The Influence of Gender and Bullying Behavior of Children on the Perceived Seriousness and the Willingness to Intervene

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Abstract

Bullying remains a prevalent and harmful phenomenon with serious implications for children's well-being and development. Adults, especially in supervisory roles, play a critical role in addressing bullying, yet their willingness to intervene can vary. This experimental study examined how the gender of the bully and the type of bullying behavior (physical vs. relational) influence the perceived seriousness and adults' intervention intentions using an online vignette-based questionnaire. Drawing on the Theory of Planned Behavior (Ajzen, 2012), System Justification Theory (Jost et al., 2004), and prior empirical findings on gendered patterns in bullying behavior, a within-subjects survey design was employed. A total of 223 adult participants evaluated eight scenarios adapted from validated bullying vignettes, varying the gender of the bully and type of bullying behaviour (physical vs. relational). A repeated-measures ANOVA revealed significant main effects for both gender and bullying type: participants were more willing to intervene when the bully was female and when the bullying was physically aggressive. Contrary to expectations based on System Justification Theory, there was no significant interaction effect between gender and bullying type. However, the highly educated nature of the sample may have led to weaker stereotypical beliefs, potentially reducing the effects of gender and the expected interaction effect. These findings contribute to the literature on bullying interventions by highlighting gender-related perceptions in adult responses to bullying and reinforcing the need for training that addresses implicit biases.

Key words: Bullying behaviours, adult intervention, gender bias, perceived seriousness, Theory of Planned Behavior, System Justification Theory

Introduction

Although bullying prevention efforts increasingly emphasize the role of adult intervention, little is known about how adults assess such situations (Yoon & Bauman, 2014). In the literature bullying is commonly defined as repetitive and intentional harmful behavior, characterized by an imbalance in power (Menesini & Salmivalli, 2017). Between 9 and 25% of school-age children in western countries are victims of bullying (Menesini & Salmivalli, 2017). It can have detrimental short- and long-term consequences (Arseneault, 2017; Aluede et al., 2008; McDougall & Vaillancourt, 2015; Menesini & Salmivalli, 2017). Victims can, amongst others, experience physical symptoms (Aluede, 2006), lower academic performance, low self-esteem and multiple mental health implications such as depression, anxiety and suicidality (Christina et al., 2021; McDougall & Vaillancourt, 2015; Van den Broek e.a, 2022; Wolke et al., 2013). The high prevalence of bullying and the far reaching consequences has led to an increase in research into bullying interventions.

In research it is recognized that adults, and especially teachers, play a vital role in preventing and reducing bullying (Bokkel et al., 2020; Veenstra et al., 2014). An adult's or teacher's intervention impacts the adjustment of those involved and communicates the acceptability of bullying (Dawes et al., 2024). However, the willingness to intervene among adults varies considerably, and research on the factors motivating them is scarce (Van Aalst et al., 2022). Since gender seems to matter for the prevalence of bullying (Smith et al., 2019), the perception of bullying (Salin & Hoel, 2013) and for the outcome of interventions (Kennedy, 2020), it is a relevant factor to take into account. Another key factor warranting further exploration is the type of bullying behavior, as bullying can manifest in various forms which can influence intervention willingness differently (Yin et al., 2024). Bullying behaviour is commonly categorized into verbal, physical, and relational types (Casper, 2021). Relational or social bullying is highly prevalent among girls. It can include actions like spreading gossip, telling lies, betraying trust, passing notes, ignoring the victim, or excluding the victim (Aluede, 2008). In contrast, physical bullying, more frequently observed among boys, typically involves actions such as pushing, kicking, or hitting others (Smith et al., 2019).

These gendered patterns of bullying may shape how adult bystanders perceive and respond to bullying behaviors, potentially introducing bias in their willingness to intervene. Further research is needed to examine how gender and bullying type influence and interact to

affect adult intervention, with the ultimate goal of informing more effective anti-bullying strategies and reducing overall bullying prevalence.

Theoretical Background

The theory of planned behaviour

The theory of planned behaviour (TPB) can be applied to shed light on factors that drive individuals' willingness to intervene in bullying situations. A systematic review of 75 studies concluded that the TPB is a suitable framework for research into this topic (Van Aalst et al., 2022). The theory posits that human behavior is guided by intentions (Ajzen, 2012). In the context of bullying, an individual's intervention intentions are influenced by three factors: their attitudes towards bullying, the subjective norms surrounding it and the perceived behavioural control.

Attitudes towards bullying

Attitudes form based on an individual's beliefs about the likely consequences of the behavior and their earlier experiences associated with the behavior (Ajzen, 2012). Multiple studies have found individual level variables associated with adults' attitudes or beliefs and their responses to bullying incidents (Van Aalst et al., 2022). Amongst others, it was found that the gender of the bystander, their empathy for the victim and their personal experiences with bullying appeared to affect their perceptions and actions (Bauman and Del Rio, 2006; Van Aalst et al., 2022). Additionally, if an individual has been bullied in the past themselves or if they experienced it in their direct environment, they might have a more negative attitude towards bullying and be more inclined to intervene (Dedousis-Wallace et al., 2014).

Besides the individual level variables, characteristics of the bullying situations are also expected to be of influence. Multiple studies focus on the effects of the different types of bullying behaviour on teachers' or adults' perceptions of bullying and on their intervention intentions (Bauman & Del Rio, 2006; Chen, 2023; Swit, 2019; Yoon & Bauman, 2014). Of the three bullying types described above, physical bullying has been associated with the highest intervention willingness, followed by verbal and then relational bullying types (Yin et al., 2024). Researchers state that the difference in intervention readiness between the different types of bullying behaviour might be due to the perceived seriousness of the situation (Bauman & Del Rio, 2006; Chen, 2023; Dedousis-Wallace et al., 2014; Liu et al., 2024). The

perceived seriousness refers to how harmful individuals perceive bullying behaviors to be (Chen, 2023). Physical bullying is often viewed as direct and harmful, while relational bullying, such as gossiping or social exclusion, is seen as less severe (Yin et al., 2024). The consequences of relational bullying tend to be psychological and are less noticeable. Therefore, adults might be more willing to intervene in physical bullying situations compared to relational bullying situations (Chen, 2023; Begotti et al., 2016; Bell & Willis, 2016; Swit, 2019).

The influence of subjective norms

The second factor that influences an individual's intentions are the perceived subjective norms (Azjen, 2012). These perceived norms entail an individual's beliefs about the normative expectations and behaviors of others. As can be seen in bullying in the organizational context, a norm that can be of influence are the existing gender norms and stereotypes (Salin & Hoel, 2013). Gender norms are socially constructed rules or expectations about how individuals should behave or look based on their perceived gender (Ridgeway & Correll, 2004). These norms influence roles, behaviors, and responsibilities that are considered appropriate for men and women. Gender stereotypes, in contrast, can be defined as cognitive shortcuts that attribute traits or behaviours to individuals solely based on their gender (Ridgeway & Correll, 2004)

In western cultures girls are often expected to be empathetic, nurturing and relationship-focused, while boys are expected to be disruptive, dominant and assertive (Riley, 2014). Adults may subconsciously expect girls to adhere to stereotypical roles. When girls violate these norms by bullying, it may seem more problematic, prompting quicker or more frequent intervention (Riley, 2014). For boys, there may be an expectation that they are more likely to misbehave and engage in bullying than girls. In cross-cultural surveys, bullying perpetrators are indeed more often boys than girls, across all ages (Smith et al., 2019). This prevalence of male perpetrators may shape adults' attitudes and perceived norms, leading them to view such behavior as typical for boys. When bullying incidents are perceived as normal behaviour, and potentially as less severe, adults will be less likely to intervene (Kochenderfer-Ladd and Pelletier, 2007).

Despite the relevance of gender and behavior type, these factors have not been sufficiently examined in the context of bullying incidents. In a systematic review, Van Aalst et al. (2022) found that none of the studies considered the gender of the bully when

evaluating teacher perceptions and intervention intentions. Additionally, the relationship between the perceived seriousness of a bullying incident and the willingness to intervene remains underexplored in this context. While these two constructs are related, they are not identical; willingness to intervene is also theorized to be influenced by the third component of the TPB: perceived behavioral control (Ajzen, 2012; Dedousis-Wallace et al., 2014). In bullying situations, this construct may reflect adults' knowledge about how to intervene, as well as their confidence in their ability to do so. If an individual rates a bullying situation as serious but does not feel confident in their intervention abilities, they might not be willing to intervene.

To conclude, based on the TPB, it is expected that adults' attitudes about responses, normative beliefs about bullying, and perceived behavioral control, are important predictors of their behavioral intentions on bullying situations (Yoon & Bauman, 2014). Specifically the gender of the bully and the displayed bullying behaviour type are expected to be of influence. Adults may perceive bullying as more serious and be more willing to intervene when the bully is a girl or when the bully displays physically aggressive bullying behavior.

System Justification Theory

The system justification theory (SJT) offers an additional perspective to individuals' intentions to intervene by highlighting the influence of social structures. The theory states that individuals tend to defend and justify existing social, economic, and political systems, even when those systems may be unfair or disadvantageous to them (Jost & Banaji, 1994). Individuals are motivated to uphold existing social norms and structures because they provide a sense of stability and security (Jost et al., 2004). If a person deviates from the system, individuals might be more willing to correct them or intervene.

A potential explanation for this tendency is that individuals might experience cognitive dissonance (Owuamalam et al., 2016). Cognitive dissonance is the psychological discomfort experienced when an individual holds conflicting thoughts, beliefs, or attitudes. In the context of SJT, this dissonance arises when people recognize that the social system is unfair but also depend on or live within it. To reduce the dissonance, and thereby the discomfort, people may rationalize or reframe the system as fair, necessary or inevitable (Owuamalam et al., 2016).

In line with the SJT, research into gender norms has shown that individuals may justify existing gender hierarchies even when they are personally disadvantaged by them

(Mouafo & Nzekaih, 2021). For example, women who strongly endorse gender system justification are less likely to support actions aimed at improving their position and are more likely to accept or rationalize victimization, such as domestic abuse (Mouafo & Nzekaih, 2021).

In the context of bullying, adults may unconsciously accept gender-typical forms of aggression as natural or less problematic. As a result, they may be less likely to intervene when the bullying aligns with traditional gender roles and more likely to respond when behavior violates these expectations. Since, according to the SJT, individuals would be more likely to intervene when an individual deviates from the norm (Jost et al., 2004). Building onto the gender differences described above, the more physically aggressive bullying type can be labeled as typically masculine, and the behaviour that girls are expected to show more, the relationally aggressive behaviour, can be labeled as typically feminine.

To conclude, based on the SJT, adults are expected to be more willing to intervene when girls display typically masculine behavior or when boys display typically feminine behaviour compared to when they behave congruently with their gender.

The current study

The theory of planned behavior (Ajzen, 2012) and the system justification theory (Jost et al., 2004) were applied as a theoretical framework to gain insight into adults' perceptions and intervention intentions in bullying situations. Adults may perceive bullying as more serious and be more willing to intervene when the bully is a girl or when the bully displays physically aggressive bullying behavior. Additionally, these factors may shape the willingness to intervene together. When girls display typically masculine behavior or when boys display typically feminine behaviour adults may perceive it as more severe and may be more willing to intervene.

However, the influence of the gender of the bully has not been researched in the context of primary school bullying situations. Additionally, since gender has not been considered, it is also unknown whether there is an interaction between the gender and the type of bullying behavior, as proposed based on the SJT. Therefore, the following research question was formulated: To what extent do children's gender and type of bullying behavior influence adults' willingness to intervene? Researching this question can add to the knowledge on intervening intentions with the aim of improving the intervention likelihood of adults to reduce childhood bullying and its negative consequences.

Based on the theory of planned behaviour the first two hypotheses were formed:

H1.A When girls display bullying behaviour individuals will be more *willing to intervene* than when boys display bullying behaviour.

H1.B When girls display bullying behaviour individuals will *perceive the situation as more serious* than when boys display bullying behaviour.

H2.A When boys and girls display physically aggressive bullying behavior individuals will be more *willing to intervene* than when they display relational bullying behaviour.

H2.B When boys and girls display physically aggressive bullying behaviour individuals will *perceive the situation as more serious* than when they display relational bullying behaviour.

The final hypothesis was formed based on the system justification theory:

H3.A When boys and girls behave incongruently with their gender, individuals will be more *willing to intervene* than when they behave congruently with their gender.

H3.B When boys and girls behave incongruently with their gender, individuals will *perceive the situation as more serious* than when they behave congruently with their gender.

Lastly, exploratory analysis will be done to research the relation between perceived seriousness and willingness to intervene.

To conclude, the goal of the present study is to examine how the gender of the bully and the type of bullying behaviour influence the perceived seriousness and adults' intervention intentions. Together, these findings could add to the literature on bullying interventions, increasing the study's practical relevance.

Method

Sample

An a priori power analysis was performed for a repeated measures, within factors ANOVA. For the power analysis, the standard significance level of .05 and a power of .95 were used (Faul et al., 2007). For the correction among repeated measures a value of 0.2 was used and for the nonsphericity correction 1 (Greenhouse & Geisser, 1959). Based on the results of the study of Van Aalst and colleagues (2024) and on the bachelor thesis *Gender Stereotypes in parental challenges* (De Zeeuw, 2024) from the same research line as the current study, a small effect size is expected, which, according to Cohen's f (Muller & Cohen, 1989), is around .10. Based on a power analysis the aim is to recruit a minimum of 220 participants.

The inclusion criteria entailed that participants had to be between the age of 18 and 67 years old and needed to have a proficient understanding of the Dutch language. There were no further exclusion criteria determined. The final sample (N = 223) consisted of 131 female (58,3%) and 72 male (32.3%) participants, none of the participants identified as non-binary or other genders and 20 participants did not fill out the demographic information questions (M age = 36.77, SD = 14.51). Of the participants, 55 reported having experience with working in education, 146 participants did not and 2 individuals preferred not to say. The sample characteristics are summarized in Table 1.

For the educational level answer categories, the International Standard Classification of Education (ISCED; Centraal Bureau voor de Statistiek, n.d.) was used to enable the researchers to refer the results to an internationally recognised educational level. In the current study sample, 4% of participants were classified as having a low level of education, 16.6% as having a medium level, and 69.1% as highly educated.

Table 1

Demographic Information of the Study Sample

Characteristics		*n*	*%*
Gender	Female	131	58.7
	Male	72	32.3
	Missing	20	9.0
Educational level			
	Primary education	1	0.4
	Lower secondary education	8	3.6
	Upper secondary education	37	16.6
	Bachelor or equivalent	82	36.8
	Master or equivalent	72	32.3
	Prefer not to say	3	1.3
	Missing	20	9.0
Experience in education	Yes	55	24.7
	No	146	65.5
	Prefer not to say	2	0.9
	Missing	20	9.0

Note. N=223. Participants were on average 36.77 years old (SD = 14.51).

Design

The study employed an experimental within-subjects design with a 2 × 2 factorial structure, manipulating two variables: the gender of the child (boy vs. girl) and the type of bullying behavior (typically masculine vs. typically feminine)(Table 2). All participants were exposed twice to each of the four experimental conditions.

Table 2

The Four Experimental Conditions in the Presented Vignettes

Gender	Bullying type	
	Typically masculine	Typically feminine
Boy	Boy x Masculine	Boy x Feminine
Girls	Girl x Masculine	Girl x Feminine

Data were collected through an online survey that was created and administered via the questionnaire software of Qualtrics (Qualtrics. 2025). Participants could fill out the survey on a laptop, tablet, or smartphone. The survey was created within a larger research project. It contained a total of 16 vignettes, each depicting a hypothetical bullying scenario set in a primary school context. Eight of the vignettes focussed on the behaviour and gender of the bully and the other eight focussed on the gender and behaviour of the victim. Only the former were used in the current study. Additionally, participants were presented with an intervention suggestion after every vignette and were asked to rate the quality and the suitability of the intervention. This part was also not relevant to the current study and was not taken into account.

After providing informed consent on the information page, participants were presented with the vignettes. The order in which the participants completed the two sets of vignettes (bully-focused vs. victim-focused) was randomized to control for order effects. Each vignette was followed by two rating-scale questions assessing participants' willingness to intervene in the described situation and their perceived seriousness of the situation.

Within the bully-focused set, four vignettes illustrated stereotypically male forms of bullying, such as physical aggression and direct verbal insults, while the other four depicted stereotypically female forms of bullying, such as relational aggression and social exclusion (see Appendix A for the vignettes). These scenarios were adapted from prior work by Yoon and Bauman (2014) and were presented in Dutch. As an example, one of the vignettes containing typically masculine bullying behaviour was as follows:

A boy/girl bullies a classmate by being physically aggressive. This has happened multiple times in the past few weeks. Today, during PE, a classmate who was the goalkeeper accidentally let a ball through. Out of frustration the bully pushed them which made them almost fall over.

To ensure robust internal validity, the order of the eight bully-focused vignettes was randomized, as were the factors of child gender and behavior type within each vignette. The design and coding of the survey ensured that participants encountered all possible combinations of gender and behavior type equally, while maintaining a counterbalanced within-subjects structure.

At the end of the survey, participants were presented with two additional sets of items measuring their system justification beliefs related to gender, and their endorsement of gender essentialist stereotypes. These scales were included as part of the broader research project. The resulting data were not analyzed in the present study, as they fell outside the scope of the current research questions.

Measurements

Likelihood of Intervention

The dependent variable of this study was *Willingness to intervene*. It was measured by asking participants to respond to a question that followed each of the eight bullying vignettes. The proposed question was: “How likely are you to intervene in this situation?” (*Hoe waarschijnlijk is het dat u in deze situatie zou ingrijpen?*). This question was based on the research discussed in a systematic and meta-analytic review on attitudes toward bullying and intervention responses (Dawes et al., 2024). Participants had to respond on a seven-point Likert-type scale (1= not at all (*helemaal niet*), 7= certainly (*helemaal wel*)). Each participant was presented twice with every experimental condition. The values were averaged per experimental condition for further analysis.

Perceived Seriousness of Bullying

The other dependent variable of this study, the perceived seriousness, was measured with the question: “How serious do you perceive the described bullying situation as?” (*Hoe ernstig vindt u de beschreven pestsituatie?).* Participants responded on a seven-point Likert-type scale (1=Not at all serious (*Helemaal niet ernstig*), 7=Very serious (*Zeer*

ernstig)). Every experimental condition was presented twice. The values were averaged per condition for further analysis.

Data gathering

The data collection took place between the 4th of April until the 18th of May 2025. participants were recruited via convenience sampling in the Netherlands. The researchers sent a link to the survey via social media. The target was friends, family and students of the social sciences department of Utrecht University. Additionally, the survey was posted in multiple Dutch Facebook groups focussed on individuals working in education. The aim of oversampling this group was to ensure that the findings would reflect the perceptions and intentions of individuals who are most likely to have encountered bullying situations in real-world settings. Moreover, while the sample also included participants from other backgrounds, this distribution allows future research to explore potential differences between educational and non-educational groups.

To avoid potential priming effects and the social desirability bias, the objective of this study was not mentioned in the introduction of the survey. Instead it was presented as examining individuals' opinions on different bullying interventions. On average the survey took about 15 minutes to fill out. Participants were not compensated for their time.

The experiment was approved by the Faculty Ethics Review Committee (24-2179) and by the Student Ethics Review & Registration System of the faculty of social sciences of Utrecht University. The participants were informed that the data will be saved for 10 years on a protected server of Utrecht University. Additionally, the results of the study will be used for educational purposes or the data may be published in scientific journals. Only aggregated group-level data will be reported in such publications, ensuring that individual responses cannot be traced back to any participant. All participants provided active consent to this described anonymous data gathering, use and storage.

Statistical analysis

Missing data

Only cases in which active consent was given and all eight vignettes were filled out were taken into account. If data on the demographic questions were missing the cases were included in the analysis.

Planned analyses

For the descriptive statistics the means and standard deviations of the willingness to intervene and perceived seriousness were requested. Additionally, for the planned exploratory analysis of perceived seriousness and willingness to intervene, four Pearson correlations were performed to explore the connection between the variables.

For hypothesis 1A, 2A and 3A, a repeated measures anova was performed with bullying type (typically masculine, typically feminine) and gender of the bully (boy, girl) as independent variables and willingness to intervene as the dependent variable. To test 1A, the main effect of gender (boy, girl) on willingness to intervene will be examined. To test 2A, the main effect of behaviour type (typically masculine, typically feminine) on willingness to intervene will be examined. To test 3A, the interaction effect of gender (boy, girl) and behaviour type (typically masculine, typically feminine) on willingness to intervene will be examined.

For hypothesis 1B, 2B, and 3B, another repeated measures anova was performed with bullying type (typically masculine, typically feminine) and gender of the bully (boy, girl) as independent variables but with perceived seriousness as the dependent variable. To test 1A, the main effect of gender (boy, girl) on perceived seriousness will be examined. To test 2A, the main effect of behaviour type (typically masculine, typically feminine) on perceived seriousness will be examined. To test 3A, the interaction effect of gender (boy, girl) and behaviour type (typically masculine, typically feminine) on perceived seriousness will be examined. If the interaction effect is significant, Post hoc tests with Sidak corrections will be performed to examine the effect.

All tests were performed with IBM SPSS Statistics (Version 29, IBM Corp. 2023) software and used an alpha of .05.

Results

Descriptive statistics

The mean willingness to intervene scores for each condition were as follows: boys displaying typically masculine behaviour (M = 6.09, SD = 0.96), boys displaying typically feminine behaviour (M = 5.52, SD = 1.13), girls displaying typically masculine behaviour (M = 6.22, SD = 0.91), and girls displaying typically feminine behaviour (M = 5.56, SD = 0.99).

The mean perceived seriousness scores for each condition were as follows: boys displaying typically masculine behaviour (M = 5.87, SD = 0.84), boys displaying typically feminine behaviour (M = 5.39, SD = 0.85), girls displaying typically masculine behaviour (M = 6.00, SD = 0.84), and girls displaying typically feminine behaviour (M = 5.46, SD = 0.83).

Exploratory analyses

There was a significant positive correlation between willingness to intervene and perceived seriousness across all vignette conditions (see Table 2). According to Cohen's (1989) guidelines, these correlations can be interpreted as large. This suggests that participants who rated incidents as more serious also reported being more willing to intervene. The strongest correlation was observed when the bully was a girl displaying masculine behaviour, r(221) = .79, p < .001, 95% CI [.73, .83]. Since, based on the literature, the variables describe two different concepts, they will be considered separately (Azjen, 2012; Dedousis-Wallace et al., 2014).

Table 2

Correlations Between Willingness to Intervene and Perceived Seriousness Across Conditions

Condition	*r*	95% CI	*p*
Boy – Masculine behaviour	.74	[.68, .80]	< .001
Boy – Feminine behaviour	.71	[.63, .77]	< .001
Girl – Masculine behaviour	.79	[.73, .83]	< .001
Girl – Feminine behaviour	.70	[.63, .77]	< .001

Note. r = Pearson's correlation coefficient. CI = confidence interval. All correlations are significant at p < .001.

Repeated measures ANOVA - Willingness to intervene

A 2 (child gender: boy, girl) × 2 (behavior type: typically masculine, typically feminine) repeated measures ANOVA was conducted to examine whether participants' willingness to intervene differed depending on the gender of the child and the type of behavior displayed. All ANOVA assumptions were checked. The Shapiro–Wilk test indicated a significant deviation from normality in the residuals, W= 0.848, p = <.001. However, ANOVA is robust to moderate violations of normality with large sample sizes, and inspection of Q–Q plots did not reveal extreme deviations. Therefore, the analysis was conducted as planned.

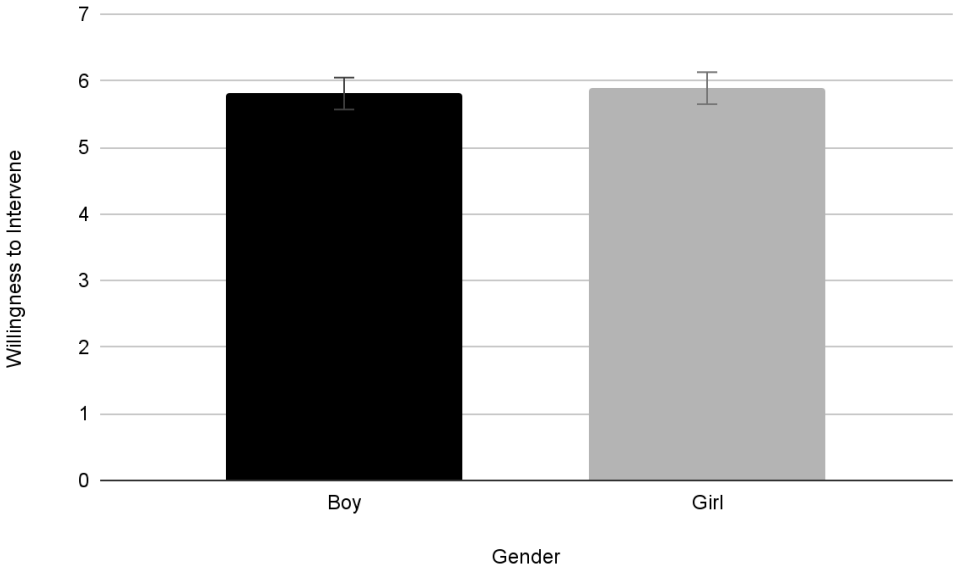
The main effect of child gender was significant, $F(1, 222) = 3.93$, $p = .049$, $\eta p^2 = .017$, indicating that participants were slightly more willing to intervene with girls ($M = 5.89$, $SE = .06$) compared to boys ($M = 5.81$, $SE = .06$)(see figure 1). According to Cohen's (1989) guidelines, the effect size can be interpreted as small.

There was a significant main effect of behavior type, $F(1, 222) = 153.78$, $p < .001$, $\eta p^2 = .409$, indicating that participants were more willing to intervene when children displayed typically masculine behavior ($M = 6.16$, $SE = .06$) compared to typically feminine behavior ($M = 5.54$, $SE = .06$) (see figure 2). According to Cohen's (1989) guidelines, the effect size can be interpreted as medium.

The interaction between child gender and behavior type was not significant, $F(1, 222) = 1.60$, $p = .208$, $\eta p^2 = .007$, indicating that the effect of behavior type on intervention willingness did not differ significantly between boys and girls. When boys and girls behave incongruently with their gender, individuals will not be more willing to intervene than when they behave congruently with their gender.

Figure 1

Estimated Marginal Means of Willingness to Intervene by Gender



Note. Error bars represent 95% confidence intervals, the difference is significant $p = .049$.

Figure 2

Estimated marginal Means of Willingness to Intervene per Bullying Behaviour Type

Note. Error bars represent 95% confidence intervals, the difference is significant $p < .001$.

Repeated measures ANOVA - Perceived seriousness

A 2 (child gender: male, female) × 2 (behavior type: typically masculine, typically feminine) repeated measures ANOVA was conducted to examine whether participants' perceptions of seriousness varied based on the gender of the child and the type of bullying behavior. The Shapiro–Wilk test indicated a significant deviation from normality in the residuals, $W = 0.93$, $p = <.001$. However, given that ANOVA is robust to moderate violations of normality with sample sizes larger than 30, and inspection of Q–Q plots did not reveal extreme deviations, the analysis was conducted as planned.

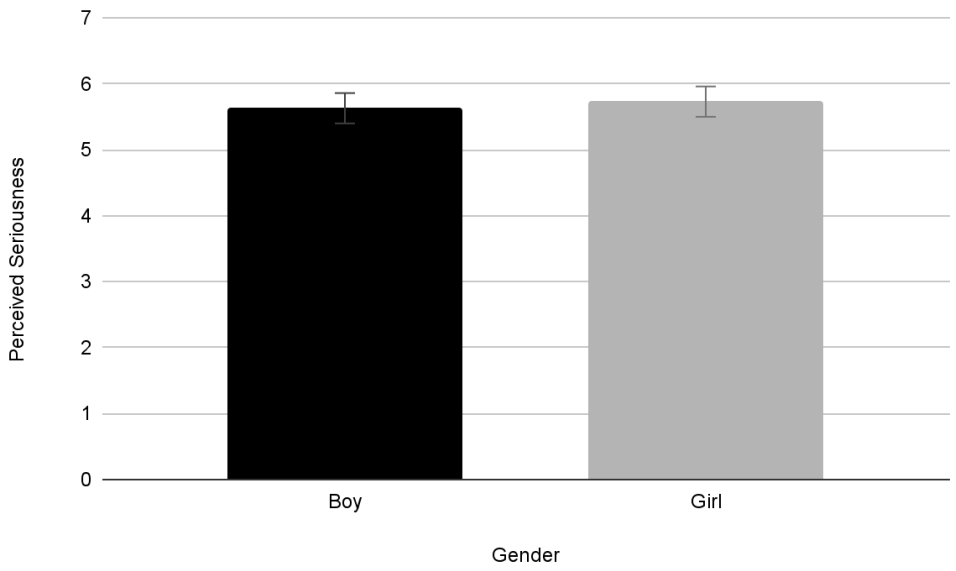
There was a significant main effect of child gender, $F(1, 222) = 7.115$, $p = .008$, $\eta^2 = .031$, indicating that participants rated bullying incidents as more serious when the bully was a girl ($M = 5.73$, $SE = .06$) compared to when it was a boy ($M = 5.63$, $SE = .05$) (see figure 3). According to Cohen's (1989) guidelines, the effect size can be interpreted as small.

A significant main effect of behavior type was found, $F(1, 222) = 111.11$, $p < .001$, $\eta^2 = .33$, indicating that typically masculine bullying behaviors were perceived as significantly more serious ($M = 5.94$, $SE = .05$) than typically feminine behaviors ($M = 5.42$, $SE = .05$) (see figure 4). According to Cohen's (1989) guidelines, the effect size can be interpreted as small.

Lastly, there was no significant interaction between child gender and behavior type, $F(1, 222) = 0.961$, $p = .33$, $\eta^2 = .004$. This suggests that the difference in perceived seriousness between typically masculine and typically feminine behaviors did not vary depending on the gender of the child.

Figure 3

Estimated Marginal Means of Perceived Seriousness per Gender



Note. Error bars represent 95% confidence intervals, the difference is significant $p = .008$.

Figure 4

Estimated Marginal Means of Perceived Seriousness per Bullying Behaviour Type

Note. Error bars represent 95% confidence intervals, the difference is significant $p < .001$.

Discussion

The present study aimed to examine the influence of the gender of the bully and the type of bullying behavior on the perceived seriousness and adults' willingness to intervene, using the Theory of Planned Behavior (TPB; Ajzen, 2012) and the System Justification Theory (SJT; Jost et al., 2004) as a theoretical framework.

The descriptive results showed that the willingness to intervene and perceived seriousness were highly correlated. Based on the literature it was decided that they would be treated as separate variables (Dedousis-Wallace et al., 2014). The results of the performed analyses showed great similarities.

We found that individuals perceive the situation as more serious and are more willing to intervene when girls display bullying behaviour than when boys display bullying behaviour. This was in line with what we expected in H1.A and B. Individuals intentions and perceptions are likely influenced by the existing gender norms (Ajzen, 2012; Salin & Hoel, 2013). These norms dictate that girls are expected to be empathetic and kind (Riley, 2014). By bullying, they violate the gender norms, which can lead to an increase in perceived seriousness and intervention willingness. However, the effect size was found to be very small. Highlighting that other factors are expected to be of greater influence.

Secondly, the effect of bullying behaviour was examined. We found that individuals perceive the situation as more serious and are more willing to intervene when children display typically masculine bullying behaviour than when they display typically feminine bullying behaviour. This was in line with what we expected in H2.A and B. This finding reflects existing literature suggesting that the physical bullying that is typical for boys, is viewed as harmful and elicits stronger reactions from adults (Yoon & Bauman, 2014). The typically feminine bullying type, in contrast, is seen as less severe (Yin et al., 2024). The effect size was moderate to large, indicating not only a statistically significant difference but also a practically meaningful one. This suggests that the type of bullying behavior is a salient factor in shaping adults' intervention intentions, potentially more so than the gender of the child involved.

Lastly, the interaction between bullying type and gender was examined. We found that when boys and girls behave incongruently with their gender (i.e. display the behaviour that was typical for the opposite gender), individuals do not perceive it as more serious and will not be more willing to intervene than when the children behave congruently with their gender. These results were not in line with hypothesis 3.A and B, that were based on the SJT

(Jost et al., 2004). We expected adults to perceive it as less serious and be less likely to intervene when the bullying aligns with traditional gender roles, and more serious and more likely when behavior violates these expectations.

This may suggest that, in the context of bullying, system-justifying tendencies are less salient or are potentially overridden by other factors such as the perceived seriousness of the bullying type. Alternatively, a limitation of the study could have been of influence. Specifically, the limitation that the sample might not be representative of the general population. In this study's sample 69,1% of the participants were highly educated. Highly educated individuals tend to have less gender stereotypical beliefs and norms (Hossain & Islam, 2024), potentially reducing the effects of gender in this study and explaining the absence of the interaction effect.

The study potentially has another limitation. The use of vignettes may not fully capture the complexity of real-life bullying situations which reduces the ecological validity of the study. Bullying situations are complex and there are factors this study did not take into account, potentially reducing how comparable the vignettes are to real life (Scheithauer et al., 2006). One overlooked factor is that individuals can occupy multiple roles in bullying dynamics. For example, a bully may also be a victim, and a victim may at times engage in bullying behavior themselves. Additionally, bullying often occurs in group settings, and the reactions of bystanders and the victim have been found to be of influence (Scheithauer et al., 2006). These factors may affect an adult's level of empathy, potentially leading to variation in the perceived seriousness and their willingness to intervene. Moreover, the vignettes in this study explicitly stated that children were bullying and what behaviour they displayed. In practice, there might be overlap in the bullying behaviours that are displayed (Scheithauer et al., 2006) or, behaviours may be harder to notice, especially for relational bullying (Chen et al., 2018). The challenge of recognizing relational bullying may result in an even larger gap in intervention intentions in real-life situations.

Future research should aim to recruit a sample that is more representative of the general population in terms of educational level. This would allow for a more accurate examination of the effects of the bully's gender. Additionally, efforts should be made to design vignettes or experimental settings that more closely reflect real-life situations in order to enhance ecological validity.

The findings of this study offer both theoretical and practical contributions. Theoretically, they extend the TPB to the context of adults' intentions to intervene in bullying situations, supporting its relevance for researching how personal attitudes and perceived

norms influence intervention behavior. While the results did not support the expected interaction effects based on the SJT, suggestions for future research were presented to examine this effect further. Importantly, the study also addresses a notable gap in the literature by investigating how the bully's gender affects both the perceived seriousness of bullying and adults' willingness to intervene.

Practically, these findings can inform improvements in bullying intervention efforts. They underscore the importance of teacher training programs that raise awareness of potential gender-based biases in recognizing and responding to bullying. The lower likelihood of intervention in cases of typically feminine bullying behaviour highlights the need for greater sensitivity and skills in detecting and addressing this form of bullying (Liu et al. 2024). Especially since the consequences of relational bullying can be as severe, or even more damaging, than those of physical bullying (Christina et al., 2021). Ultimately, this research might help the development of more effective anti-bullying strategies and contribute to reducing the overall bullying prevalence.

References

Ajzen, I. (2012). The theory of planned behavior. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of Theories of Social Psychology* (Vol. 1, pp. 438–459). Sage. https://doi.org/10.4135/9781446249215.n22

Aluede, O. (2006). Bullying in Schools: A form of Child abuse in schools. *Educational Research Quarterly*, 30 (1), 37-49.

Aluede, O., Adeleke F., Omoike, D., Afen- Akpaida, J. (2008). A review of the extent, nature, characteristics and effects of bullying behaviour in schools. *Journal of Instructional Psychology,* 35(2), George Uhlig Publisher

Arseneault, L. (2017). Annual Research Review: The persistent and pervasive impact of being bullied in childhood and adolescence: implications for policy and practice. *Journal Of Child Psychology And Psychiatry*, *59*(4), 405–421. https://doi.org/10.1111/jcpp.12841

Bauman, S., & Del Rio, A. (2006). Preservice teachers' responses to bullying scenarios: Comparing physical, verbal, and relational bullying. *Journal Of Educational Psychology*, *98*(1), 219–231. https://doi.org/10.1037/0022-0663.98.1.219

Begotti, T., Tirassa, M., & Maran, D. A. (2016). School bullying episodes: attitudes and intervention in pre-service and in-service Italian teachers. *Research Papers in Education*, *32*(2), 170–182. https://doi.org/10.1080/02671522.2016.1158857

Bell, K. J. S., & Willis, W. G. (2016). Teachers' perceptions of bullying among youth. *The Journal Of Educational Research*, *109*(2), 159–168. https://doi.org/10.1080/00220671.2014.931833

Bokkel, I. M. T., Stoltz, S. E. M. J., Van Den Berg, Y. H. M., De Castro, B. O., & Colpin, H. (2020). Speak up or stay silent: Can teacher responses towards bullying predict victimized students' disclosure of victimization? *European Journal Of Developmental Psychology*, *18*(6), 831–847. https://doi.org/10.1080/17405629.2020.1863211

Casper, D. M. (2021). Types of Traditional (Offline) Bullying. In P. K. Smith & J. O. Norman, *The Wiley Blackwell Handbook of Bullying: A Comprehensive and International Review of Research and Intervention*. Wiley-Blackwell. https://doi.org/10.1002/9781118482650.ch6

Centraal Bureau voor de Statistiek. (n.d.). *ISCED*. Centraal Bureau Voor De Statistiek. https://www.cbs.nl/nl-nl/onze-diensten/methoden/classificaties/onderwijs-en-beroepen/isced

Chen, L., Wang, L., & Sung, Y. (2018). Teachers' Recognition of School Bullying According to Background Variables and Type of Bullying. *Journal Of Educational Cultural And Psychological Studies (ECPS Journal)*, *18*. https://doi.org/10.7358/ecps-2018-018-chen

Chen, L. (2023). Exploring the Impact of Multiple Predictors on Teachers' Willingness to Intervene in Relational Bullying: The Moderating Role of Victim-Blaming Tendency. *Journal Of School Violence*, *23*(3), 363–375. https://doi.org/10.1080/15388220.2023.2299984

Christina, S., Magson, N. R., Kakar, V., & Rapee, R. M. (2021). The bidirectional relationships between peer victimization and internalizing problems in school-aged children: An updated systematic review and meta-analysis. Clinical Psychology Review, 85. https://doi.org/10.1016/j.cpr.2021.101979.

Dawes, M., Malamut, S. T., Guess, H., & Lohrbach, E. (2024). Teachers' Attitudes Toward Bullying and Intervention Responses: A Systematic and Meta-analytic Review. *Educational Psychology Review*, *36*(4). https://doi.org/10.1007/s10648-024-09951-5

Dedousis-Wallace, A., Shute, R., Varlow, M., Murrihy, R., & Kidman, T. (2014). Predictors of teacher intervention in indirect bullying at school and outcome of a professional development presentation for teachers. *Educational Psychology*, *34*(7), 862–875. https://doi.org/10.1080/01443410.2013.785385

De Zeeuw, K. (2024). *Genderstereotypen in ouderlijke uitdagingen* [Unpublished Bachelor thesis]. Utrecht University.

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191. https://doi.org/10.3758/bf03193146

Greenhouse, S. W., & Geisser, S. (1959). On methods in the analysis of profile data. *Psychometrika*, *24*(2), 95–112. https://doi.org/10.1007/bf02289823

Hossain, D., & Islam, R. (2024). A systematic literature review on the relationship between education and gender ideology. *Discover Global Society*, *2*(1). https://doi.org/10.1007/s44282-024-00071-7

IBM Corp. (2023). IBM SPSS Statistics for Windows, version 29.0.2. Armonk, NY: IBM Corp. [Computer software]

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system‐justification and the production of false consciousness. *British Journal of Social Psychology*, *33*(1), 1–27. https://doi.org/10.1111/j.2044-8309.1994.tb01008.x

Jost, J. T., Banaji, M. R., & Nosek, B. A. (2004). A Decade of System Justification Theory: Accumulated Evidence of Conscious and Unconscious Bolstering of the Status Quo. *Political Psychology*, 25(6), 881–919. https://doi.org/10.1111/j.1467-9221.2004.00402.x

Kochenderfer-Ladd, B., & Pelletier, M. E. (2007). Teachers' views and beliefs about bullying: Influences on classroom management strategies and students' coping with peer victimization. *Journal Of School Psychology*, *46*(4), 431–453. https://doi.org/10.1016/j.jsp.2007.07.005

Liu, L., Huang, Y., Liu, X., & Zhang, L. (2024). Why do teachers intervene? understanding the relationship between subjective norms and teachers' intervention in real-life bullying incidents. *Social Psychology of Education*, *28*(1). https://doi.org/10.1007/s11218-024-09965-5

McDougall, P., & Vaillancourt, T. (2015). Long-Term adult outcomes of peer victimization in childhood and adolescence: Pathways to adjustment and maladjustment. American Psychologist, 70(4), 300–310. https://doi.org/10.1037/ a0039174

Menesini, E., & Salmivalli, C. (2017). Bullying in schools: the state of knowledge and effective interventions. *Psychology Health & Medicine*, *22*(sup1), 240–253. https://doi.org/10.1080/13548506.2017.1279740

Muller, K., & Cohen, J. (1989). Statistical Power Analysis for the Behavioral Sciences. *Technometrics*, *31*(4), 499. https://doi.org/10.2307/1270020

Owuamalam, C. K., Rubin, M., & Spears, R. (2016). The System Justification Conundrum: Re-Examining the Cognitive Dissonance Basis for System Justification. *Frontiers in Psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.01889

Qualtrics. (2024). *Qualtrics XM Platform*. Qualtrics. [Computer software] https://www.qualtrics.com

Riley, T. (2014). Boys are Like Puppies, Girls Aim to Please: How Teachers' Gender Stereotypes may Influence Student Placement Decisions and Classroom Teaching. *Alberta Journal Of Educational Research*, 60(1), 1–21. https://doi.org/10.11575/ajer.v60i1.55729

Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the Gender System. *Gender & Society*, *18*(4), 510–531. https://doi.org/10.1177/0891243204265269

Salin, D., & Hoel, H. (2013). Workplace bullying as a gendered phenomenon. *Journal Of Managerial Psychology*, *28*(3), 235–251. https://doi.org/10.1108/02683941311321187

Scheithauer, H., Hayer, T., Petermann, F., & Jugert, G. (2006). Physical, verbal, and relational forms of bullying among German students: age trends, gender differences, and correlates. *Aggressive Behavior*, *32*(3), 261–275. https://doi.org/10.1002/ab.20128

Smith, P. K., López-Castro, L., Robinson, S., & Görzig, A. (2019). Consistency of gender differences in bullying in cross-cultural surveys. *Aggression And Violent Behavior*, *45*, 33–40. https://doi.org/10.1016/j.avb.2018.04.006

Swit, C. S. (2019). Differential associations between relational and physical aggression: why do teachers and parents perceive these behaviors differently? *Early Child Development And Care*, 191(3), 321–337. https://doi.org/10.1080/03004430.2019.1621304

Van den Broek, A., Ramakers, C., & Cuppen, C. (2023). *Veilig op school: Landelijke Veiligheidsmonitor 2020-2021: Veiligheidsbeleid en veiligheidsbeleving in het primair en voortgezet onderwijs.* ResearchNed. https://www.huiselijkgeweld.nl/publicaties/rapporten/2023/03/01/rapport-veilig-op-school

Van Aalst, D. A. E., Huitsing, G., & Veenstra, R. (2022). A Systematic Review on Primary School Teachers' Characteristics and Behaviors in Identifying, Preventing, and Reducing Bullying. *International Journal Of Bullying Prevention*. https://doi.org/10.1007/s42380-022-00145-7

Veenstra, R., Lindenberg, S., Huitsing, G., Sainio, M., & Salmivalli, C. (2014). The role of teachers in bullying: The relation between antibullying attitudes, efficacy, and efforts to reduce bullying. *Journal Of Educational Psychology*, *106*(4), 1135–1143. https://doi.org/10.1037/a0036110

Wolke, D., Copeland, W. E., Angold, A., & Costello, E. J. (2013). Impact of bullying in childhood on adult health, wealth, crime, and social outcomes. *Psychological Science,* 24(10), 1958–1970. https://doi.org/10.1177/0956797613481608

Yin, H., Gao, J., & Han, Z. (2024). A survey-experiment study on school bullying victims' reactions and teachers' serious perception and intervention willingness. *Teaching and Teacher Education*, *150*, 104735. https://doi.org/10.1016/j.tate.2024.104735

Yoon, J., & Bauman, S. (2014). Teachers: A Critical But Overlooked Component of Bullying Prevention and Intervention. *Theory Into Practice*, *53*(4), 308–314. https://doi.org/10.1080/00405841.2014.947226

Appendix A

Bullying Vignettes

Vignette 1

A boy/girl bullies a classmate by using physical violence. This has happened multiple times in the past few weeks. Today, during gym class, the classmate was playing as the goalkeeper and accidentally let a goal through. Out of frustration, the bully gave the goalkeeper a hard push, nearly causing them to fall.

(Een jongen/meisje pest een klasgenoot door fysiek geweld te gebruiken. Dit is de afgelopen weken vaker gebeurd. Vandaag, tijdens de gymles, speelde de klasgenoot als keeper en liet per ongeluk een doelpunt door. Uit frustratie gaf de pester de keeper een harde duw, waardoor die bijna viel.)

Vignette 2

A boy/girl bullies a classmate by repeatedly making insulting remarks. The bully gives the classmate hurtful nicknames such as “Fatty” or “Tubby” because of their weight and regularly calls them a “crybaby” or “loser.”

(Een jongen/meisje pest een klasgenoot door herhaaldelijk beledigende opmerkingen te maken. De pester geeft de klasgenoot kwetsende bijnamen zoals 'Dikkie' of 'Tonnetje' vanwege diens gewicht en noemt diegene ook regelmatig een 'jankerd' of 'loser'.)

Vignette 3

A boy bullies a classmate by repeatedly threatening to fight them. Today, the bully threatened to wait for the classmate after school because the classmate used the classroom computer that the bully also wanted to use.

(Een jongen pest een klasgenoot door deze herhaaldelijk te bedreigen met vechten. Vandaag dreigde de pester de klasgenoot na school op te wachten, omdat de klasgenoot de klascomputer gebruikte die hij ook wilde gebruiken.)

Vignette 4

A boy bullies a classmate by frequently damaging their belongings. There have been multiple instances where he walked past the classmate, grabbed their pencil, and snapped it in half.

(Een jongen pest een klasgenoot door regelmatig diens eigendommen te beschadigen. Er zijn meerdere gevallen geweest waarin hij langs de klasgenoot liep, diens potlood pakte en het doormidden brak.)

Vignette 5

A boy/girl bullies a classmate by excluding them. He/she repeatedly claimed during recess games that the teams were already full and that the classmate couldn't join. When another student asked to join, they were allowed to participate immediately.

(Een jongen/meisje pest een klasgenoot door deze buiten te sluiten. Hij/zij beweerde meerdere malen tijdens spelletjes in de pauze dat de teams vol waren en dat de klasgenoot daarom niet mee kon doen. Toen een andere leerling vroeg om mee te spelen, mocht diegene wel direct meedoen.)

Vignette 6

A boy/girl bullies a classmate by saying negative things behind their back. For instance, the bully told other students that the classmate "still wets the bed."

(Een jongen/meisje pest een klasgenoot door achter diens rug om negatieve dingen over diegene te zeggen. Zo heeft de pester tegen andere leerlingen verteld dat de klasgenoot 'nog steeds in bed plast'.)

Vignette 7

A boy/girl bullies a classmate by spreading rumors about them. For example, he/she told other students that the classmate had lice, which led some students to start avoiding the classmate.

(Een jongen/meisje pest een klasgenoot door geruchten over diegene te verspreiden. Zo vertelde hij/zij tegen andere leerlingen dat de klasgenoot luizen had, wat ertoe leidde dat sommige leerlingen de klasgenoot begonnen te mijden.)

Vignette 8

A girl bullies a classmate by excluding them. She recently removed the classmate from a WhatsApp group that included almost the entire class. When the classmate asked to be added back, the girl said “no” and walked away.

(Een meisje pest een klasgenoot door deze buiten te sluiten. Zo heeft zij de klasgenoot onlangs uit een WhatsApp-groep verwijderd waarin bijna de hele klas zat. Toen de klasgenoot vroeg om weer toegevoegd te worden, zei het meisje “nee” en liep weg.)