A Different View on Bullies' Cognitions: Examining Bullies' Beliefs About Their Victims' Initial Views of Them

Bachelor Thesis Pedagogische Wetenschappen

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Date: 26-06-2017

Abstract

Bullying is a common problem among adolescents. Bullies often have agentic goals which includes having social status and dominance using aggression to pursue those goals. This makes them popular, but not well liked. It is important to investigate why bullies maintain this behaviour despite its negative consequences in terms of likeability. In this study we will investigate the following question: Do bullies think their victims would not have liked them anyway and therefore have nothing to lose in terms of likeability? The first explanation we will study is if bullies value their popularity more than their likeability. The second possible explanation is that bullies endorse beliefs that their victims dislike them even before the bullying starts. The present study included 383 Dutch adolescents (232 participants) in the first and second year of secondary education. The participants filled out questionnaires about themselves and their peers on bullying and peer status. Results show a significant positive correlation between bullying and perceived popularity, but no correlation between bullying and likeability was found. Furthermore, bullies were found to be more likely than others to value popularity more than likeability. Bullying was not a significant positive predictor off the belief that peers dislike bullies in bullying scenarios and for the belief that the victim disliked the bully before the bullying started. Adolescents who score high in popularity tend to think that peers do not like the bully and that the victim already disliked the bully before the bullying started.

Keywords: bullying, perceived popularity, perceived likeability, social goals, social cognition, bullies' beliefs

Worldwide, about 35% of adolescents are being bullied (Modecki, Minchin, Harbaugh, Guerra & Runions, 2014). Bullying is defined as "(1) aggressive behaviour or intentional 'harm doing' (2) which is carried out 'repeatedly and over time' (3) in an interpersonal relationship characterised by an imbalance of power" (Olweus, 1999, p. 11). A causal effect between being bullied and externalising as well as internalizing consequences including aggression, depression and low self-esteem has been found (Grusec & Hastings, 2014; Reijntjes, Kamphuis, Prinzie & Telch, 2010). To lessen these consequences, interventions are needed. In order to intervene, understanding why bullies engage in this behaviour is essential (Reijntjes, et al., 2010).

Instead of suffering social repercussions for the maltreatment of their peers, the majority of bullies are popular. Bullies have even been found to be the most popular children in school. Despite this popularity, bullies are often disliked by their peers (Caravita, DiBlasio & Salmivalli, 2010; Peeters, Cillessen & Scholte, 2010; Sentse, Kiuru, Veenstra & Salmivalli, 2014; Thunfors & Cornell, 2008). High popularity has been found to encourage bullies to act aggressively (Cillessen & Mayeux, 2004), but why does their low likeability not deter them? There are three tentative explanations. A first explanation could be that bullies are not aware of their low likeability. A second explanation could be that they value their popularity much more than their likeability. A third explanation could be that bullies think that their victims would not like them anyway (i.e., even if they had not bullied them) and therefore have nothing to lose in terms of likeability. This study puts the second and third explanations to the test.

Peer status

Historically, children viewed as popular were socially adept and well-adjusted. Nowadays a distinction is made between sociometric popularity and perceived popularity (Peeters et al., 2010). Sociometric popularity refers to the overall likeability of a person, whereas, perceived popularity is related to social dominance, status and leadership (Lease, Kennedy & Axelrod, 2002; Sandstrom & Cillessen, 2006). Cross-sectional studies show a relation between aggression and perceived popularity (De Bruyn & Cillessen, 2006; Rose, Swenson & Waller, 2004). Longitudinal studies show that initial perceived popularity leads to aggressive behavior, including bullying, later on (Cillessen & Mayeux, 2004; Prinstein & Cillessen, 2003). Most studies indicate a bidirectional positive association between aggression and perceived popularity (Caravita et al., 2010; LaFontana & Cillessen, 2002). These findings suggest that engaging in bullying is often rewarded with perceived popularity, which, in turn can lead to more bullying behavior.

Although bullies tend to be high in perceived popularity, they often score low in terms of likeability. Likeability includes having feelings of affection towards others and being well-liked and accepted by peers (Caravita, Di Blasio & Salmivalli, 2008; Cillessen & Mayeux, 2004). Unidirectional negative relations between bullying and likeability have

been found in several longitudinal studies. Initial bullying behavior at Time 1 was negatively associated with likeability later on (Caravita et al., 2008; Peeters et al., 2010). This suggests that persisting in bullying behavior is at the expense of the bullies' likeability.

Social goals of bullies

Bullying behavior has been shown to be positively associated with certain social goals and to be negatively associated with other social goals (Smalley & Banerjee, 2014). All people have social goals which influence their behavior and the way they judge other people's behavior and features. Important goals for adolescents are high status, affection and relationships with peers (Huitsing & Veenstra, 2012). There are two clusters of social goals: agentic goals and communal goals. People with agentic goals aim for dominance, power, status and influence on other people. People with communal goals have the desire to be close, intimate and have positive relationships with others (Hazebroek, Olthof & Goossens, 2017; Caravita & Cillessen, 2012).

Social goals of adolescents have an impact on their social behavior (Caravita & Cillessen, 2012; Ojanen et al., 2005). It is found that agentic goals are positively associated with aggression concurrently and are predictors off future aggression. Furthermore, it is found that communal goals are negatively associated with agression (Ojanen & Findley-Van Nostrand, 2014). This suggests that bullying behavior is more related to agentic goals, indicating that bullies might value their popularity over their likeability (Sijtsema, Veenstra, Lindenberg, & Salmivalli, 2008).

Beliefs of Bullies: The Role of Social Cognition

Beside the importance of peer status and social goals in bullying behavior, social cognitions could provide an explanation why low likeability does not deter them. Social cognition is described as the ability to understand or manipulate the minds of others (Gini, 2006; Sutton, Smith & Swettenham, 1999). Bullies seem to look at situations from an egocentric point of view. They are lower in empathy (Gini, 2006) and may have more difficulty taking the perspective of others, processing social information and cues (Andreou, 2004; Menesini et al., 2003).

The hostile attribution bias, which is found in aggressive adolescents, is an influential social cognition (Bailey & Ostrov, 2008).This refers to the tendency to interpret intentions of others as hostile without a clear indication that they are (Milich & Dodge, 1984). Our responses to others are affected by the goal we ascribe to their actions (Matthews & Norris, 2002). When bullies ascribe hostile intentions to others, they allow themselves to bullying or react aggressively because they might feel provoked or offended (Fluck, 2014; Rigby, 2012). This might explain bullies' aggressive behaviour. Bullies might feel that others do not like them anyway, or they assume hostility in their victims. This might give them a feeling that they have nothing to lose in terms of

likeability by behaving aggressively, and thus this does not deter them from bullying.

The Present Study

The focus of this study is on why low likeability does not deter bullies. The main question of this study is: Do bullies think their victims would not have liked them anyway and therefore have nothing to lose in terms of likeability? This study tests for two explanations. The first explanation will test is if bullies value their popularity more than their likeability. The second possible explanation is that bullies endorse beliefs that their victims dislike them even before the bullying starts. The following hypotheses are drafted to answer the main question. First, we expect that bullies score higher on popularity and lower on likeability. A positive association between bullying and popularity, and a negative association between bullying and likeability has been found in multiple studies (Sentse et al., 2014). Secondly, we expect that bullies value their popularity more than they value their likeability. Studies have shown that bullies tend to have more agentic goals, relating to high status, power and dominance (Sijtsema et al., 2008). Thirdly, we expect that bullies are more likely to endorse beliefs that victims dislike bullies even before the bullying starts.

Method

Sample

A total of 232 participants provided data on 383 classmates (107 students did not receive parental consent and 44 students who did receive parental consent did not agree to participate). Forty-six percent of the participants were boys. The mean age was 12,96 (SD = 0.78), and ranged from 11-15 years. Of all the participants, 96,4% were born in the Netherlands and 0,4% were born in Surinam, Morocco, Turkey or The Antilles. The other 3,2% were born in other countries. Participants were students in the first and second year of secondary education, which is comparable to the 7th and 8th grade in the US. The participants belonged to 14 classrooms (average class size 27 students) in 7 schools in The Netherlands. Students were distributed over six different school types, VMBO (26.1%), 7.7% VMBO/HAVO (7.7%), HAVO (21.9%), HAVO/VWO (7.9%), VWO (30.3%) and VWO+ (6.1%). These school types differ in level of education with VMBO being the lowest school type used in the present research, HAVO as a medium level and VWO+ being the highest school type used. VWO+ refers to a more elevated level of education including extra subjects like Latin and/or bilingual teaching.

Procedure

The potential participants were approached by using the network of the researchers, who were third-year Bachelor students from the University of Utrecht. E-mail and telephone were used to get in contact with secondary school teachers. When the teacher gave permission, a consent form for the parents was sent by email. Students could only participate if their parents signed this form and gave their consent. The data collection

took place during regular teaching hours, in the presence of their teacher and the researcher. Before filling out the questionnaire the students also had to agree to participate by signing a consent form. This form was used to ensure participants of the anonymity of the study and included information on the purpose, the topic and the duration of the survey. A paper-and-pencil questionnaire including self-reported and peer-reported items was used. Before handing out the questionnaires, the researcher explained the purpose of the questionnaire and gave instructions on how to fill it out. Students who did not agree to participate received a general questionnaire about school subjects. This questionnaire looked similar to the survey, so that it was not clear for students who did and did not participate.

To ensure confidentially and anonymity, each of the researchers, schools, classrooms and students had their own two-digit number which were translated into one eight-digit number. This number was used as identification instead of the name. Also, a list was enclosed with each questionnaire on which the names of all classmates and the corresponding numbers were listed. Students nominated their peers with the corresponding numbers, instead of the names. The complete data was only accessible to the researchers that were present during the data collection and the lists with the names and numbers were destroyed after entering the data.

Measures

Bullying. Bullying was assessed by the Bullying Role Nomination Procedure (BRNP; Olthof, Goossens, Vermande, Aleva & van der Meulen, 2011). The BRNP is a measure that assesses five distinct forms of bullying. These include physical (e.g., pushing), property attacks (e.g., taking away personal property), verbal (e.g., scolding), direct relational (e.g., excluding someone), and indirect relational (e.g., gossiping) bullying (Reijntjes et al., 2013). Prior to the questions, the children were provided with a detailed description of bullying to avoid potential interpretation differences. The description explained the core features, namely, intent to harm, repetition over time, and a clear power difference between perpetrator and victim. Bullying was measured by four peer-nominated questions, relating to physical, verbal, direct relational and indirect relational bullying. First, an explanation of the type of bullying was given. Next, two sub-questions per type of bullying were asked to get information about the victims ('Do you know classmates who are bullied this way? Who are they?') and the bullies ('Do you know classmates who bully this way? Who are they?'). For each student, scores on the four questions related to bullying perpetration were averaged together to obtain a bullying score. Cronbach's Alpha (α) for these four items was .70. In order to compare scores across classrooms, proportion bullying scores were computed. The number of nominations received was divided by the number of nominators per classroom to obtain individual bullying scores. These scores were used in further analyses.

Popularity. The individual's level of popularity was measured by peer nominations. Participants were asked to nominate their most popular classmates and their least popular classmates. For both questions, the number of nominations received by each participant was summed up and divided by the number of participants in each classroom to obtain a proportion score for popularity. Individual popularity was computed by subtracting the proportion scores for *least popular* nominations from the proportion scores for *most popular* nominations.

Likeability. The individual's level of likeability was measured by peer nominations. Participants were asked to nominate which classmates they liked the most and which classmates they liked the least. For each of these two variables, the number of nominations received by each participant were summed up and divided by the number of participants in each classroom to obtain proportion scores. Individual likeability was computed by subtracting the proportion scores for *liked least* nominations from the proportion scores for *liked most* nominations.

Favoring popularity over likeability. Two self-reported questions were used to find out to which extent participants found it important to be popular and to what extent they found it important to be liked by their classmates. Participants gave ratings to two questions based on their own opinion, ranging from 'not true' (assigned 0) to 'very true' (assigned 6). The questions were: 1) I think it is important to be popular 2) I think it is important to be liked by my classmates. The extent to which they favoured popularity or likeability was measured by subtracting the score on question 2 (importance of likeability) from the score on question 1 (importance of popularity), resulting in a single variable.

Beliefs towards the likeability of bullies. Participants beliefs on the likeability of bullies was assessed by using three vignettes, each describing an hypothetical occurrence of either physical, verbal or relational bullying with one victim and one bully. About each vignette, the participants were asked four questions: According to you, how likely is it that 1) the victim dislikes the bully, 2) the classmates dislike the bully, 3) the victim disliked the bully before the bullying started and 4) the classmates disliked the bully before to the bullying started. Participants gave ratings, ranging from 'very unlikely' (assigned 0) to 'very likely' (assigned 6). For all participants, the average score per question across the three vignettes was computed, resulting in scores for bullies' current unlikeability by victims (Question 1; $a= .70$), bullies' current unlikeability by classmates (Question 2; $a= .77$), bullies' unlikeability by victims before the bullying started (Question 3; $a= .76$) and bullies' unlikeability by classmates before the bullying started (Question 4; $a= .75$).

Data analysis

Three questions will be analysed. The first question is: Do bullies score high on popularity and low on likeability? Correlations were run to examine the interrelationship between bullying scores, perceived popularity and likeability.

The second question, whether bullies value popularity more than likeability, was examined with a linear regression. The favouring popularity over likeability was used as dependent variable. The independent variable was the bullying score, controlling for age, gender, perceived popularity and likeability.

Lastly, we tested whether those higher in bullying were more likely to think that victims disliked bullies already even before the bullying started. Linear regressions were used. Average scores on the third question of all vignettes (if the victim disliked the bully prior to the bullying) were used as the dependent variable. Bullying, age, gender, perceived popularity and perceived likeability were used as predictors. For comparison purposes, we also tested the effects of bullying on each of the other three questions related to the vignettes in three additional regression analyses.

Results

Descriptive statistics for the main variables are shown in Table 1. T-tests were conducted to test for gender differences on these variables. The results are shown in Table 2. There was a significant difference on perceived likeability, with boys (M= .10, SD= .24) reporting lower scores than girls (M= .17, SD= .18). , $t(329)$= -3.18, p=.002, two-tailed, d=.21. For the other variables, no gender differences were found.

Table 1
Means, standard deviations and range for the whole sample

Variable	N	M	SD	Range
Age	244	12.96	.79	11 – 15
Bullying	382	.02	.04	.00 – .40
Perceived Popularity	382	.01	.38	-1.80 – 1.40
Likeability	382	.14	.29	-2.20 – 1.60
Favoring Popularity over Likeability	244	-3.11	1.85	-6 – 5
Beliefs on likeability				
Q1: Victim dislikes bully	244	4.65	1.25	0 – 6
Q2: Peers dislike bully	243	3.08	1.29	0 – 6
Q3: Victim already disliked bully	244	3.25	1.57	0 – 6
Q4: Peers already disliked bully	243	2.39	1.33	0 – 6

Table 2
Means (and standard deviations) by gender

	Boys		Girls		
	M	*SD*	*M*	*SD*	*t*
Age	12.93	.81	12.97	.78	.36
Bullying	.01	.04	.01	.03	.12
Perceived Popularity	-.01	.34	.02	.34	1.00
Perceived Likeability	.10	.24	.17	.18	3.18**
Favoring Popularity over Likeability	-3.00	1.96	-3.20	1.75	.87
Beliefs on likeability					
Q1: Victim dislikes bully	4.81	1.18	4.51	1.31	1.86
Q2: Peers dislike bully	2.94	1.30	3.20	1.27	1.52
Q3: Victim already disliked bully	3.34	1.60	3.16	1.54	.89
Q4: Peers already disliked bully	2.40	1.40	2.40	1.28	.07

** $p < .01$

Correlations

Correlations were run to determine the strength and direction of the relations among the main study variables. Correlations between Bullying, Perceived Popularity, Perceived Likeability, Favoring popularity over likeability and beliefs that the victim already disliked the bully (Q3) are most relevant for the present study. Results are shown in Table 2. Bullying was positively correlated with perceived popularity, $p = <.001$, but not with likeability, $p = .980$. A significant positive correlation was found between Perceived Popularity and Likeability, $p = <.001$. Also, a significant positive correlation between Bullying and Favoring popularity over likeability was found, $p = .02$. No significant correlation was found between Bullying and Q3, $p = .73$.

Table 3
Bivariate Correlations between main Study Variables

Variable	1.	2.	3.	4.	5.	6.	7.	8.
1. Age								
2. Bullying	.11							
3. Perceived Popularity	-.08	.27***						
4. Likeability	.02	.00	.38***					
5. Favoring Popularity over Likeability	.07	.15*	.11	-.14*				
6. Q1: Victim dislikes bully	-.12	-.02	.12	.06	-.09			
7. Q2: Peers dislike bully	.02	.01	.24***	.21**	.01	.34***		
8. Q3: Victim already disliked bully	.05	.02	.16*	.12	.09	.25***	.21**	
9. Q4: Peers already disliked bully	.01	-.08	.12	.17**	.08	.18**	.54***	.56***

* $p < .05$, ** $p < .01$, *** $p < .001$

Bullying and favoring popularity over likeability

A regression analysis was conducted to explore whether bullying scores could predict the favoring of popularity over likeability, the dependent variable. Other included variables that were controlled for are Age, Gender, Perceived Popularity and Perceived Likeability. Results are shown in Table 4. The model was significant, $R^2 = .07$, $F(5,235) = 3.621$, $p < .004$. Bullying was a significant positive predictor for the favoring of popularity over likeability, $B = 8.19$, S.E.$= 4.08$, $p = .046$. Also, a significant positive effect was found for perceived popularity, $B = .93$, S.E.$= .38$, $p = .014$. Likeability was a significant negative predictor, $B = -1.57$, S.E.$= .58$, $p = .007$. Participants that scored higher on bullying were more likely to favor popularity over likeability, whereas participant scoring high on likeability were more likely to favor likeability over popularity.

Table 4
Standardized Coefficients for the Prediction of Favoring Popularity over Likeability

	ß
Bullying	.13*
Age	.07
Gender	-.05
Perceived Popularity	.17*
Perceived Likeability	-.18**

*$p < .05$, **$p < .01$

Bullying and Beliefs on the Likeability of Bullies

Four separate regressions were conducted to test the effect of bullying on beliefs about the likeability of bullies. These beliefs were tested with a series of four questions after each of three bullying scenarios. The questions tested the beliefs on whether the victim disliked the bully (1), whether peers disliked the bully (2), whether the victim already disliked the bully before the bullying began (3), and whether the peers already disliked the bully before the bullying began (4). Scores on each of the questions were used as dependent variables in four separate regression analyses. The independent variables used in the four models were age, gender, bullying, perceived popularity and likeability. Results for the four models are shown in Table 5.

The first regression model was conducted for beliefs on whether the victim disliked the bully. This model was not found to be significant, $R^2 = .04$, $F(5,235) = 2.15$, $p = .06$. There was no significant relation between the independent variables and the scores on the first question. None of the included independent variables predicted endorsement of beliefs that the victim disliked the bully.

The second regression model was conducted for the second question, whether peers disliked the bully. This model was found to be significant, $R^2 = .08$, $F(5,234) = 4.30$, $p = .001$. Bullying was found to be a negative predictor, although not significant, for the belief that peers disliked the bully, $p = .76$. Only Perceived Popularity was found to be a significant positive predictor for the belief that the peers disliked the bully, $B = .81$, S.E.$= .26$, $p = .002$. The other predictors, Age, $p = .6$, Gender, $p = .22$ and Perceived Likeability,

p= .05, came across as positive, but not significant.

For the third question, whether the victim already disliked the bully before the bullying had started, the regression model was conducted as well. This model was found to be not significant, R²= .04, F(5,235)= 1.98, *p*= .08. As shown in Table 5, only Perceived Popularity came across as a significant positive predictor in this model, *B*= .68, S.E.= .33, *p*= .040. Bullying was found to be a positive, but not significant predictor for beliefs that the victim already disliked the bully, *p*= .87.

The final regression model was run for scores on the fourth question, whether the peers already disliked the bully before the bullying started. This model was not found to significant as well, R²= .04, F(5,234)= 2.12, *p*= .06. There was no significant relation between the predictors altogether and the scores on this question. Positive significant effects on the beliefs that peers already disliked the bully were only found for Perceived Likeability, *B*= .90, S.E.= .42, *p*= .034. Higher scores on Perceived Likeability generally leaded to more beliefs that peers already disliked to bully before the bullying started. Bullying (*p*= .18) and Gender (*p*= .96) came across as negative, but not significant predictors, whereas Age (*p*= .75) and Perceived Popularity (*p*= .18) were positive, not significant predictors.

Table 5
Standardized coefficients for four regression models predicting beliefs regarding the likeability of bullies.

	Victim dislikes bully	Peers dislike bully	Victim already disliked bully	Peers already disliked bully
	ß	ß	ß	ß
Bullying	.00	-.02	.01	-.09
Age	-.11	.03	.06	.02
Gender	-.13	.08	-.07	-.00
Perceived Popularity	.11	.21**	.14*	.09
Perceived Likeability	.04	.13	.09	.16*

p < .05, **p* < .01

Discussion

Despite numerous cross-sectional and longitudinal studies, it still remains unclear why bullies engage in their bullying behaviour. In this study we tested two possible explanations: Bullies favor their perceived popularity over their likeability, and bullies are more likely to endorse beliefs that victims already dislike them prior to the bullying, and therefore assume they have no likeability to lose. Based on literature, three hypotheses were drafted and tested. The first hypothesis was that bullies score high on popularity and low on likeability, which was not proven by the present study. Higher scores on perceived popularity were found for bullies, but no lower scores on likeability were found. The second hypothesis, if bullies favor their perceived popularity over their likeability, was accepted based on the present study. The main hypothesis was if bullies

are more likely to endorse beliefs that victims already dislike bullies even before the bullying begins. Based on the present results, not bullying but perceived popularity predicted the endorsement of those beliefs, leading to the rejection of the main hypothesis.

Consistent with the literature, the present study found that bullies tend to be the most popular children in school (e.g. Thunfors & Cornell, 2008). As expected, bullying was positively associated with perceived popularity. However, the correlation between bullying and likeability was not significant. In previous longitudinal studies, negative relations between bullying and likeability had been found (e.g. Peeters et al., 2010). In contrast to those studies, the present results show that bullies are not less liked than non-bullying peers. The results show that bullies were not more or less liked by their peers than non-bullies. As seen in a worldwide study investigating friendships among bullies, bullies have often a great number of friends (Eslea, et al., 2003). This can be interpreted as bullies being liked by peers, explaining our results that bullies are not less liked.

With regard to the first explanation, and consistent with results from previous investigations (e.g. Sentse et al., 2014), higher bullying scores were found to be related to a higher favouring of perceived popularity over likeability. Perceived popularity was correlated with bullying, but also found to be a significant positive predictor of favouring popularity over likeability. Likeability was a significant negative predictor. This is in line with previous findings (e.g. Caravita & Cillessen, 2012), that people with more agentic goals, related to higher popularity, aim for dominance and power over others resulting in favouring popularity over likeability. On the other hand, people who are more liked have more communal goals and aim for positive relationships with others, leading to favouring likeability over popularity.

With regard to the second explanation of the engagement in bullying behaviour – that bullies may be more likely to endorse beliefs that victims dislike them already before the bullying starts – the main hypothesis was tested. Inconsistent with our expectations, bullying did not predict beliefs that victims already disliked the bully prior to the bullying. Only perceived popularity was found to be a significant positive predictor of such beliefs. Nonetheless, bullies were found to be high in popularity. This might indicate that bullies, because of their high popularity, do endorse some beliefs that victims already disliked the bully prior to the bullying. No indication for this was found in the present study, so this cannot be concluded. The present results suggest that bullies' beliefs are no different from the beliefs of non-bullies.

Strengths and limitations

There are several strengths and limitations regarding the present study. Peer-reported questions are used to measure perceived popularity, likeability and bullying.

This is a more valid way then self-reports, because it minimizes the danger of socially desirable answers. Although subjectively measured, the scores of favoring perceived popularity over likeability are internally valid as well, as the intention was to measure personal goals. However, this concept was measured by only two self-reported questions, which is too little to measure this whole concept. Another issue with these self-reported questions is that they could have led to socially desirable answers.

The beliefs of participants were measured by using vignette questions. During the data collection, some participants struggled with these questions. Mentalizing skills, like empathy and Theory of Mind, are needed to be able to understand these questions and answer them. These skills rely on the developmental stage of the prefrontal cortex, which has shown to be not totally developed yet at the ages of 11 to 15 (Eres, Decety, Louis & Molenberghs, 2015). Examining beliefs of adolescents through vignette questions might not be the most efficient way to assess these beliefs. A possible way to assess these beliefs is through using self-reported questions in the questionnaire asking which classmates disliked them directly after they met for the first time.

With regard to the generalizability of the results, not all of the used questions and measures are internally valid, indicating that they do not exactly measure what they are supposed to measure. These results are therefore generalizable. As mentioned earlier, not all present results are consistent with results from previous research. Next to this, possible peer-reported bullies did not participate in the research. This results in limited knowledge of bullies on the self-reported measures, including the favoring of popularity and beliefs on likeability of the bullies.

Concerning the generalizability of the entire study, there are several limitations. The sample of the present study consisted of 232 Dutch students. In many classes, the participation rate was low which resulted in incomplete total scores on the peer-reported questions. To compensate this deficit, proportion scores were used for peer-reported scores. These proportion scores were also used to compare participants in different classrooms. Also, the students belonged to only 7 schools in The Netherlands, which cannot be generalized to the entire Dutch school system. Furthermore, the distribution over different school types was not evenly divided and 96.4% of the participants were born in The Netherlands, which is not representative off the Dutch school system as a whole (Central Bureau for Statistics, 2016). In conclusion, the used sample in the present study is quite specific, so not representable for the Dutch population. Because of the small scale design of the present study, and abovementioned, the present results are not generalizable to other groups in the Dutch or western society.

Implications

This study shows that bullies are very popular and that they value this more than being liked. For bullies, popularity means being dominant, having a high status and

leadership. As seen in earlier studies, they pursue these goals by showing aggressive behaviour and bullying (Sentse, et al., 2014; Ojanen & Findley-Van Nostrand, 2014; Witvliet et al., 2003). Interventions should focus on these goals and how they are pursued. Other strategies than aggression to reach these goals should be introduced. A different way to handle this problem can be to make being liked more rewarding than being popular. Teachers can play a role here in changing the dynamics in classrooms. More attention should be given to the more quiet students and less attention should be given to the students who scream for attention.

Next to the difference in the way of pursuing social goals, focus needs to be on the cause of this way of pursuing. As mentioned before, social goals of bullies are more likely pursued by aggressive behaviour including bullying (Sentse et al., 2014). This might be due to differences in the underlying thinking processes of bullies. The present study shows that adolescents who score high on popularity tend to think that peers dislike the bully and the victim already disliked the bully even before the bullying started. However, bullying, although generally associated with high popularity, did not predict the endorsement of those beliefs in the present study. Further research is needed to investigate bullies' beliefs and their relation with perceived popularity and their bullying behaviour.

Future research

To our knowledge this is the first study on bullies' beliefs about their victims prior to the bullying. More research needs to be done on the way bullies think. Bullies might look at social situations differently and have other beliefs than non-bullies. Since this is a new way to look at the bullying behaviour more research is needed to explain why bullies show the behaviour they do.

Some adolescents were having some difficulty with understanding the vignettes on paper. A different way of showing the bullying situations could be by film. In this way they can see what is happening and who is doing what. This way it might be clearer for the participants who the bully is, who the victim is and who the peers are. By visually showing these situations they might be able to sympathize more with the situation and the persons, because they need less focus on trying to ascribe actions to the imaginary persons.

Another subject where more clarity is necessary, is the Theory of Mind of bullies. This is particularly important to understand their beliefs prior to the bullying. Research is contradictory about if bullies have limitations in Theory of Mind or that they excel. Clarity about this subject is required to comprehend why bullies start bullying and what their beliefs are about their the victims before the bullying.

Conclusion

This study has provided a new perspective on bullying behaviour seen from the bully. A possible reason for why bullying is a difficult problem to solve might be that there is too much attention on the situation itself. In most cases, victims get offered help, but not the bullies. It is important to understand why bullies behave the way they do to intervene at the bottom of the problem. Bullies might look at social situations differently than we think.

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