.04)	-0.13	-0.08 (0.04)	-0.13	-0.08 (0.04)	-0.13
Victimization T2 \rightarrow Δ self-esteem	0.01 (0.05)	0.02	0.01 (0.05)	0.02	0.01 (0.05)	0.02	0.01 (0.05)	0.02
Boy \times Being Defended \rightarrow Δ Self-Esteem			0.09 (0.05)	0.11			0.01 (0.01)	0.03
Age \times Being Defended \rightarrow Δ Self-Esteem			-0.00 (0.02)	-0.01			-0.00 (0.00)	-0.05
R^2 in Δ self-esteem	10.9%		11.2%		11.0%		11.2%	
Specific								
Self-esteem T2 \rightarrow Δ self-esteem	-0.22 (0.03)	-0.32	-0.22 (0.03)	-0.32	-0.22 (0.03)	-0.32	-0.23 (0.03)	-0.32
Being defended in bully-oriented ways \rightarrow Δ self-esteem	-0.01 (0.03)	-0.04	-0.01 (0.03)	-0.03	-0.00 (0.01)	-0.02	-0.00 (0.01)	-0.01
Being defended in victim-oriented ways \rightarrow Δ self-esteem	0.02 (0.03)	0.05	-0.03 (0.04)	-0.08	0.01 (0.01)	0.03	-0.00 (0.01)	-0.02
Boy \rightarrow Δ self-esteem	0.10 (0.03)	0.28	0.04 (0.04)	0.12	0.10 (0.03)	0.29	0.11 (0.03)	0.30
Age \rightarrow Δ self-esteem	-0.02 (0.01)	-0.09	-0.00 (0.02)	-0.01	-0.02 (0.01)	-0.10	-0.02 (0.01)	-0.10
Being liked \rightarrow Δ self-esteem	-0.01 (0.07)	-0.00	-0.01 (0.07)	-0.00	-0.01 (0.08)	-0.01	-0.01 (0.07)	-0.00
Victimization T1 \rightarrow Δ self-esteem	-0.08 (0.04)	-0.13	-0.09 (0.04)	-0.14	-0.08 (0.04)	-0.13	-0.08 (0.05)	-0.13
Victimization T2 \rightarrow Δ self-esteem	0.01 (0.05)	0.02	0.01 (0.05)	0.02	0.01 (0.05)	0.02	0.01 (0.05)	0.01
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Self-Esteem			-0.02 (0.06)	-0.02			-0.00 (0.02)	-0.02
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Self-Esteem			0.00 (0.02)	0.01			0.00 (0.01)	0.02
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Self-Esteem			0.12 (0.06)	0.13			0.02 (0.02)	0.06
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Self-Esteem			-0.03 (0.02)	-0.11			-0.01 (0.01)	-0.07
R^2 in Δ self-esteem	10.9%		11.7%		11.0%		11.4%	

Note. The full results of models presented in this table are portrayed in Supplemental Material 2. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; T3 = Wave 3; *SE* = standard error; *m* Δ self-esteem = unconditional change in self-esteem; I = intercept; Δ self-esteem = latent change in self-esteem.

(Appendix continues)

Table A4

Latent Change Score Models Testing the Role of Being Defended at T2 in Within-Person Changes in Loneliness From T2 to T3 for T2 Victims

Effect	Binary				Number of defenders			
	Main effects		Interaction effects		Main effects		Interaction effects	
	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β	<i>B</i> (<i>SE</i>)	β
General								
<i>m</i> Δ loneliness	-0.05 (0.02)	-0.08	-0.05 (0.02)	-0.08	-0.05 (0.02)	-0.08	-0.05 (0.02)	-0.08
I loneliness T2	1.14 (0.02)	1.50	1.14 (0.03)	1.50	1.14 (0.03)	1.50	1.14 (0.03)	1.50
I Δ loneliness	0.39 (0.04)	0.63	0.35 (0.07)	0.56	0.38 (0.05)	0.61	0.37 (0.05)	0.60
Loneliness T2 \rightarrow Δ loneliness	-0.37 (0.06)	-0.46	-0.37 (0.04)	-0.45	-0.38 (0.04)	-0.47	-0.37 (0.04)	-0.45
Being defended \rightarrow Δ loneliness	-0.02 (0.05)	-0.04	0.03 (0.07)	0.04	-0.02 (0.01)	-0.07	0.00 (0.01)	0.02
Boy \rightarrow Δ loneliness	-0.10 (0.04)	-0.16	-0.03 (0.08)	-0.03	-0.11 (0.04)	-0.17	-0.10 (0.04)	-0.16
Age \rightarrow Δ loneliness	0.03 (0.01)	0.07	0.03 (0.03)	0.07	0.02 (0.01)	0.06	0.02 (0.01)	0.06
Liked \rightarrow Δ loneliness	-0.15 (0.11)	-0.04	-0.14 (0.11)	-0.09	-0.14 (0.11)	-0.04	-0.15 (0.11)	-0.04
Victimization T1 \rightarrow Δ loneliness	0.24 (0.07)	0.22	0.24 (0.07)	0.22	0.24 (0.07)	0.22	0.25 (0.07)	0.22
Victimization T2 \rightarrow Δ loneliness	-0.09 (0.09)	-0.09	-0.10 (0.09)	-0.09	-0.08 (0.08)	-0.08	-0.09 (0.08)	-0.09
Boy \times Being Defended \rightarrow Δ Loneliness			-0.10 (0.10)	-0.07			-0.04 (0.02)	-0.10
Age \times Being Defended \rightarrow Δ Loneliness			0.00 (0.03)	0.01			0.01 (0.01)	0.05
R^2 in Δ loneliness	20.7%		20.8%		21.1%		21.7%	
Specific								
Loneliness T2 \rightarrow Δ loneliness	-0.38 (0.04)	-0.46	-0.37 (0.04)	-0.45	-0.38 (0.04)	-0.47	-0.36 (0.04)	-0.44
Being defended in bully-oriented ways \rightarrow Δ loneliness	-0.09 (0.04)	-0.14	-0.04 (0.06)	-0.06	-0.00 (0.01)	-0.00	0.03 (0.02)	0.12
Being defended in victim-oriented ways \rightarrow Δ loneliness	0.05 (0.05)	0.08	0.06 (0.07)	0.09	-0.02 (0.01)	-0.08	-0.02 (0.02)	-0.08
Boy \rightarrow Δ loneliness	-0.09 (0.04)	-0.15	-0.02 (0.08)	-0.03	-0.11 (0.04)	-0.18	-0.11 (0.04)	-0.18
Age \rightarrow Δ loneliness	0.03 (0.01)	0.07	0.03 (0.03)	0.04	0.02 (0.01)	0.06	0.02 (0.01)	0.05
Being liked \rightarrow Δ loneliness	-0.15 (0.11)	-0.04	-0.13 (0.11)	-0.03	-0.14 (0.11)	-0.03	-0.16 (0.11)	-0.04
Victimization T1 \rightarrow Δ loneliness	0.24 (0.07)	0.21	0.24 (0.07)	0.21	0.24 (0.07)	0.22	0.24 (0.07)	0.21
Victimization T2 \rightarrow Δ loneliness	-0.09 (0.09)	-0.08	-0.09 (0.09)	-0.09	-0.09 (0.09)	-0.09	-0.09 (0.09)	-0.09
Boy \times Being Defended in Bully-Oriented Ways \rightarrow Δ Loneliness			-0.11 (0.09)	-0.07			-0.07 (0.03)	-0.20
Age \times Being Defended in Bully-Oriented Ways \rightarrow Δ Loneliness			-0.02 (0.03)	-0.05			-0.01 (0.01)	-0.05
Boy \times Being Defended in Victim-Oriented Ways \rightarrow Δ Loneliness			-0.02 (0.10)	-0.01			0.02 (0.03)	0.04
Age \times Being Defended in Victim-Oriented Ways \rightarrow Δ Loneliness			0.02 (0.03)	0.05			0.02 (0.01)	0.10
R^2 in Δ loneliness	21.1%		21.3%		21.2%		22.5%	

Note. The full results of models presented in this table are portrayed in Supplemental Material 2. Estimates in bold represent statistically significant effects after false discovery rates correction. T1 = Wave 1; T2 = Wave 2; T3 = Wave 3; *SE* = standard error; *m* Δ loneliness = unconditional change in loneliness; I = intercept; Δ loneliness = latent change in loneliness.

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