Association between self-perceived likeability and relational bullying

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Abstract

Previous research has shown that bullies are usually popular, but not highly liked by their peers. The goal of this study was to investigate why low likeability does not deter bullies who engage in relational bullying. Our study focused specifically on one possible explanation: bullies overestimate their own likeability. The present cross-sectional study included 233 adolescents (44% boys; $M_{age} = 13$) who completed the questionnaire about relational bullying, peer-reported likeability, and self-perceived likeability. In order to test the hypothesis a regression analysis was conducted on the effect of actual likeability on self-perceived likeability moderated by relational bullying. The results show there is a significant positive association between actual likeability and self-perceived likeability. However, this association is not moderated by relational bullying behaviors. This implies that bullies do not differ from others in the accuracy of their perception of their own likeability: bullies do not seem to overestimate their self-perceived likeability.

Association between self-perceived likeability and relational bullying

Other studies into bullying have shown that millions of children worldwide are affected by bullying on a daily basis (e.g. Salmivalli, 2010; Veenstra et al., 2005). Bullying is defined as aggressive behavior that is repeated over time and involves an imbalance of power (Monks & Smith, 2006). There are three distinct forms of bullying: physical, verbal and relational (Archer & Coyne, 2005). The main focus of this study will be relational bullying, which can be defined as bullying that aims to manipulate or sabotage friendships and other relationships (Archer & Coyne, 2005; Crick & Grotpeter, 1995; Wang, Iannotti & Nansel, 2009). Therefore, relational bullying is covert most of the time (Archer & Coyne, 2005). Examples of relational bullying are, but are not limited to: spreading rumors and excluding other children from a group (Archer & Coyne, 2005; Crick & Grotpeter, 1995).

Being a victim of bullying can lead to severe negative outcomes such as depression and suicide (Reijntjes, Kamphuis, Prinzie & Telch, 2010). However, these severe consequences do not keep adolescents from bullying each other. A possible explanation for this can be found in the motivation behind bullying, which is to gain popularity (Pellegrini, 2002; Salmivalli, 2010; Salmivalli & Peets, 2008). Although several studies show that bullies indeed are seen as popular by their peers, the same studies also concluded that they are not liked by them (Prinstein & Cillessen, 2003; Witvliet et al., 2009). It remains unclear why adolescents keep bullying their peers, even though this behavior makes them disliked by others. The question remains why does low likeability not prevent relational bullying behavior? One explanation for this might be that adolescents who engage in relational bullying behaviors overestimate their own likeability. They might not know that their peers do not like them as much as they think they do.

Peer status and bullying

For many years, popular children have been described as well-behaved, well-liked, socially capable, and exhibiting low levels of aggression (Cillessen & Rose, 2005). This is also known as sociometric popularity. Sociometric popularity is measured by asking peers which classmates they like the most (Cillessen & Rose, 2005; Sandstrom & Cillessen, 2006). However, decades of research has shown that peer status includes more than just sociometric popularity; nowadays, it is divided into two constructs: sociometric popularity (or: social preference, likeability) and perceived popularity (Cillessen & Rose, 2005; Cillessen, Schwartz & Mayeux, 2011; Lease, Musgrove & Axelrod, 2002; Sandstrom & Cillessen, 2006). Perceived popularity is best described as being well-known, being the center of attention and being able to influence or overpower others (Lease et al, 2002; Sandstrom & Cillessen, 2006). Perceived popularity is measured by either ‘most popular’ nominations, ‘most popular’ minus ‘least popular’ nominations or ‘popularity ratings’ (Cillessen et al., 2011).

Longitudinal and cross-sectional research on the association between relational bullying and both types of popularity found a positive association between relational bullying and perceived popularity in adolescents (e.g. LaFontana & Cillessen, 2002; Prinstein & Cillessen, 2003; Witvliet at al., 2009; Xie, Swift, Cairns & Cairns, 2002). A study of Rose et al. (2004) found this positive association even when controlling for overt aggression. On the other hand, longitudinal studies show a negative association between relational bullying and sociometric popularity, or likeability (Caravita, Di Blasio & Salmivalli, 2008; Peeters, Cillessen & Scholte, 2010; Prinstein & Cillessen, 2003; Witvliet et al., 2009). These findings suggest bullies are usually popular kids that are well known and able to influence or overpower their classmates, but they are not necessarily highly liked by their peers.

Self-perception of status

The studies mentioned above suggest that bullying behavior leads to being disliked by peers. However, this does not seem to deter bullies. A possible explanation for this is that bullies overestimate their likeability. They might not realise that they are disliked by their peers. Several studies show that children who overestimate their own sociometric popularity tend to be more aggressive towards their peers (e.g. Brendgen, Vitaro, Turgeon, Poulin & Wanner, 2004; David & Kistner, 2000; Sandstrom & Herlan, 2007). In addition, Boivin & Bégin (1989) found that compared to average children, children with high perceived popularity have a more positive self-perception. This is in line with the results Kaukiainen et al. (2002) found in their study: there is a group of bullies who have good learning skills and are average in social competence, but have an extremely positive view of themselves. Furthermore, other studies concluded that non-aggressive children tend to be accurate in the perception of their own sociometric popularity, whereas aggressive children have a tendency to overestimate their sociometric popularity (Hymel, Bowker & Woody, 1993; Patterson, Kupersmidt & Griesler, 1990) (i.e., bullies tend to overestimate their own likeability). This might explain why they continue the bullying behavior despite the fact that it results in being disliked by their peers.

Present study

The goal of our study is to investigate why low likeability does not deter bullies. We assessed whether bullies overestimate their own likeability. Previous studies show that bullies tend to be highly popular, but disliked by their peers (e.g. LaFontana & Cillessen, 2002; Prinstein & Cillessen, 2003; Rose, Swenson & Waller, 2004; Witvliet et al., 2009). Furthermore, the literature shows that children who overestimate their sociometric popularity tend to be more aggressive towards their peers (e.g. Brendgen et al., 2004; David & Kistner, 2000; Sandstrom & Herlan, 2007). Moreover, popular and aggressive children tend to have a more positive self-perception than non-popular and non-aggressive children (Boivin & Bégin, 1989; Bowker & Woody, 1993; Patterson et al., 1990). This may indicate that bullies have a tendency to overestimate themselves and their likeability. Thus, we hypothesized that adolescents who engage in relational bullying behaviors overestimate their likeability: They do not know that they are not liked by their peers. To examine this, we will test whether the strength of the association between actual and perceived likeability varies depending on whether adolescents are high or low in bullying. In other words: is the association between actual likeability and perceived likeability moderated by relational bullying behaviors?

Method

Participants

A total of 383 adolescents were approached to participate in this study. These adolescents were in the first and second grades from seven different high schools in the Netherlands. Of the 383 adolescents who were approached to participate in the study, 243 received parental consent. Among those 243, ten did not give consent themselves, resulting in a total of 233 completed questionnaires (participation rate: 61%). Among participants, 44% were boys. Approximately 96% of all participants were born in the Netherlands. The sample group subjects ranged in age from 11 to 15 years, with a mean of 13 years (SD = 0.78). The type of school they attended varied between VMBO (26.1%), VMBO/HAVO (7.7%), HAVO (21.8%), HAVO/VWO (7.9%), VWO (30.3%) and VWO+ (6.1%), where VMBO is the most practical and VWO+ is the most academic.

Procedure

The questionnaires were administered in students' classrooms by third-year Bachelor students from Utrecht University. All researchers (= the University students) contacted high school teachers for participation in the study. The teachers had to agree to allow the researchers access to their students. A week before the data collection, students received a parental consent form, that their parents had to sign and return in order to give consent to participate in the study. The consent form states that the study is about motivations and behavior of the adolescent, and that the participants had the right to stop at any time. It also contained information on how the participant's anonymity was guaranteed. Parents could get in contact with the researches if they had more questions. After receiving parental consent, adolescents needed to give permission themselves by signing and handing in their own form. Only if the parent and student both signed consent forms the adolescents were given the questionnaire. Answers could include all students, including those who did not give consent. Anonymity with regards to who did, and did not participate in the study, was guaranteed by providing all students with a similar looking questionnaire, but those who did not provide consent had general knowledge questions instead. The data was collected during regular teaching hours while the teacher, the students, and one or two researchers were present in the room.

To ensure confidentiality and anonymity, everyone received an eight-digit numeric code. This code represented four different identifiers: the researcher, school, classroom, and student. Each child received their own unique numeric code. These codes were used to identify the individuals and enter the data. On each questionnaire their own unique identifier was shown. Everyone also received a list of their classmates with their corresponding last two digit numbers of their identifier; these numbers were used as answers to the questions, so no names had to be filled in.

Measures

The questionnaire consisted of self-reported and peer-reported items focusing on bullying behaviors, defending behaviors, peer status, and self-perceived peer status. For this study, only the items related to relational bullying, actual likeability, and self-perceived likeability were used.

Actual Likeability. Actual likeability was measured by two peer-reported items. The subjects were asked ‘Which of your classmates do you like the most?’ and ‘Which of your classmates do you like the least?’. Each participant could name as many classmates as they wanted for each item. Therefore, all adolescents in the classroom could be included, even though they did not participate in the study themselves. Counting the number of nominations an adolescent received for the question ‘Which of your classmates do you like the most?’ established their actual liking score. Their actual disliking score was determined by counting the number of nominations an adolescent received for the question ‘which of your classmates do you like the least?’. In order to be able to compare these actual liking and actual disliking scores across different sized classrooms, scores were adjusted for size by dividing the number of nominations received by the number of classmates participating in the study (i.e., nominators). Scores for actual likeability were computed by subtracting the proportional score of actual disliking from the proportional score of actual liking.

Self-perceived likeability. Self-perceived likeability was measured by one self-report item. Participants were asked to circle the number on a seven-point Likert scale that best rated their opinion for the item ‘My classmates like me’. Participants could give a rating from zero (not at all) to six (completely). This score was used as the self-perceived likeability score.

Relational Bullying. In order to measure relational bullying, a definition of (relational) bullying was provided in the questionnaire namely, ‘Bullying is repeatedly harassing or humiliating another adolescent’ (The bullying role nomination procedure [BRNP]; Olthof et al., 2011, adapted by Reijntjes et al., 2016). For relational bullying a few examples were added, like gossiping or counting out someone when playing games

(The bullying role nomination procedure [BRNP]; Olthof et al., 2011, adapted by Reijntjes et al., 2016). Relational bullying was measured by two peer-reported items: one about direct relational bullying and one about indirect relational bullying. These items consisted of examples of each type of relational bullying. The question about direct relational bullying gave the following examples: ‘Walking away when someone wants contact, not listening, and / or telling someone they can only join when then do certain things they actually do not want to do’. The question about indirect relational bullying gave the following examples: ‘Telling other people they cannot hang out with another classmate, gossiping, and / or telling classmates on social media (Instagram/Snapchat/WhatsApp/Facebook) to block another classmate’. After these examples, the participants were asked: ‘Do you know classmates who engage in this type of bulling?’. Each participant could nominate as many classmates as they wanted. For each question, the number of nominations received were counted and divided by the number of nominators to provide proportional scores. The proportional scores for each of these two questions were averaged to obtain a relational bullying score.

Results

Analysis plan

The results are divided into three sections. First the descriptive statistics for the main study variables: age, perceived popularity, relational bullying, and actual likeability are shown. Second, the correlations between age, self-perceived likeability, relational bullying, and actual likeability were computed. Third, two regression analyses were conducted. First the main effects of the independent variables on the dependent variable were tested. Second, the effect of the interaction between actual likeability and relational bullying on self-perceived likeability was added to the model. This effect was tested in order to be able to find verifications for the hypothesis. To create the interaction term, the variables for actual likeability and relational bullying were mean-centered.

Descriptive statistics

Descriptive statistics for the main study variables: age, self-perceived likeability, relational bullying, and actual likeability were computed. The means, standard deviations, and range for these variables are shown in Table 1.

Table 1

Means and standard deviations for the whole sample

	N	Mean	Std. dev.	Minimum	Maximum
Age	248	12.96	.78	11.00	15.00
Self-Perceived Likeability	246	4.46	1.00	1.00	6.00
Relational Bullying	382	0.01	.04	0.00	0.50
Actual Likeability	382	0.14	.29	-2.20	1.60

T-tests were conducted to test whether there were gender differences for the main variables. Results are shown in Table 2. There were no significant gender differences for self-perceived likeability (*p* = .447) nor for relational bullying (*p* = .189). However, the scores of boys and girls differed significantly on actual likeability (*t* = -3.16, *p* = .002). On average, girls scored higher on actual likeability than boys.

Table 2

Means (and standard deviations) separately for each gender

	Boys		Girls		
	N	Mean	N	Mean	t
Age	108	12.94 (0.80)	139	12.97 (0.77)	-0.27
Self-Perceived Likeability	107	4.52 (0.92)	138	4.42 (1.06)	0.76
Relation Bullying	153	0.01 (0.03)	182	0.01 (0.03)	-1.31
Actual likeability	153	0.08 (0.31)	182	0.18 (0.20)	-3.16**

Note. **p<.01 (2-tailed).

Correlations

Table 3 shows the correlations among age, actual likeability, relational bullying, and self-perceived likeability. There was a positive correlation between actual and self-perceived likeability (*r* = .187, *p* = .003). No significant correlation was found between relational bullying and actual likeability (*r* = .042, *p* = .414), nor between relational bullying and self-perceived likeability (*r* = .061, *p* = .314). The correlation between age and the other variables was also found to be non-significant.

Table 3

Correlations among main study variables (244 < N < 382)

	1	2	3	4
1. Age	-			
2. Actual Likeability	-.03	-		
3. Relational Bullying	.09	.04	-	
4. Self-Perceived Likeability	-.10	.19**	.06	-

Note. **p<.01 (2-tailed).

Regression analyses

Two linear regression analyses were conducted (Model 1 and Model 2). The second model, which tested the effect of the interaction between actual likeability and relational bullying on self-perceived likeability, was used to test the hypothesis. To begin, the main effects of the predictors gender, age, actual likeability, and relational bullying on the dependent variable self-perceived likeability were tested. The results of these regression analyses are shown in Table 4.

The first model (F = 3.636, R^2 = .058) tests the effects of the predictors actual likeability and relational bullying on the dependent variable perceived likeability, controlling for the effects of gender and age. Actual likeability positively predicts self-perceived likeability (β = .206, *p* = .001). The effect of relational bullying on perceived likeability (β = .081, *p* = .205), as well as the effect of gender (β = -.079, *p* = .224) and age (β = .100, *p* = .114) were not significant.

The second linear regression analysis (F = 3.112, R^2 = .062) was computed to investigate whether the association between actual likeability and perceived likeability was moderated by relational bullying behaviors. Actual likeability positively predicts perceived likeability (β = 0.178, *p* = .011). The other predictors: gender (β = 0.130, *p* = .218), age (β = -0.101, *p* = .110), and relational bullying (β = 0.053, *p* = .445) were not found to be significant. The interaction was not found to be significant either (β = .075, *p* = .314). This means that the association between actual likeability and perceived likeability is not moderated by relational bullying.

Table 4

Regression analyses predicting self-perceived likeability

	Model 1: Main effects			Model 2: Interactive effects		
	B	S.E.	β	B	S.E.	β
Intercept	6.05***			6.09***		
Gender	-0.16	0.13	-0.08	-0.16	0.13	-0.08
Age	-0.13	0.08	-0.10	-0.13	0.08	-0.10
Actual likeability	0.75	0.23	0.21**	0.65	0.25	0.18*
Relational bullying	2.76	2.17	0.08	1.81	2.36	0.53
Likeability*Bullying				6.43	6.38	0.08

Note. *p<.05, **p<.01, ***p<.001 (2-tailed).

Conclusion and discussion

The main objective of this study was to examine whether bullies who engage in relational bullying behaviors overestimate their own likeability. We investigated whether the association between actual likeability and self-perceived likeability was moderated by relational bullying behaviors. The results of our study did not support this hypothesis. We found a significant positive association between actual likeability and self-perceived likeability. However, the most important conclusion of our study is this association is not moderated by relational bullying behaviors. Thus, a high score on actual likeability predicts a high score on self-perceived likeability regardless of relational bullying behaviors. This implies that bullies do not differ from others in the accuracy of their perception of their own likeability. In other words, bullies do not seem to overestimate their own likeability.

This result is rather remarkable given previously mentioned studies. Past research have found that non-aggressive and non-popular children tend to be accurate in their self-perception of likeability, whereas aggressive and popular children have a tendency to overestimate their likeability (Hymel, Bowker & Woody, 1993; Patterson, Kupersmidt & Griesler, 1990). These findings suggest that bullies seem to overestimate their likeability, whereas the present study does not support this idea.

An explanation for these contrary findings can be found in studies on social cognitions of bullies. For a long time, bullies have been seen as lacking in social skills, being ‘(socially) stupid’ and ‘oafish’ (e.g. Crick & Dodge, 1994, Randall, 1997). However, the opposite may be true. A study from Sutton, Smith and Swettenham (1999) shows that bullies actually have very well developed social cognitions, theory of mind and emotions. In addition, a study from Mertens (2010) shows there are no differences between bullies, defenders and ‘neutrals’ regarding self-perceived social acceptance, or likeability. These results may indicate that bullies are accurate assessors of their own social competence and acceptance (i.e., they are not more secure about their likeability among peers than non-bullies, even though they are highly popular). These findings are in line with the results from the present study: bullies seem to be accurate in their self-perception of likeability.

A second possible explanation for these differential findings is that the sample used in this study was not truly random; the researchers were free to select the schools themselves, with no restrictions. This selection procedure may have led to a sample that included only schools where there were no or fewer incidents of bullying. Therefore it might be possible that the association between actual likeability and self-perceived likeability moderated by relational bullying behaviors did not manifest. For future research, it is recommended to use a truly random sample to ensure a good representation of the population eleven to fifteen year olds in order to be able to generalize the results and ensure external validity.

A third possible explanation for the contradictory findings could be due to the design of the questionnaire that was used in the present study. The questionnaire was lengthy and included a lot of items about different kinds of bullying, (self-perceived) likeability, (self-perceived) popularity, defending mechanisms, and anxiety. Only a few of these items measured the constructs used in this study. As a result the constructs actual likeability and relational bullying were measured by just two items. The construct self-perceived likeability was measured solely by one item. Therefore it can be questioned if the items represented all facets of the three constructs. To ensure content validity it is recommended to use a different questionnaire with multiple items to measure all aspects of the constructs: actual likeability, self-perceived likeability, and relational bullying.

A forth possible explanation for the opposite findings can be explained by the fact that not every student in the classrooms participated in the study. This may have led to an incomplete representation of the constructs actual likeability and relational bullying. These constructs were measured by peer-reported items. The scores of individuals on these items could have been different had the entire classroom participated; this should be considered when interpreting the results. Future researchers should keep this in mind and should try to only use classrooms where the majority gives consent and is able to participate in the study.

In contrast to previous research, the present study suggests that there is no difference between bullies and non-bullies in the accuracy of their perception of their own likeability. Our study does not support the hypothesis that bullies overestimate their self-perceived likeability. This is an important finding in understanding relational bullying behavior. Previous research shows that bullies are typically not well-liked by their peers (Caravita, Di Blasio & Salmivalli, 2008; Peeters, Cillessen & Scholte, 2010; Prinstein & Cillessen, 2003; Witvliet et al., 2009). Our study shows that bullies are aware of this fact, as they ranked their own likeability correctly. Despite knowing that they are not well-liked, they still bully. Thus, there must be other reasons why bullies keep engaging in relational bullying behaviors. It may be possible that bullies think they would not be liked anyway and therefore have nothing to lose in terms of likeability. Another possible reason can be that bullies value likeability less than they value popularity; popularity alone satisfies them. These possible explanations for maintaining relational bullying behaviors, even though they are not well-liked by their peers, should be investigated in future research.

References

Archer, J., & Coyne, S.M. (2005). An integrated review of indirect, relational, and social aggression. *Personality and Social Psychology Review, 9*(3), 212-230.

Boivin, M., & Bégin, G. (1989). Peer status and self-perception among early elementary school children: The case of the rejected children. *Child Development, 60*(3), 591-596.

Brendgen, M., Vitaro, F., Turgeon, L., Poulin, F., & Wanner, B. (2004). Is there a dark side of positive illusions? Overestimation of social competence and subsequent adjustment in aggressive and nonaggressive children. *Journal of Abnormal Child Psychology, 32*(3), 305-320.

Caravita, S. C. S., Di Blasio, P., & Salmivalli, C. (2008). Unique and interactive effects of empathy and social status on involvement in bullying. *Social Development, 18*, 140-163.

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

Cillessen, A.H.N., Schwartz, D., & Mayeux, L. (Ed.) (2011). *Popularity in the peer system.* New York: The Guilford Press.

Crick, N.R., & Dodge, K.A. (1994). A review and reformulation of social information processing mechanisms in children's social adjustment. *Psychological Bulletin, 115,* 74-101.

Crick, N.R., & Grotpeter, J.K. (1995). Relational aggression, gender, and social psychological adjustment. *Child Development, 66*(3), 710-722.

David, C.F., & Kistner, J.A. (2000). Do positive self-perceptions have a "dark side"? Examination of the link between perceptual bias and aggression. *Journal of Abnormal Child Psychology, 28*(4), 327-337.

Kaukiainen, A., Salmivalli, C., Lagerspetz, K., Tamminen, M., Vauras, M., Maki, H., & Poskiparta, E. (2002). Learning difficulties, social intelligence, and self-concept: Connections to bully-victim problems. *Scandinavian Journal of Psychology, 43,* 269-278.

LaFontana, K.M., & Cillessen, A.H.N. (2002). Children's stereotypes of popular and unpopular peers: A multimethod assessment. *Developmental Psychology, 38*, 635-647.

Lease, A.M., Musgrove, K.T., & Axelrod, J.L. (2002). Dimensions of social status in preadolescent peer groups: Likeability. Perceived popularity and social dominance. *Social Development, 11*(4), 508-533.

Mertens, N. (2010). *Social competence in bullies, defenders and neutrals: A comparison* (Bachelor's thesis, Utrecht University, Utrecht, The Netherlands). Retrieved from https://dspace.library.uu.nl/handle/1874/187904

Monks, C.P., & Smith, P.K. (2006). Definitions of bullying: Age differences in understanding of the term, and the role of experience. *Developmental Psychology, 24*(4), 801-821.

Patterson, C.J., Kupersmidt, J.B., & Griesler, P.C. (1990). Children's perceptions of self and of relationships with others as a function of sociometric status. *Child Development, 61*(5), 1335-1349.

Peeters, M., Cillessen, A. H. N., & Scholte, R. H. (2010). Clueless or powerful? Identifying subtypes of bullies in adolescence. *Journal of Youth and Adolescence, 39*, 1041-1052.

Pellegrini, A.D. (2002). Bullying, victimization, and sexual harassment during the transition to middle school. *Educational Psychologist, 37,* 151-163.

Prinstein, M.J., & Cillessen, A.H. (2003). Forms and functions of adolescent peer aggression associated with high levels of peer status. *Merrill-Palmer Quarterly, 49*(3), 310-342.

Randall, P. (1997). *Adult bullying: Perpetrators and victims.* London: Routledge

Reijntjes, A., Kamphuis, J. H., Prinzie, P., & Telch, M. J. (2010). Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect, 34*, 244-252.

Rose, A.J., Swenson, L.P., & Waller, E.M. (2004). Overt and relational aggression and perceived popularity: Developmental differences in concurrent and prospective relations. *Developmental Psychology, 40*(3), 378-387.

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

Salmivalli, C., & Peets, K. (2008). Bullies, victims, and bully–victim relationships. In K. Rubin, W. Bukowski & B. Laursen (Eds.), *Handbook of peer interactions, relationships, and groups* (pp. 322–340). New York: Guilford Press.

Sandstrom, M.J., & Cillessen, A.H.N. (2006). Likeable versus popular: Distinct implications for adolescent adjustment. *International Journal of Behavioral Development, 30*(4), 305-314.

Sandstrom, M.J., & Herlan, R.D. (2007). Threatened egotism of confirmed inadequacy? How children's perceptions of social status influence aggressive behavior toward peers. *Journal of Social and Clinical Psychology, 26*(2), 240-267.

Sutton, J., Smith, P.K., & Swettenham, J. (1999). Social cognition and bullying: Social inadequacy or skilled manipulation? *Britisch Journal of Developmental Psychology, 17,* 435-450.

Veenstra, R., Lindenberg, S., Oldehinkel, A.J., Winter, A.F. de, Verhulst, F.C., & Ormel, J. (2005). Bullying and victimization in elementary schools: A comparison of bullies, victims, bully/victims, and uninvolved preadolescents. *Developmental Psychology, 41*(4), 672-682.

Wang, J., Iannotti, R.J., & Nansel, T.R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health, 45,* 368-375.

Witvliet, M., Olthof, T., Hoeksma, J.B., Goossens, F.A., Smits, M.S.I., & Koot, H.M. (2009). Peer group affiliation of children: The role of perceived popularity, likeability, and behavioral similarity in bullying. *Social Development, 19*(2), 285-303.

Xie, H., Swift, D.J., Cairns, R.B., & Cairns, B.D. (2002). Aggressive behaviors in social interaction and developmental adaptation: A narrative analysis of interpersonal conflicts during early adolescence. *Social Development, 11,* 205-224.