



Understanding Defender Subtypes in Bullying: Implications for Effective Anti-Bullying Interventions

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Abstract

Although some anti-bullying programs stimulate defending victims, it is unclear whether defending effectively supports victims. One problem hampering research is that measures of defending not only reflect defending by *pure defenders* who do not have any other role in bullying. They also reflect defending by (1) *low profile defenders* who also are victims or outsiders and who can be assumed to lack social dominance and to only defend indirectly (comforting victims rather than confronting bullies); (2) *antisocial defenders* who also are *probullies* (bullies, assistants, and reinforcers) and who may lack the prosocial attitude that underlies defending actual victims; and (3) *ambivalent defenders* who simultaneously are low profile and antisocial defenders. Because the severity of such a contamination of defending measures depends on the prevalence of defender subtypes, we used peer nominations to classify the defenders among 6554 Dutch adolescents ($M_{\text{age}} = 13.3$, $SD = .5$; 48% boys) into defender subtypes and in terms of their defending strategies (indirect, direct, or indirect/direct). To test the assumptions mentioned above, we compared the defender types to each other and to victims, outsiders, and probullies in terms of social dominance and, as a proxy for a prosocial attitude, social preference. Most defenders either were low profile defenders who defended indirectly and lacked social dominance, or antisocial or ambivalent defenders who lacked social preference. Accordingly, only a minority of defenders may effectively support victimized peers. We encourage future researchers to differentiate between defender subtypes when examining defending effectiveness and when stimulating defending.

Keywords Defender subtypes · Direct and indirect defending · Bullying · Social dominance · Social preference · Gender differences

Introduction

Bullying in schools is a persistent problem that peaks in adolescence (Pouwels et al., 2016). Researchers increasingly have come to see bullying as a group process in

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which multiple participant roles can be distinguished (Chen et al., 2020; Salmivalli et al., 1996). Research has shown that not only the roles of bully and victim matter. Also important are *reinforcers*, who encourage bullies to carry on; *outsiders*, who avoid being involved in bullying; and *defenders*, who help victims either directly by confronting their bullies (*direct defenders*) or indirectly by providing mental support (*indirect defenders*) (Reijntjes et al., 2016). Some researchers also distinguished between those who initiate bullying (*bullies* or *ringleader bullies*) versus those who participate in bullying that has already started (*assistants*) (e.g. Salmivalli et al., 1996). However, for empirical reasons and in the interest of parsimony, other researchers combined the roles of bully, assistant, and reinforcer roles into a single *probully* role (e.g., Chen et al., 2020). In the present study we took that same approach.

In the previous decade researchers were optimistic that anti-bullying interventions could be improved by stimulating students to defend victims (Polanin et al., 2012; Salmivalli, 2014). Unfortunately, later evaluations of the effectiveness of defending in terms of diminishing bullying and improving victims' psychosocial functioning, were disappointing, especially in adolescence (Salmivalli et al., 2021). Our general aim was to increase our understanding of such disappointing results by identifying defender subtypes that are likely to be differentially effective in supporting adolescent victims of bullying. In line with Tian et al.'s (2025) recommendation, we did so by taking defenders' other bullying related roles into account. That is, we based our defender role typology on whether defenders also were probullies, outsiders, or victims.

Defenders' Other Roles as Indicators of Defending Ineffectiveness

To be able to oppose their bullying classmates without running the risk of being bullied themselves, effective defenders may need to be popular (Ma et al., 2019; Salmivalli et al., 2021). Being popular is related to being socially dominant, because it reflects having a reputation of being influential and visible within the peer group (Cillessen & Marks, 2011; Vermande et al., 2018). If popularity is necessary to defend effectively, ineffective defending may result from being carried out by victims and outsiders, who are known to be low in popularity and social dominance (Pouwels et al., 2016; Pronk et al., 2020). Accordingly, defenders' other roles as victims and/or outsiders may reflect a cause of defending ineffectiveness, namely a low social dominance. Because victims and outsiders also have introverted personality characteristics (Pronk et al., 2021), we refer to this defender subtype as *low profile* defenders.

Salmivalli et al. (2021) also suggested that the ineffectiveness of defending could be due to it being indirect rather

than direct. However, indirect defending also is the preferred defending strategy of outsiders (Pronk et al., 2013). Accordingly, it is unclear whether a lack of effectiveness is due to the indirectness of the defending or to the low social dominance of many indirect defenders. Therefore, we examined whether both factors can be disentangled by independently assessing whether defenders have additional roles and whether they use indirect or direct defending or both.

A second potential cause of findings that defending is ineffective, is that some probullies receive defender nominations from other probullies because of defending members of their own clique (Huitsing & Veenstra, 2012; Huitsing et al., 2014). Consequently, some defenders as identified by commonly used measures of defending, may not defend actual victims of bullying as identified by established role assignment procedures (Goossens et al., 2006; Salmivalli et al., 1996). Instead, they might rather defend those who harass such victims. Obviously, this would negatively affect results of research on defending effectiveness. Accordingly, defenders' other roles as probullies may reflect a tendency not to defend actual victims of bullying. We refer to the subtype of defenders who also are probullies as *antisocial defenders*.

Prevalence of Defender Subtypes

The extent to which defending by low profile and/or antisocial defenders negatively affects the results of research on defending effectiveness, depends on how common these defender subtypes are. To our knowledge, no previous research specifically examined defenders' additional roles, but from the published results of the few studies that did examine dual (Goossens et al., 2006) or triple (Chen et al., 2020) participant roles, it can be derived that a majority of all defenders in these studies were low profile defenders. This was especially true for female defenders, but less so for males. Small minorities of defenders belonged to the antisocial subtype. These studies also revealed the existence of still another minority of defenders that we refer to as *ambivalent defenders*, because they qualified as being both low profile and antisocial defenders. Based on the above considerations, our first aim was to examine the prevalence of low profile, antisocial, and ambivalent defender subtypes among all defenders and among female and male defenders separately.

Pursuing this aim necessarily also informs us about the prevalence of *pure defenders* who do not have any other role in bullying. Accordingly, they do not show additional bullying related behaviors that might reflect one of the causes of defending ineffectiveness discussed above. Goossens et al. (2006) found about a quarter of their defenders to be pure defenders. Although previous research did not specifically focus on the characteristics of pure defenders, relevant

evidence comes from studies that controlled measures of defending for correlates of other bullying related behaviors. Such studies suggest that pure defenders are highly empathic (Ma et al., 2019) and have a strong moral motivation (Kolárová et al., 2015; Pronk et al., 2019).

Based on the findings described above, we expected most defenders to be low profile defenders with the proportion being even higher among girls (expectation 1a). We also expected to find relatively small minorities of antisocial and ambivalent defenders (expectation 1b) as well as a substantial minority of pure defenders (expectation 1c). Because of a paucity of evidence, we refrained from formulating expectations about the extent to which antisocial, ambivalent, and pure defenders are represented among both gender groups.

Defenders' Use of Indirect and Direct Defending Strategies

Our second aim was to examine the defending strategies of the defender subtypes in terms of being indirect, or direct, or both. Previous research indicated that outsiders prefer indirect defending (Pronk et al., 2013). Assuming the same for victims, we therefore expected low profile defenders to primarily use indirect defending (expectation 2a). Antisocial defenders have been shown to use direct defending relatively often (Garandeau et al., 2022; Reijntjes et al., 2016). Accordingly, we expected antisocial defenders to use relatively more direct defending than low profile and pure defenders (expectation 2b).

Although we know of no evidence suggesting that expectations 2a and 2b are differentially valid for female versus male defenders, we tested them both for the group as a whole, and for both gender groups separately. We also examined the data in terms of pure and ambivalent defenders' use of indirect and/or direct defending strategies, but a lack of evidence prevented us from formulating expectations.

Defenders' Social Dominance and Social Preference

Above, we assumed that defenders' other roles in bullying reflect one or both of two potential causes of defending ineffectiveness, namely (1) a low social dominance and (2) a tendency to not defend actual victims of bullying. Our third aim was to test these assumptions. The available evidence suggests that low profile defenders' other roles as victims and/or outsiders reflect a low social dominance, and that antisocial defenders' other roles as probullies reflect a tendency not to defend actual victims. Because pure defenders do not have any other role in bullying, it could be assumed that neither of both causes applies to them and that they do defend effectively. This assumption seems justified for those pure defenders who defend either directly or both directly and indirectly (further referred to as *assertive* pure

defenders), but possibly not for those pure defenders who only use indirect defending (*comforting* pure defenders). Specifically, Reijntjes et al. (2016) found that students who only used indirect defending were lower in social dominance than students who used direct defending. However, because these authors largely ignored other bullying related behaviors, some of their indirect defenders may actually not have been pure defenders, but rather low profile defenders. This leaves it unclear how socially dominant comforting pure defenders actually are. To examine low profile and comforting pure defenders' social dominance, we compared them to antisocial, ambivalent, and assertive pure defenders and to three non-defender reference roles (victims, outsiders, and probullies) in terms of social dominance.

Because it was beyond the scope of this study to directly test the assumption that antisocial defenders do not defend actual victims of bullying, we used an indirect test. We reasoned that the assumption implies that antisocial defenders lack the prosocial attitude and the accompanying tendency to behave in prosocial ways that is associated with being liked by one's peers and therefore with having a high social preference (Garandeau et al., 2022; McDonald & Asher, 2018). Accordingly, we took a low social preference as a proxy for the lack of a prosocial attitude and we then compared antisocial, ambivalent, low profile, comforting pure, and assertive pure defenders to each other and to the three reference roles (victims, outsiders, and probullies) in terms of social preference.

We expected low profile defenders to show a low social dominance/high social preference pattern of the peer status variables. Such a pattern reflects their being less dominant than all other defenders and probullies and being more preferred than antisocial defenders, victims, outsiders, and probullies (expectation 3a). We further expected antisocial defenders' peer status pattern to resemble that of probullies, who are known to be high in social dominance and low in social preference (Pouwels et al., 2016). Specifically, we expected antisocial defenders to be at least as dominant as any other role category, and to be less preferred than low profile and pure defenders (expectation 3b). We also expected assertive pure defenders to have a high social dominance/high social preference peer status pattern. Such a pattern reflects being more dominant than low profile defenders, victims, and outsiders, and at least as preferred as any other role category (expectation 3c). We further expected comforting pure defenders to be more socially dominant than low profile defenders, victims, and outsiders, and to be at least as preferred as any other role category (expectation 3d). However, we refrained from formulating expectations about how their dominance compares to that of the other role categories. A lack of evidence

also prevented us from formulating expectations about ambivalent defenders' peer status. Finally, we saw no reason why expectations 3a to 3d would be differentially valid for girls versus boys, so we expected them to be valid for both gender groups.

Study Setup

We collected peer report data on defending (direct and indirect), other types of involvement in bullying (as a probully, an outsider, and a victim), and peer status (social preference and social dominance), in a large sample of Dutch adolescents. To test our prevalence expectations, we classified defenders as low profile, antisocial, pure, or ambivalent defenders and also as indirect, direct, or indirect/direct defenders. To be able to test our expectations concerning peer status, we further divided pure defenders into comforting and assertive pure defenders and then compared the five defender subtypes in terms of social dominance and social preference. Single role victims, outsiders, and probullies were included in this comparison to serve as references.

Method

Participants

The original sample consisted of 7684 first year students from 330 classrooms from 30 secondary education schools in the Netherlands. The data were collected in 2007, 2008 and 2009 in the second half of the school year. After obtaining approval from the schools and teachers, we sent parents a letter with information about the study's aims and procedures. Parents who objected to their children's participation returned a pre-printed form to the research team. Students were also asked for their consent before testing and they could opt out at any point during testing. This consent procedure was deemed acceptable by the Ethical Board of the Faculty. Of the original sample, 922 students did not participate because of parents' or students' objections, or because of students' absence. Because students were assigned to a role if nominated by at least 10% of the nominators, students in classes with 11 or fewer participants ($n=208$) were excluded from the analyses. This was to guarantee that all role assignments were based on nominations from at least two classmates. Accordingly, 6554 students (52.3% girls) from 303 classes (mean class size 24.4; SD 4.5) participated in the study. Students' mean age was 13.3 years ($SD=0.5$). Ages ranged from 11 – 16.3 years, but 85% had an age within the typical range for Dutch first year secondary school students with a normal school career. Students were of mixed socioeconomic and ethnic backgrounds with 86.1% being of Dutch origin.

Measures

Defending and Other Bullying Related Behaviors

Bullying Role Nomination Procedure To obtain students' peer nominations for the roles of indirect defender, direct defender, bully, reinforcer, outsider, and victim, we used an online version of the *Bullying Role Nomination Procedure* (Olthof et al., 2011) with a slightly adapted phrasing to be age-appropriate for adolescents. The original version of this instrument was adapted from Salmivalli et al.'s (1996) Participant Role Scales. Items were presented in a fixed order with students first receiving a definition of bullying that included the elements of intentionality, repetition, and power differential. They then received examples of physical bullying ("hit, kick, pinch, or push others"). Subsequently, students used dropdown lists containing all their classmates' names in a unique random order to first nominate classmates whom they thought had been victimized in that way and then to nominate classmates who had bullied others in that way. The same questions were asked for four other forms of bullying: property attacks (e.g., "take away belongings of others"), verbal bullying (e.g., "say mean things on the internet"), direct relational bullying (e.g., "exclude others from games") and indirect relational bullying (e.g., "give others a bad name"). For each bully they nominated, respondents received a follow up question about whether that particular bully initiated the bullying or joined in with others. However, in the present study we did not use the resulting ringleader bully versus assistant distinction.

Four more questions were asked to elicit outsider (e.g., "do not want to have anything to do with the bullying"), indirect defender (e.g., "tell victims not to feel bad about the bullying"), direct defender (e.g., "get annoyed and intervene when a classmate is bullied"), and reinforcer (e.g., "encourages the bullying") nominations. Peer-nominations were quasi-unlimited, that is, capped at a maximum of 10 (Gommans & Cillessen, 2015).

We calculated continuous proportion scores for each participant by dividing the number of received nominations by the total number of within-classroom nominators. To not underestimate students' bullying and victimization, the corresponding scores consisted of the average of the two forms for which they received the most nominations (cf. Olthof et al., 2011; Pronk et al., 2021). Spearman's rho correlation between the two highest scores was .87 for bullying, and .82 for being victimized.

Assigning Students to Defender Subtypes and to Non-defender Roles We first combined the bullying and reinforcer scores ($r=.65$, $p<.001$) into a single probully

score. We then used Goossens et al.'s (2006) 10% role assignment criterion to assign students to the indirect defender, direct defender, victim, outsider, and probully roles without limiting the number of roles a student could have. Specifically, students were assigned to each role for which they scored at least 10%, which implies that they could be assigned to one, two, three, four, or five roles. Subsequently, we assigned defenders to one of four defender subtypes. Students with one or both of the indirect and direct defender roles in combination with one or both of the victim and outsider roles, were assigned to the low profile defender subtype. Students with one or both of the indirect and direct defender roles in combination with the probully role, were assigned to the antisocial defender subtype. Students with one or both of the indirect and direct defender roles in combination with the probully role and with one or both of the victim and outsider roles, were assigned to the ambivalent defender subtype. Students with one or both of the indirect and direct defender roles only, were assigned to the pure defender subtype.

Social Dominance: Popularity and Resource Control

We measured social dominance as an aggregate of popularity (LaFontana & Cillessen, 2002) and resource control (i.e., access to desirable but scarce resources, Hawley, 1999). To assess participants' popularity, we asked: "Which students in your class are popular?" and "Which students are not popular?" Popularity was determined as the standardized difference between the standardized number of received popular and the standardized number of received unpopular nominations (LaFontana & Cillessen, 2002). All standardizations were by classroom. We assessed resource control using Olthof et al.'s (2011) six items (e.g., "Which students in your class have the nicest items or the best place when something is happening?"). Based on the number of nominations students received, continuous proportion scores were computed for each item that were subsequently averaged and standardized by classroom (coefficient alpha = .88). To obtain a single measure of social dominance, the measures of popularity and resource control ($r = .66$, $p < .001$) were averaged. Higher scores indicate more dominance.

Social Preference

We assessed social preference by having students rate their classmates on a 7-point scale ranging from *extremely dislikeable* to *extremely likeable* (Maassen et al., 1996). Social

preference was calculated by averaging all ratings received, and then standardizing by classroom.

Procedure

Participating students completed online questionnaires during regular school hours. Trained research assistants gave instructions and assisted students whenever necessary. Students were reassured that their answers would remain confidential and instructed not to share their answers. Total testing time—including collecting data not of interest to this study—was about 90 min.

Analytical Strategy

We first tested our expectations 1a to 1c concerning the prevalence of defender subtypes. After examining how many defenders were low profile, antisocial, ambivalent, and pure defenders, we used Chi square tests to examine whether the composition of the defender group in terms of defender subtypes, differed for both gender groups. We then tested our expectations 2a and 2b concerning the prevalence of indirect, direct, and indirect/direct defenders per defender subtype. This was done by conducting Chi square tests for the group as a whole and for male and female defenders separately. Subsequently, we tested our expectations 3a to 3d concerning differences among the defender subtypes and the three reference roles in terms of social dominance and social preference. Specifically, we conducted a 2 (Gender) $\times$ 8 (Role Category) $\times$ 2 (Peer Status = social dominance vs. social preference) mixed-design analysis of variance with Peer Status as the within-subject factor. Because our expectations implied a Role Category $\times$ Peer Status interaction, we focused on effects that included this interaction when describing and interpreting the results and when conducting follow-up analyses.

Results

Prevalence of Defender Subtypes

The numbers of students assigned to each defender subtype for all defenders and for male and female defenders separately, are presented in Table 1. As can be seen at the bottom of Table 1, 2437 students qualified as a defender. This amounts to 37.2% of all participants, most of them being girls, $\chi^2(1) = 921.04$, $p < .001$, $V_{\text{Cramer}} = .38$. A Gender $\times$ Defender Subtype Chi-square test revealed that the defender subtypes were not equally represented among female versus male defenders, $\chi^2(3) = 154.49$, $p < .001$, $V_{\text{Cramer}} = .25$. To further examine

Table 1 Prevalence of the low profile, antisocial, pure, and ambivalent defender subtypes for the sample as a whole and per gender group

Defender Subtype	All		Boys		Girls	
	<i>n</i>	(col %)	<i>n</i>	(col. %)	<i>n</i>	(col. %)
Low Profile	1279	(52.5)	216	(37.9)	1063	(58.9)
Antisocial	272	(11.2)	132	(23.2)	140	(7.6)
Pure	664	(27.2)	138	(24.2)	526	(28.6)
Ambivalent	222	(9.1)	84	(14.7)	138	(7.5)
All	2437	(100)	570	(100)	1867	(100)

Percentages printed in bold (italics) indicate that the column percentage for this gender was significantly larger (smaller) than could be expected in the case of no gender differences

these differences, we evaluated the standardized adjusted residuals of each cell in terms of whether they exceeded the Bonferroni corrected critical value of (-)2.73. In line with our expectation 1a, the first line of Table 1 reveals that more than half of all defenders were low profile defenders and that the proportion was even higher among female defenders. However, among the much smaller subgroup of male defenders, low profile defenders only constituted a large minority, rather than a majority. When taken together, these findings confirm expectation 1a for girls, but not for boys.

The second and fourth lines of Table 1 reveal that antisocial and ambivalent defenders each constituted about 10% of all defenders, which confirms expectation 1b. Unlike the defender group as a whole, antisocial and ambivalent

defenders were overrepresented among boys, rather than among girls. Finally, the third line of Table 1 reveals that about a quarter of all defenders were pure defenders, which confirms our expectation 1c. Male and female defenders did not differ in terms of the proportion of all defenders who were pure defenders.

Prevalence of Indirect, Direct, and Indirect/direct Defending

Table 2 presents the division across the indirect, direct and indirect/direct defending strategies for each defender subtype among all defenders and among male and female defenders separately. Defender Subtype x Defending Strategy Chi-square tests for all defenders

Table 2 Prevalence of the use of indirect, direct, and indirect/direct defending strategies across the defender subtypes for all defenders and per gender group

All Defenders	Indirect		Direct		Indirect/Direct		All
Defender Subtype	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>
Low Profile	1030	80.5	34	2.7	215	16.8	1279
Antisocial	110	40.4	82	30.1	80	29.4	272
Pure	450	67.8	54	8.1	160	24.1	664
Ambivalent	88	39.6	51	23.0	83	37.4	222
All	1678	68.9	221	9.1	538	22.1	2437
Male Defenders							
Defender Subtype	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>
Low Profile	170	78.7	17	7.8	29	13.4	216
Antisocial	45	34.1	56	42.4	31	23.5	132
Pure	76	55.1	31	22.5	31	22.5	138
Ambivalent	30	35.7	34	40.5	20	23.8	84
All	321	56.3	138	24.2	111	19.5	570
Female Defenders							
Defender Subtype	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>	row %	<i>n</i>
Low Profile	860	80.9	17	1.6	186	17.5	1063
Antisocial	65	46.4	26	18.6	49	35.0	140
Pure	374	71.1	23	4.4	129	24.5	526
Ambivalent	58	42.0	17	12.3	63	45.7	138
All	1357	72.7	83	4.4	427	22.9	1867

Percentages printed in bold (italics) indicate that the row percentage for the particular defending strategy was significantly larger (smaller) than expected in the case of no differences between defender subtypes

and for male and female defenders separately, revealed that defender subtypes differed in terms of the defending strategies used. For all defenders and for male and female defenders separately, the relevant statistics were $\chi^2(6) = 371.54$, $p < .001$, $V_{\text{Cramer}} = .28$; $\chi^2(6) = 95.02$, $p < .001$, $V_{\text{Cramer}} = .29$; and $\chi^2(6) = 197.01$, $p < .001$, $V_{\text{Cramer}} = .23$, respectively. Evaluating the standardized adjusted residuals of each cell in terms of whether they exceeded the Bonferroni corrected critical value of $(-).2.73$, revealed that a large majority of low profile defenders were indirect defenders. This was true for the group of defenders as a whole, but also for male and female defenders separately, thus confirming our expectation 2a. Relatively more antisocial defenders defended directly. As before, this was true for the group of defenders as a whole, but also for male and female antisocial defenders separately, thus confirming our expectation 2b. As can be seen in the rightmost columns at the bottom panel of Table 2, female antisocial defenders also were indirect/direct defenders relatively often. Note, that the pattern of defending strategy use of ambivalent defenders was very similar to that of antisocial defenders, both for male and female defenders. Although antisocial and ambivalent defenders used relatively less indirect defending than the other defender subtypes, it can be seen in the *indirect* column of Table 2 that even these defender subtypes included large minorities of indirect defenders.

Finally, most pure defenders were indirect defenders, indicating that they belonged to the comforting pure defender subtype. This was true for both male and female pure defenders. The remaining pure defenders were direct or indirect/direct defenders, indicating that they belonged to the assertive pure defender subtype.

Defenders' Peer Status

To test our expectations 3a to 3d, we next examined how low profile, antisocial, ambivalent, comforting pure, and assertive pure defenders compared to each other and to the bully, victim, and outsider reference roles in terms of social dominance and social preference. A technical problem that prevented retrieving received social preference ratings, led us to exclude 116 students from the analyses. The resulting subsample included 4342 students (59.1% girls).

The Gender x Role Category x Peer Status analysis of variance yielded the expected Role Category x Peer Status interaction $F(7, 4326) = 302.07$, $p < .001$, but also a significant Gender x Role Category x Peer Status three-way interaction $F(7, 4326) = 2.21$, $p = .03$. Nevertheless, the Role Category x Peer Status interaction also resulted from separate Role Category x Peer Status mixed design analyses of variance per gender group with $F(7, 1770) = 142.97$, $p < .001$ and $F(7, 2556) = 199.51$,

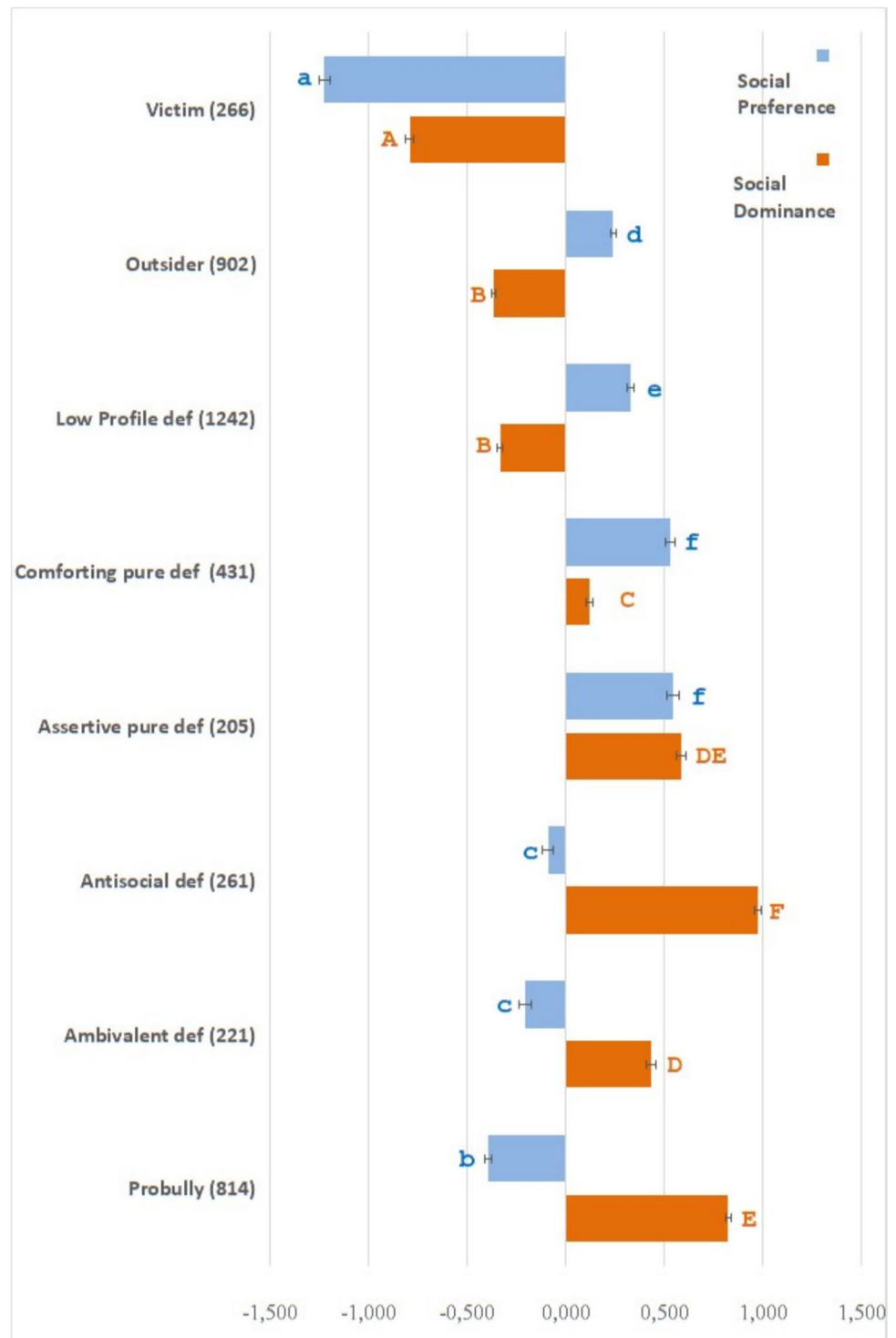
$p < .001$ for boys and girls, respectively. We then carried out one-way analyses of variance with social dominance and social preference as the dependent variables and Role Category as the between subjects factor for the subsample as a whole and for boys and girls separately. These analyses yielded significant effects of Role Category with F values ranging from 68.17 to 421.19 and all p values $< .001$. Because Levene's test revealed that error variances were not equal among the role categories, we used the Games-Howell statistic to make multiple comparisons among means.

The Role Category x Peer Status interaction for the subsample as a whole, together with the comparisons among means, is depicted in Fig. 1. Similar figures for boys and girls separately are presented in the supplementary material Figures S1 and S2. The differences between means for the subsample as a whole and for both gender groups separately, were quite similar and none of the gender differences was relevant for evaluating our expectations. Accordingly, the following description is valid for all participants, but where appropriate we also refer to gender differences.

Figure 1 reveals that the data on social dominance were in line with expectation 3a in that low profile defenders were low in social dominance when compared to the other defender subtypes and to probullies. In line with expectation 3b, antisocial defenders were more socially dominant than any other role category. In line with expectation 3c, assertive pure defenders were more dominant than low profile defenders, victims, and outsiders. Nevertheless, assertive pure defenders still were less socially dominant than antisocial defenders and, as can be seen in Figure S2, in the case of girls also than probullies. In line with expectation 3d, comforting pure defenders were more socially dominant than low profile defenders, victims, and outsiders. However, they were less dominant than assertive pure defenders, antisocial defenders, ambivalent defenders, and probullies. Finally, ambivalent defenders were relatively high in dominance, although less so than antisocial defenders and probullies.

As can also be seen in Fig. 1, the data on social preference indicate that low profile defenders were more socially preferred than antisocial defenders, victims, outsiders, and probullies, which is in line with our expectation 3a. However, they still were less preferred than both types of pure defenders. Antisocial defenders were less preferred than low profile and pure defenders, which is in line with expectation 3b. Assertive and comforting pure defenders were more socially preferred than any other role category, which is in line with expectations 3c and 3d. Finally, ambivalent defenders resembled antisocial defenders and probullies in being less preferred than low profile, comforting, and assertive pure defenders.

Fig. 1 Visual representation of the Role Category x Peer Status interaction. The *n* of each role category is given in parentheses. *Note.* Error bars represent standard errors. Paired comparisons are presented using letter markings in upper case bold orange (social dominance) and lower case blue (social preference). Any pair of social dominance (preference) means that does not share at least one uppercase (lowercase) letter, differed significantly. For example, the **DE** marking of assertive pure defenders' social dominance indicates that these defenders were not significantly more dominant than ambivalent defenders, but also not significantly less dominant than probullies. In contrast, the lack of a shared letter in the social preference markings of low profile defenders and outsiders indicates that both role categories differed significantly in terms of social preference



Discussion

We theorized that disappointing results of research on defending effectiveness could be due to defending being carried out by two different subtypes of defenders. These were (1) low profile defenders, who may lack the social dominance needed to defend effectively and who primarily

defend indirectly and (2) antisocial defenders, who may lack the prosocial attitude that underlies defending actual victims of bullying. Accordingly, we first examined whether these defender subtypes are sufficiently prevalent to negatively affect results on defending effectiveness. Next, we examined the nature of defenders' defending strategies in terms of being indirect, direct, or both. Finally, we

tested our assumptions about low profile defenders' lack of social dominance and antisocial defenders' lack of a prosocial attitude as reflected in a low social preference.

As expected, a majority of all defenders were low profile defenders, but this was entirely due to the relatively large group of female defenders. Low profile defenders were less common among male defenders. Also as expected, small minorities were antisocial or ambivalent defenders. However, these subtypes were relatively more prevalent among male defenders than among female defenders. Finally, as expected, a substantial minority of about one out of four defenders were pure defenders. When taken together, low profile, antisocial, and ambivalent defenders constituted a large majority of all defenders, which suggests that they are sufficiently prevalent to negatively affect results on defending effectiveness.

As Pronk et al.'s (2013) and Reijntjes et al.'s (2016) results led us to expect, low profile defenders tended to defend indirectly. Relatively more antisocial and ambivalent defenders defended directly, although they also used indirect defending quite often. These results suggest that Yun and Juvonen's (2020) finding of indirect defending being less effective in supporting victims of bullying, could reflect most indirect defenders' low social dominance and some indirect defenders' tendency to not defend actual victims of bullying.

The data generally confirmed our expectations regarding some defenders' lack of social dominance and other defenders' lack of a prosocial attitude. Low profile defenders were low in social dominance but relatively high in social preference, thus indicating that they were liked by their peers. This suggests that although low profile defenders have the prosocial attitude that is needed to defend actual victims of bullying, their position in the peer group may be too weak to do so effectively.

Antisocial defenders showed a high social dominance/low social preference pattern of peer status variables. This indicates that they had a strong position in the peer group, but that they were unlikely to have the prosocial attitude that is reflected in being liked by one's peers. Actually, antisocial defenders' peer status pattern was more similar to that of probullies than to that of low profile and pure defenders. Remarkably, the same was true for ambivalent defenders. When combined with our finding that antisocial and ambivalent defenders also resembled each other in terms of their use of indirect and direct defending strategies, these findings suggest that ambivalent defenders actually are quite similar to antisocial defenders. Ambivalent defenders' outsider behavior and/or being victimized, may be less important when studying defending effectiveness. When seen in the light of earlier findings of mutual defending by bullies (Huitsing & Veenstra, 2012; Huitsing et al., 2014), our

findings suggest that antisocial and ambivalent defenders' defending behavior may not just constitute ineffective defending, but rather the active promotion of bullying. As such, their defending may be more important in explaining disappointing results on defending effectiveness than their modest numbers seem to suggest.

Pure defenders were highly preferred, thus suggesting that they have the prosocial attitude needed to support actual victims of bullying. Assertive pure defenders were also high in social dominance, which suggests that they may effectively defend actual victims of bullying. However, it is important to note that they were still less dominant than antisocial defenders, and for girls, also less dominant than probullies. Although comforting pure defenders resembled low profile defenders also in terms of primarily using indirect defending, they were more socially dominant. This suggests that it is possible to disentangle indirect defending from a low social dominance. Future researchers could examine how a low social dominance position and a tendency to defend indirectly independently affect defending effectiveness. Future research could also sort out whether being less dominant than probullies, negatively affects pure defenders' ability to effectively defend victims. Possibly, their high social preference compensates for their relative lack of dominance, because it facilitates forming cooperative alliances to support each other against more dominant others (Farrell & Dane, 2020).

Defending and Gender

In line with previous findings (Ma et al., 2019), defenders were less often boys than girls. Furthermore, the most promising subtype of defenders, namely pure defenders, were also underrepresented among male defenders. In contrast, antisocial and ambivalent defenders, whose defending behavior may harm rather than support actual victims of bullying, were overrepresented among male defenders. Because defending mostly occurs within gender groups (Huitsing et al., 2014), these results suggest that victimized boys have a worse chance of being defended effectively than victimized girls.

Strengths, Limitations, and Future Directions

One strength of this study is that our defender typology enabled us to examine defenders' other bullying related behaviors as indicators of two theoretically and empirically plausible causes underlying defending ineffectiveness. Second, our large sample enabled us to identify and examine less common, but potentially important, types of defenders. Antisocial and ambivalent defenders serve as a clear example.

The study is not without limitations. Although we found our defender role typology to be related to factors that likely underlie defending effectiveness, it remains for future research to directly relate that typology to defending effectiveness. A second limitation is that the available evidence led us to assume that anti-social defenders, unlike pure defenders, do not defend actual victims of bullying. However, it remains for future research to provide quantitative estimates of who are the beneficiaries of the defending behavior of each defender subtype. Third, all measures were based on peer report, thus enhancing chances that shared method variance strengthened the relations between defender subtypes and peer status. Future researchers could integrate self and teacher reported defending in their measures.

Finally, our data stem from before the rise of smartphone and social media use. However, online defending, bullying, and victimization are highly related to the corresponding offline behaviors (Seo, 2023). Accordingly, the co-occurrence of cyberdefending with other bullying related behaviors as reflected in our defender typology, may also be largely similar. Nevertheless, there may be differences as well. For example, in their review of the cyberdefending literature, Sobol et al. (2025) found a relationship between victimization and defending that was absent in a recent study focusing on the offline context (Malamut et al., 2025). Although this may have to do with the use of self report versus peer report based measures of defending (Ma et al., 2019; Tian et al., 2025), another explanation is that the anonymity of the online context better enables victims to defend other victims. If so, the online context might yield a power dynamics that is more favorable to defending by low profile defenders than the offline context.

Implications for Research and Practice

We recommend future research on the effectiveness of defending in offline and online contexts to differentiate among defenders along the lines of our defender typology. Researchers using a variable based approach, could control measures of defending for bullying, victimization, and outsider behavior when relating them to measures of victimization and victim wellbeing. In a person based approach the number of defenders of each subtype in a particular class or grade could be related to measures of victimization and victim wellbeing. Because of their high social dominance and social preference, assertive pure defenders are the most promising type of defenders, but their modest number may limit their impact in terms of alleviating the plight of victims. The much larger number of comforting pure defenders indicates that indirect defending is used by a relatively large group of defenders who are intermediately dominant and highly preferred. Future research could

examine the effectiveness of this type of defending. Possibly, if carried out by pure defenders, indirect defending is more effective than has been suggested in the literature.

Our findings on low profile defenders reinforce doubts about whether anti-bullying interventions should stimulate these students' defending behavior, especially when considering the accompanying mental health risks for such defenders (Malamut et al., 2021). Our findings on antisocial and ambivalent defenders further suggest that interventionists and practitioners should realize that some self-reported or peer-reported defending in a particular group of adolescents might support perpetrators of bullying, rather than their victims. Obviously, such defending should not be stimulated. Instead, students should be stimulated to become assertive pure defenders. This requires interventions to have two different components. First, students' compassion with the plight of victims should be enhanced. Second, defenders who empathize with victims could be taught how to regulate the emotions and the stress that may accompany assertive defending, thus facilitating their engagement in that type of defending (Tian et al., 2025).

Finally, our findings suggest that victimized adolescent boys have a relatively low chance of being defended effectively, which may be due to adolescent boys' reluctance to intervene in bullying. Ingram et al. (2019) found such a reluctance to be related to permissiveness of sexual harassment, homophobic name calling, lack of empathy, pro-bullying attitudes, and social dominance, all of which they saw as manifestations of toxic masculinity. Accordingly, efforts to stimulate male adolescents' effective defending might profit from incorporating a positive masculinity approach (Wilson et al., 2022).

Conclusions

A large majority of all adolescent defenders were unlikely to effectively support actual victims of bullying. This was because they also were victims or outsiders who lack sufficient social dominance to defend effectively, or because they also were bullies who lack the prosocial attitude that underlies defending actual victims of bullying. These findings suggest that research on defending effectiveness that does not take defenders' other roles into account, is likely to yield disappointing results. Most pure defenders only defended indirectly and it is unclear whether these comforting pure defenders are sufficiently dominant to effectively support victims. In contrast, assertive pure defenders were both socially dominant and socially preferred, thus implying that they may effectively support victims. We encourage future researchers to differentiate between defender subtypes when examining defending effectiveness and when stimulating defending. We hope that such research will facilitate the development of interventions that alleviate victims' suffering by effectively curbing bullying and strengthening their weak position in the peer group.

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Data Availability The data supporting the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Ethics Approval and Consent to Participate We complied with APA ethical standards in the treatment of the sample. Informed consent was obtained from the schools, the participants, and their parents. Formal IRB approval was not required when preparing the study, but the consent procedures were deemed acceptable by the local research ethics committee.

Consent for Publication Not applicable.

Competing interests We have no competing interests to disclose.

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