Same-Gender and Cross-Gender Peer Acceptance and Peer Rejection and Their Relation to Bullying and Helping Among Preadolescents: Comparing Predictions From Gender-Homophily and Goal-Framing Approaches

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The relation between bullying and helping and same-gender and cross-gender peer acceptance and peer rejection was examined in a sample of preadolescents aged 11 and 12 years (N=1,065). The authors tested predictions from a gender-homophily approach vs. predictions from a goal-framing approach in which acceptance and rejection are seen as being generated by approach and avoidance goals, respectively. For preadolescents, both approaches predicted a central role for gender, but the gender-homophily approach predicted symmetrical effects for acceptance and rejection, whereas the goal-framing approach predicted strong asymmetries. The data supported the goal-framing approach. The most important findings were that for preadolescents, acceptance is much more frequent and much more gendered than rejection; the absolute impact of helping on acceptance is much larger than that of bullying (and vice versa for rejection); for acceptance, there is a prototypicality effect (i.e., boys accept bullying girls better than nonbullying girls, and girls accept helping boys better than nonhelping boys); and for acceptance, there is a cross-gender ignorance effect (i.e., boys ignore helping in girls, and girls ignore bullying in boys).

Keywords: bullying, helping, gender, peer acceptance, peer rejection

Peer acceptance and peer rejection are widely recognized as important determinants and indicators for developmental outcomes (Ollendick, Weist, Borden, & Greene, 1992; Prinstein & La Greca, 2004). Not being accepted or being rejected by peers puts children at risk for externalizing problems, such as poor school adjustment (Buhs & Ladd, 2001; Kupersmidt & Coie, 1990; Rubin, Bukowski, & Parker, 1998; Schaeffer, Petra, Ialongo, Poduska, & Kellam, 2003) and disruptiveness and physical aggression (Newcomb, Bukowski, & Pattee, 1993), and internalizing problems, such as feelings of loneliness, social anxiety, depression, and negative

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An earlier version of this study was presented at the biennial meeting of the International Society for the Study of Behavioral Development, Ghent, Belgium, July 2004. This research is part of the TRacking Adolescents' Individual Lives Survey (TRAILS), a collaboration of research centers from the University Medical Center Groningen and University of Groningen (principal investigator J. Ormel), Erasmus Medical Center Rotterdam (principal investigator F. C. Verhulst), Radboud University Nijmegen, University of Utrecht, and the Trimbos Institute in the Netherlands. TRAILS is supported by Netherlands Organization for Scientific Research Grants GB-MW 940-38-011, GB-MAGW 480-01-006, GB-MAGW 457-03-018, NWO 175.010.2003.005, ZonMw 100-001-001, ZonMw 60-60600-98-018; the Department of Justice, Research and Documentation Centre; and the participating research centers.

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self-appraisals (Kupersmidt & Coie 1990; Parker & Asher, 1987; Rubin et al., 1998). Reflecting the importance of acceptance and rejection by peers, a long tradition of research has focused on finding explanations of peer acceptance and peer rejection (Bukowski & Cillessen, 1998; Coie, Coppotelli, & Dodge, 1982; Dodge, 1983; Gifford-Smith & Brownell, 2003; Newcomb et al., 1993).

In this study, we focused on preadolescents. Research on liking and disliking for preadolescents has focused especially on the effects of gender and of various forms of antisocial and prosocial characteristics on peer acceptance and rejection (aggregated liking and disliking scores). However, the mechanisms that relate gender and pro- and antisocial characteristics to liking and disliking have, to our knowledge, not yet been studied in any detailed way. For example, are the processes that lead to liking and those that lead to disliking the same or are they different? The aim of this study was to formulate and test two possible mechanisms that lead to peer acceptance and peer rejection for preadolescents. We used a large data set collected in the Netherlands (TRacking Adolescents' Individual Lives Survey; TRAILS) from children aged 11 or 12 years.

Theoretical Elaboration

Two theories have dominated research on likes and dislikes. Similarity theory states that people like characteristics in others that are similar to their own (Byrne, 1971). Among sociologists, the term *homophily* is used for the same idea (see McPherson, Smith-Lovin, & Cook, 2001). Sometimes the theory is extended to state that dissimilarity leads to dislike (Nangle, Erdlay, Zeff, Stanchfield, & Gold, 2004; Rosenbaum, 1986). By contrast, fea-

tures theory states that there are general attractive features (such as prosociality) and general unattractive features, and people who are perceived as having these features are liked or disliked more than people who do not have these features (Newcomb et al., 1993).¹ Both theories wield a considerable amount of empirical evidence. However, for both theories it is difficult to accommodate differences in likes and dislikes that are due to the possible interaction of similarity and feature effects and the influence of changing circumstances. The importance of this possibility has been stressed before. For example, Martin and Halverson (1981) regarded stereotyping, which is related to both similarity and features evaluations, as a form of information processing, which allowed them to consider the influence of varying salience of such schemas on children's behavior. It has been argued that things may be more complex, either because similarity is mainly a tool to some other ends (e.g., Byrne & Clore, 1970; Condon & Crano, 1988) or because the effect of attractive or unattractive features on acceptance and rejection are moderated by many variables, and it is necessary to find out how (e.g., Newcomb et al., 1993).

An important starting point for considering similarity and feature effects at the same time is to recognize that, with regard to similarity, gender is probably the most crucial variable for preadolescents. Gender is widely recognized as an important determinant in peer interaction (Maccoby, 1988, 1998). Children experience greater comfort interacting with same-gender peers (Benenson, Apostoleris, & Parnass, 1997; Lundy, Field, McBride, Field, & Largie, 1998). Children and preadolescents also seem to have a pronounced preference for same-gender peers with schoolwork (Strough & Covatto, 2002; Strough & Meegan, 2001), time spending (Larson & Richards, 1991), and playing (Bukowski, Gauze, Hoza, & Newcomb, 1993; Martin & Fabes, 2001; Martin, Fabes, Evans, & Wyman, 1999). Davey (1983) found that children categorized other children as "belonging together" by gender when the context was play. Preference for same-gender peers increases during childhood until early adolescence (Maccoby, 1998).

As mentioned in the introduction, prosocial and antisocial characteristics are probably of crucial importance for acceptance and rejection in general. In our empirical study, we focused on the influence of helping and bullying. There are surely additional aspects that deserve closer attention. For example, aggressive children have been found to have more friends who like to violate rules (see Bagwell & Coie, 2004). However, tracing the interaction of gender with bullying and helping creates already much complexity, and thus as a first step we limited our analyses to clear profiles of the mechanisms. They are described below.

The Extended Gender-Homophily Mechanism of Peer Acceptance and Rejection

Perhaps the simplest plausible mechanism is a gender-homophily mechanism extended within a plausible assumption of feature effects. We are dealing with preadolescents for whom gender differences have been shown to be of primary importance (see Theoretical Elaboration). This suggests that gender-homophily effects trump feature effects in the sense that acceptance and rejection are governed by gender, and bullying and helping only subtract from or add to these scores. Thus, feature effects "piggyback" on gender effects. It also stands to reason that there is an exception to the piggyback effect. When same gender

is so important for interaction, there will be prototypicality effects (see Hogg & Hains, 1996). Boys will accept bullying girls (i.e., more "boyish" girls) better than other girls, and girls will accept helpful boys (i.e., more girl-like boys) better than other boys. The testable hypotheses for preadolescent boys and girls based on these considerations are the following.

Hypotheses on the effects of gender on acceptance and rejection:

Hypothesis 1: The main explanatory factor for acceptance and rejection in preadolescents is gender homophily (same-gender acceptance, cross-gender rejection). For this reason, acceptance and rejection are predicted to have symmetrical effects.

Hypothesis 2: Boys will be more accepted by boys than by girls and vice versa.

Hypothesis 3: Boys will be more rejected by girls than by boys and vice versa.

Hypotheses on the effects of combinations of gender and features (bullying and helping) on acceptance and rejection:

Hypothesis 4: For both boys and girls (4a) bullying will somewhat decrease acceptance with the exception (4b) that boys will accept bullying girls better than nonbullying girls; (4c) helping will somewhat increase acceptance (this includes girls will accept helping boys better than nonhelping boys).

Hypothesis 5: For both boys and girls (5a) bullying will increase rejection; (5b) helping will decrease rejection.

The Goal-Framing Mechanism of Peer Acceptance and Rejection

Another possible mechanism for acceptance and rejection can be derived from goal-framing theory (Lindenberg, 2001, 2006), which, in turn, draws among others on results from the research on goals by Kruglanski (see Kruglanski et al., 2002) and Bargh (see Ferguson & Bargh, 2004). The importance of goals for explaining various forms of behavior and peer acceptance and rejection has also been suggested by various authors in the developmental literature (cf. Crick & Dodge, 1994; Heidgerken, Hughes, Cavell, & Willson, 2004; Ojanen, Grönroos, & Salmivalli, 2005; Renshaw & Asher, 1983). To our knowledge, however, it has not yet been used to explain the possible combinations of gender and feature effects as we do here.

Goals can be seen as combinations of representations of desired or undesired end states and knowledge structures (including stereotypes) about ways to realize them. When they are activated or "focal," goals influence both what we pay special attention to and what we like and dislike. Objects that are deemed to facilitate goal achievement are liked, and objects that are deemed to block goal achievement are disliked. Helping is likely to be a feature seen to

¹ A third theory (called implicit egotism theory; see Jones, Pelham, Carvallo, & Mirenberg, 2004) based on associations (e.g., people like others who have similar names) is less relevant in our context and is not discussed.

facilitate goal pursuit and is thus a positive feature. Bullying, by contrast, is not always seen as a negative feature. Of course, it thwarts goal pursuit for the victims and is perceived as negative by the victims. But for onlookers or collaborators, it may be neutral and sometimes even facilitate goal pursuit, such as status striving (see Hawley, 1999). Thus, the effects of bullying (as a feature) on acceptance are expected to be more mixed and thus much weaker than the effects of helping.

A strong influence of gender on acceptance and rejection could be the result of the importance of gender for goal achievement. For example, the question "I would like to have a good time playing with another child. Which child is best suited for this purpose?" could be answered by "I am a boy and playing with other boys will give me a much better time than playing with girls." Martin and Halverson (1981) called such gender-related mental constructs for achieving goals "sex-schemas" and suggested that they are the result of instruction and experience of sex-related features that are relevant to who a person is and what the person wants to do. These schemas are self-relevant (i.e., pertain to a person's goals and their realization) and chronically accessible, which means that they influence likes and dislikes in a particular context (school) continuously unless they change. Such sex-schemas imply for preadolescent boys and girls that the bulk of important goals to be realized in peer interaction can best be realized with peers of one's own sex. This does not appear to differ greatly from a homophily effect, as described above. However, there are important differences.

First, the goal-framing approach predicts asymmetries between acceptance and rejection, whereas the gender-homophily approach treats acceptance and rejection symmetrically. People like what facilitates pursuit of their goals and reject what harms it. Though preadolescents can be predicted to like others of their own sex much more than members of the opposite sex, rejection cannot be expected to be so discriminating. Anybody who disrupts the pursuit of one's goal will be rejected, be that a boy or a girl. A boy who disrupts the goal pursuit of another boy should be disliked just as much as a girl who does so, and vice versa. The rest is a matter of the likelihood of occurrence of disruption episodes. The sexschemas make it more likely that, for boys, goal pursuit will be disrupted by girls, who are categorically thought to be of little use for goal pursuit, and vice versa for girls. Thus asymmetry in frequency of pursuing positive goals versus avoiding disturbance of goal pursuit should manifest itself in an asymmetry of the frequency of acceptance (high) and rejection nominations (low). In addition, boys should have a greater dislike for girls than for other boys and vice versa for girls. This difference should be much smaller, however, than the corresponding differences for acceptance.

Second, in the goal-framing approach, focal goals are hypoth-esized to influence what people attend to. People pay close attention to what they think is instrumental in or disturbs the achievement of interaction goals. They focus on cues that help them predict the usefulness of another person or of certain features of that person for the realization of their own goals. An important implication of the goal-framing approach is that when there is a strong focus on gender for achieving one's goals, features of a person such as helping and bullying have a double function. In one situation, they signal gender by confirming the sex-schemas ("boys bully," "girls are nonaggressive and helpful"). In another situation,

they are taken as features that facilitate or hinder goal achievement. In a context in which helping and bullying could not possibly be taken as markers for gender (as in one's own gender group), they are features that directly influence acceptance and rejection. However, when they apply to people outside one's gender group, they are likely to be more indicative of gender than of prosocial or antisocial features. This has two important implications. One is a prototypicality effect. When preadolescent girls are bullies, boys will see them as being more like one of their own, and thus more likable. For the same reason, girls are likely to see a helpful boy as more like one of their own and thus find him more likable. The other is a cross-gender ignorance effect. Boys will see helpfulness in girls as indicative of "girlishness" and ignore it as a special feature, and girls will see bullying in boys as "typically boyish," also ignoring it as a special feature. For rejection, this cross-gender ignorance effect is not probable. When a person thwarts another's goal pursuit, certain features of the other can lessen the disturbance (helpfulness) or exacerbate it (bullying). Thus, for rejection, features are likely to be seen as subtracting from or adding to the disturbance and thus rejection. But because rejection has mainly to do with the blockage of goal pursuit, bullying is predicted to have a stronger absolute effect on rejection than helping.

In sum, though we do not assess goals directly but focus on their tie with gender for preadolescent children, the goal-framing approach leads to concrete testable hypotheses for acceptance and rejection in preadolescence. Empirical evidence for these hypotheses will also support the assumed link between gender and goals for this particular age group. The hypotheses are formulated as follows.

Hypotheses on the effects of gender on acceptance and rejection:

Hypothesis 1: The main explanatory factor for acceptance and rejection in preadolescents is goal-framing. Gender is especially important for reaching interaction goals and thus for acceptance, but not for rejection. For this reason acceptance and rejection are predicted to have asymmetrical effects. (These predictions differ from those of the gender-homophily approach.)

Hypothesis 2: Boys will be more accepted by boys than by girls and vice versa (same as in the gender-homophily approach).

Hypothesis 3: For both boys and girls (3a) scores on acceptance will be much higher than on rejection; (3b) boys will be somewhat more rejected by girls than by other boys and vice versa. (These predictions differ from those of the gender-homophily approach.)

Hypotheses on the effects of combinations of gender and features (bullying and helping) on acceptance and rejection:

Hypothesis 4: Only for the same sex (4a) bullying will decrease and helping increase acceptance, but helping will have a much stronger aggregate effect on the acceptance score than bullying (owing to the varying relations of bullying to goal pursuit); (4b) boys will accept girls better if the girls are more

like them (here in terms of bullying); (4c) girls will accept boys better if the boys are more like them (here in terms of helping); (4d) boys will ignore the feature "helpful" in girls in terms of acceptance; (4e) girls will ignore the feature "bullying" in boys in terms of acceptance. (The predictions in 4a, 4d, and 4e differ from those of the gender-homophily approach.)

Hypothesis 5: For both boys and girls (5a) bullying will increase rejection; (5b) helping will decrease rejection. But the absolute effect of bullying on rejection will be larger than that of helping (5c). (The predictions in 5a and 5b are the same as in the gender homophily approach; in 5c, they are different.)

The hypotheses generated using the competing approaches were tested empirically. In spite of some overlap in predictions, there are many differences that will allow us to pinpoint which of the approaches, if either, comes closer to spelling out the underlying mechanism.

The Present Study

Because goal-framing theory states that the relation between gender and features (here helping and bullying) on the one hand and peer acceptance and rejection on the other hand depends on the gender of the nominator, it is necessary to examine acceptance and rejection based on nominations from boys and girls separately. So far this has rarely been done (cf. Rubin et al., 1998; A. B. Smith & Inder, 1990), but the large sample of boys and girls in this study allowed us to do so.

Methods

Sample

The TRacking Adolescents' Individual Lives Survey (TRAILS) is a new prospective cohort study of Dutch preadolescents who will be measured biennially until they are at least 25 years old. TRAILS is designed to chart and explain the development of mental health and social development from preadolescence into adulthood. The TRAILS target sample involved preadolescents living in five municipalities in the north of the Netherlands, including both urban and rural areas (De Winter et al., 2005; Oldehinkel, Hartman, De Winter, Veenstra, & Ormel, 2004; Veenstra, Lindenberg, Oldehinkel, De Winter, & Ormel, 2006). Of all children approached for enrollment in the study (selected by the municipalities and attending schools that were willing to participate, N = 3,145 children from 122 schools, response of schools 90.4%), 6.7% were excluded because of incapability or language problems. Of the remaining 2,935 children, 76.0% were enrolled in the study, yielding N = 2,230 (consent to participate: both child and parent agreed; mean age of child = 11.09 years, SD = 0.55; gender: 50.8% girls; ethnicity: 10.3% children who had at least one parent born in a non-Western country; parents' education: 32.6% of children had parents with a low educational level, at maximum a certificate from a lower track of secondary education). No nonresponse bias was found in our study for the estimation of the prevalence rates of psychopathology, including antisocial behavior. Boys, children from lower social strata, and children with worse school performance were somewhat more likely to belong to the nonresponse group (De Winter et al., 2005).

A subsample assessed during the first wave of TRAILS, which ran from March 2001 to July 2002, was used in the present study. The subsample consisted of 1,065 of the 2,230 TRAILS respondents. Peer nominations, which were essential for this study, were only assessed in classrooms with at least 10 TRAILS respondents. For this reason, children in classes with fewer than 10 TRAILS respondents were omitted. These children had few TRAILS classmates because our sample is a birth cohort. This made the subsample more selective. Children in special education (5.6% of the sample), children in small schools (6.4%), and children who repeated a grade (16.9%) or skipped a grade (2.2%) were not included in the subsample. The subsample of 1,065 children (mean age = 11.06 years, SD = 0.51; gender: 55.2% girls; ethnicity: 8.7% had at least one parent born in a non-Western country; parents' education: 32.0% of children had a father and 33.8% had a mother with a low educational level, at maximum a certificate from a lower track of secondary education) differed from the other TRAILS respondents on several individual and psychosocial characteristics: They were more often girls, $\chi^2(1, N = 2,230) = 16.1$, p < .01; came on average from higher socioeconomic strata, t(2186) = 5.1, p < .01; lived more often with the same parents throughout their lives, $\chi^2(1, N = 2,230) = 12.5, p < .01$; had a higher level of academic performance, t(1923) = 5.8, p < .01; and were more prosocial, t(1926) = 4.4, p < .001, less aggressive, t(1927) = -3.3, p < .01, and less isolated, t(1927) = -4.4, p < .01.01. In sum, the findings produced using this subsample can only be generalized to a population of preadolescents who attend regular elementary schools and did not repeat grades. This subsample contained fewer children who were at risk (Veenstra et al., 2005). For the comparison of the two approaches, this restriction is not crucial.

Measures

Peer acceptance and peer rejection were assessed using peer nominations in school classes. In classes with at least 10 participating children, children received a list of all classmates and were asked to score at dyadic level whether they liked or disliked all the listed classmates. They also nominated their classmates on helping ("By whom are you helped?") and bullying ("By whom are you bullied?"). The number of nominations they could make was unlimited, and it was given at the dyadic level. Nominations were not required. We used the number of nominations children received from their classmates, the so-called in-degree, for peer acceptance, peer rejection, helping, and bullying. These measures were the aggregates of all the dyadic nominations a person received from others and were for that reason potentially highly reliable and valid (cf. Bukowski et al., 1993; Bukowski & Hoza, 1989). In order to take differences in the number of respondents per class into account, scores were standardized within each classroom. Because all 1,065 participants were on the list and could be nominated, there are no missing data with regard to the above-

Table 1
Mean, Standard Deviation, and Minimum and Maximum of Variables

	Во	ys and girl	s(N = 1,0)	065)		Boys (A	7 = 477)			Girls (Λ	V = 588	58)		
Variable	M	SD	Min.	Max.	M	SD	Min.	Max.	M	SD	Min.	Max.		
Peer acceptance general	0.29	0.16	0.00	0.80	0.28	0.16	0.00	0.78	0.30	0.15	0.00	0.80		
Peer acceptance boys	0.24	0.29	0.00	1.00	0.47	0.28	0.00	1.00	0.11	0.13	0.00	1.00		
Peer acceptance girls	0.30	0.27	0.00	1.00	0.06	0.16	0.00	1.00	0.46	0.24	0.00	1.00		
Peer rejection general	0.13	0.13	0.00	0.85	0.16	0.15	0.00	0.85	0.10	0.12	0.00	0.69		
Peer rejection boys	0.10	0.15	0.00	1.00	0.08	0.14	0.00	1.00	0.20	0.16	0.00	1.00		
Peer rejection girls	0.13	0.17	0.00	1.00	0.12	0.20	0.00	1.00	0.07	0.12	0.00	0.75		
Bullying	0.06	0.08	0.00	0.70	0.08	0.10	0.00	0.70	0.03	0.06	0.00	0.40		
Helping	0.21	0.14	0.00	0.80	0.18	0.13	0.00	0.67	0.24	0.14	0.00	0.80		

Note. Min. = minimum; Max. = maximum.

mentioned characteristics. The descriptive statistics and the correlations for these variables are shown in Tables 1 and 2.

Analyses

A hierarchical regression analysis was conducted for peer acceptance and peer rejection based on nominations from boys and girls jointly and based on nominations given by boys and girls separately. Because both acceptance and rejection variables deviated from normality, we conducted regression analyses with the Tobit model, which accounts for violations of normality of the dependent variables (Long, 1997; D. A. Smith & Brame, 2003; Tobin, 1958). Each analysis consisted of two steps. First, regression analyses with only the main effects of bullying, helping, and gender were conducted. Second, interaction effects between gender and either bullying or helping were added to the model. All variables were standardized (M = 0, SD = 1).

Results

Both approaches stress the importance of gender effects (first hypothesis), but the goal-framing approach limits the gender effects mainly to the mechanisms leading to acceptance, excluding those leading to rejection. Generally, the results supported this asymmetry. Table 3 (acceptance) shows that when boys and girls were considered separately, the explained variance for peer acceptance shot up from 10% to about 27% for boys and 23% for girls with some significant interaction effects. Pooling boys and girls for analysis creates ambiguous results because the gendered effects in part cancel each other out, and this goes far beyond the interaction effect shown in the regression analyses. This indicates that studies on acceptance that fail to focus on boys and girls separately and yet include both are likely to find contradictory or ambiguous results. By contrast, for rejection, analyzing boys and girls separately did not increase the explained variance, and interaction effects were almost not significant. The explained variance for rejection was also much lower than for acceptance (4% vs. 27% for boys, and 12% vs. 23% for girls). The most plausible explanation for this difference is that gender, as the most important explanatory factor for acceptance, plays a much smaller role in rejection.

The second hypothesis was identical in both approaches, and it predicted that peer acceptance would be much higher for the same sex than for the opposite sex. Figure 1A shows that this is indeed the case. The differences were highly significant, t(1063) = -31.34, p < .001, for boys and t(1063) = 27.38, p < .001, for girls. The evidence showed strong gender effects of peer acceptance. The third hypothesis of the gender-homophily approach predicted that rejection scores would be mirror images of the acceptance scores. By contrast, the goal-framing approach predicted an asymmetry between acceptance and rejection. Rejection scores were expected to be much lower and less gender-specific than acceptance scores. Figure 1B shows that the data support the goal-framing prediction. The differences in boys' rejection of boys and of girls and vice versa were still significant, t(1063) = 3.94, p < .001, for boys and t(1063) = -13.21, p < .001, for girls. Compared with acceptance (Figure 1A), however, the differences were much smaller.

The fourth hypothesis of the gender-homophily approach was the prediction that, irrespective of gender, bullying would somewhat decrease and helping would somewhat increase acceptance with the exception of a prototypicality effect. The corresponding hypotheses from the goal-framing approach were partly the same (prototypicality effect) and partly different. On the basis of this approach, we predicted that the effect of bullying would be much smaller than the effect of helping due to the varying relations of bullying with goal pursuit. For the interpretation of the interaction effects, we formulated multiple equations, alternating the values of the main effects (one standard deviation below and above the mean) and holding all other variables in the models to their sample means. This enabled us to draw Figures 2 and 3.³

 $^{^2}$ Peer acceptance by boys and girls (skewness = 0.39/kurtosis = -0.22), peer acceptance by boys (skewness = 1.01/kurtosis = -0.02), peer acceptance by girls (skewness = 0.67/kurtosis = -0.47), peer rejection by boys and girls (skewness = 1.55/kurtosis = 3.03), peer rejection by boys (skewness = 1.91/kurtosis = 4.93), and peer rejection by girls (skewness = 1.66/kurtosis = 2.84).

³ In the representation of the interaction effects in Figures 2 and 3, for representational reasons, we subtracted 0.93 from the scores of boys and added 0.93 to the scores of girls. This number is the mean of the main effects of gender (2.18 and 1.52) divided by 2.

Table 2
Correlation Between Variables

Variable	1	2	3	4	5	6	7	8	9
Peer acceptance general									
Peer acceptance boys	.38**								
Peer acceptance girls	.57**	41^{**}							
4. Peer rejection general	41**	03	34^{**}						
5. Peer rejection boys	27^{**}	25^{**}	03	.65**					
6. Peer rejection girls	31**	.15**	44**	.84**	.22**				
7. Bullying	07^{*}	.19**	21^{**}	.46**	.25**	.42**			
8. Helping	.49**	.03	.38**	29^{**}	11**	25^{**}	12^{**}		
9. Gender $(1 = boys)$	07^{*}	.69**	63**	.21**	12**	.38**	.30**	20^{**}	

^{*} p < .05. ** p < .01.

In Figure 2A, the effect of bullying on same-gender acceptance is depicted. As expected from the goal-framing approach, there is a trend that peers were less accepting the more they saw samegender peers as bullies. However, effects were not significant either for boys (b = -.07, p = .22) or for girls (b = -.08, p = .11).

For helping, both approaches predicted the same pattern as for same-gender bullying. This is also what we found. As can be seen from the left side of Figure 2B, boys were more accepting of boys whom they saw as helping (b = .38, p < .01); girls were more accepting of other members of their own sex the more they saw them as helping (b = .37, p < .01).

The data support, and inspection of Figures 2A and 2B readily show, that the effect of helping on acceptance is much stronger than the effect of bullying. This supports the prediction of the goal-framing approach and contradicts the prediction of symmetric effects by the gender-homophily approach.

Turning to the prototypicality effect predicted by both approaches, we observe from the left side of Figure 3 that acceptance by boys of bullying girls indeed increased the more the boys saw the girls as bullies (b = .34, p < .01). This is as predicted, and it

is also confirmed for girls: Looking at the right side of Figure 3, we see that girls accepted boys better the more they saw them as being helpful (b = .25, p < .01).

Is there a cross-gender ignorance effect on girls for bullying boys and on boys for helping girls, as predicted by the goal-framing approach? The data tell us that, contrary to the prediction of the gender-homophily approach and confirming the prediction of the goal-framing approach, the effects of bullying and helping on acceptance do not hold across gender groups. Whereas helping had a large effect on acceptance within their own gender group (b = .38, p < .001) for boys and b = .37, p < .001 for girls), boys ignored helping as a feature in girls (b = .15, p = .12). Similarly for girls: As we have seen, girls did not respond much to bullying within their own gender group, but when it comes to boys, they ignored bullying totally in terms of acceptance (b = .05, p = .32).

For the test of the hypotheses on the combination of gender and features with regard to rejection, we followed the same procedure as for the effects on acceptance. In order to facilitate the comparison with the effects on acceptance, we again composed multiple equations, alternating the values of the main effects (one standard deviation below and above the mean) and holding all other vari-

Table 3
Results of Multiple Regression Analyses on Relations Between Bullying and Helping and Peer Acceptance Among Boys and Girls Jointly and Separately (N = 1,065)

	on no	ominatic	tance based ons from boy s jointly			n nomin	ptance based nations from as only			Peer acceptance based on nominations from girls only			
Variable	В	SE	В	SE	В	SE	В	SE	В	SE	В	SE	
Bullying	-0.03	0.04	0.06	0.06	0.03	0.06	0.34**	0.09	0.01	0.03	-0.08	0.05	
Helping	0.51**	0.05	0.50^{**}	0.05	0.28**	0.06	0.15	0.09	0.32**	0.05	0.37**	0.05	
Gender of like nominee $(1 = boys)$	0.07	0.08	0.06	0.08	2.25**	0.17	2.18**	0.16	-1.53**	0.13	-1.52**	0.13	
Bullying × Gender			-0.13^{+}	0.07			-0.41^{**}	0.10			0.12	0.08	
Helping × Gender			0.02	0.06			0.23^{*}	0.11			-0.12	0.11	
Pseudo R-square	0.096		0.098		0.254		0.267		0.224		0.227		

Note. White-Huber standard errors that adjust for clustering of individuals within classrooms are reported. Pseudo R-squares as obtained from Tobit analyses are reported.

p < .05. ** p < .01. + p < .10.

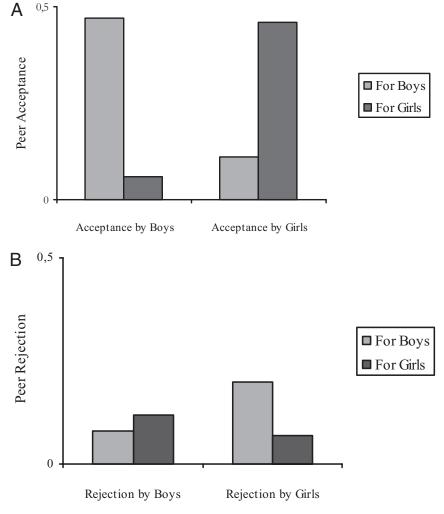


Figure 1. Mean standardized acceptance scores (A) and rejections scores (B) for boys and girls by gender (N = 1,065).

ables in the models to their sample means. This is shown in Figures 4 and 5.4

We show in Table 4 and, for ease of visualization, also in Figures 4 and 5, that the fifth hypothesis in both approaches is supported by the data. Bullying was significantly positively associated with peer rejection based on nominations taken from boys and girls together (b = .50, p < .01) and based on nominations from boys (b = .52, p < .01) and girls (b = .47, p < .01) separately. Helping was significantly negatively associated with peer rejection based on nominations from boys and girls together (b = -.34, p < .01) and based on nominations from boys (b =-.32, p < .01) and girls (b = -.34, p < .01) separately. As predicted by the goal-framing approach (hypothesis 5c) and against the prediction of the gender-homophily approach, bullying has a larger absolute effect on rejection than helping for both boys and girls. Gender was only slightly significantly associated with peer rejection based on nominations from boys and girls together (because the two effects cancel each other out; b = .12, p = .09), but it is, as predicted, significantly positively associated with rejection based on nominations from boys (b = -.96, p < .01) and girls (b = .87, p < .01) separately.

As predicted by both approaches, there was no significant interaction effect for helping with gender. However, for peer rejection by girls, the effect of bullying was partially dependent on gender, that is, after controlling for the interaction of bullying with gender, the effect of bullying on rejection by girls was somewhat smaller for boys (b = .40, p < .01) than for girls (b = .67, p < .01). Figures 4 and 5 show that, for rejection, the reactions of boys and girls to same-gender and cross-gender bullying and helping were very similar, with the small exception that girls were somewhat more rejecting of bullying girls than bullying boys (compare Figures 4A and 5A). This hints at a small prototypicality effect (i.e., bullying in boys is sometimes seen by girls as boyish rather than obnoxious).

Despite this effect for bullying, the gender effect indicated that, as we expected, boys and girls more often reject cross-gender than

⁴ In the representation of the interaction effects in Figures 4 and 5, for representational reasons, we subtracted 0.46 from the scores of girls and added 0.46 to the scores of boys. This number is the mean of the main effects of gender (0.94 and 0.88) divided by 2.

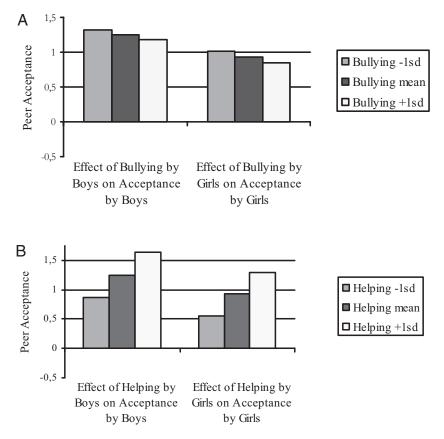


Figure 2. Effects of bullying (A) and helping (B) on same-gender peer acceptance by boys and girls separately (N = 1,065).

same-gender peers almost without any special difference in the way they do it.

Discussion

The main result of this study is that whereas the genderhomophily and the goal-framing approaches both correctly predict strong gender effects with regard to acceptance and rejection, the details of the mechanism underlying acceptance and rejection in preadolescents seem to be much better predicted by the goalframing approach than by the gender-homophily approach. What is this mechanism and how do the two approaches differ on this?

Peer acceptance and rejection have been shown to matter greatly in all sorts of ways for boys and girls (e.g., see Ollendick et al., 1992). However, more seems to be known about their conse-

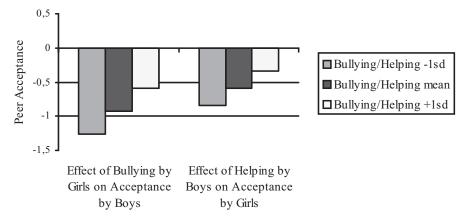


Figure 3. Prototypicality effects of bullying by girls on acceptance by boys and helping by boys on acceptance by girls (N = 1,065).

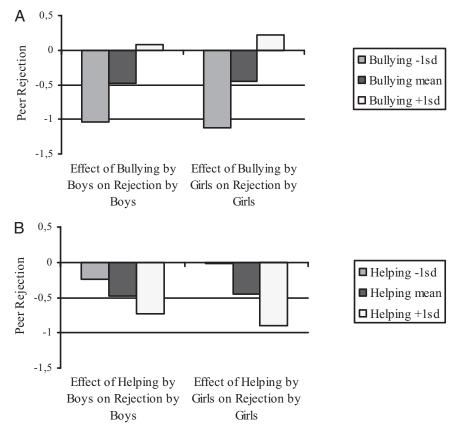


Figure 4. Effects of bullying (A) and helping (B) on same-gender peer rejection by boys and girls separately (N = 1,065).

quences than their causes. With regard to their causes, results from empirical studies have been ambiguous or even contradictory. This may in part be because the two basic theories used (explicitly or implicitly) in most studies to explain acceptance and rejection, namely that (a) similarity creates acceptance and dissimilarity rejection and that (b) generally attractive features create acceptance and unattractive features rejection, are not well integrated. Both theories have much empirical support, but they do not deal with possible combination effects of similarity and features. Given the age of our subjects, gender seems to be the most important similarity feature. We elaborated two approaches that deal with the possible combinations of the effects of gender and the features bullying and helping: the gender-homophily approach and the goal-framing approach. In both, gender plays the central role, but the underlying mechanisms are different. In the gender-homophily approach, gender similarity dominates acceptance and gender dissimilarity dominates rejection, and features only add to or subtract from the gender effects. Thus acceptance and rejection effects are symmetrical. In the goal-framing approach, it is assumed that what is helpful for goal pursuit is liked, and that what thwarts goal pursuit or is dangerous is disliked. In addition, goals are taken to affect what is attended to and what is ignored. In this light, peer acceptance and rejection are not two sides of the same coin but the results of different goal-achievement processes. Contrary to the gender-homophily approach, the goal-framing approach thus predicts a pronounced difference between the circumstances that lead to acceptance and those that lead to rejection.

The detailed findings that relate to the mechanisms behind acceptance and rejection in preadolescence favor the goal-framing approach in both major areas of prediction: the gender effects and the combination of gender and feature effects. The most important differences in predictions between the two approaches with regard to gender effects are that the gender-homophily approach predicts symmetrical effects for acceptance and rejection, whereas the goal-framing approach predicts that acceptance will be much more frequent than rejection and that the gender difference in rejection will be less pronounced than the gender difference in acceptance. The data clearly support the goal-framing predictions.

With regard to the combination of gender and feature effects, the goal-framing approach predicts two tell-tale manifestations of the underlying goal-framing mechanism: Helping has much stronger aggregate effects on acceptance than does bullying (owing to the more varied relations of bullying to goal pursuit), and there is a cross-gender ignorance effect. This effect entails that preadolescent boys see helpfulness in girls as part of being a girl rather than as a prosocial feature, and that preadolescent girls see bullying in boys as part of being a boy rather than as an antisocial feature. This means that boys will not like helpful girls better than nonhelpful girls and girls will not like bullying boys less because they bully. The gender-homophily approach predicts symmetry in the effects

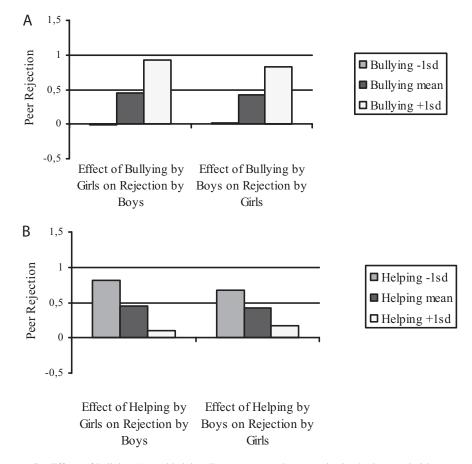


Figure 5. Effects of bullying (A) and helping (B) on cross-gender peer rejection by boys and girls separately (N = 1,065).

of helping and bullying on acceptance for both sexes. Again, the data clearly favor the predictions of the goal-framing approach.

The important point here is not that certain predictions were confirmed while others were not, but that the consistent support of the results for the goal-framing approach greatly increases our confidence that it is possible to predict what the underlying mechanism of acceptance and rejection in preadolescence is likely to be. An important implication of the goal-framing approach and of these findings is that acceptance and rejection are not tied to the same processes. For example, we found strong differences in effects for boys and girls for acceptance but not for rejection, in line with the goal-framing prediction about the different mecha-

Table 4
Results of Multiple Regression Analyses on Relations Between Bullying and Helping and Peer Rejection Among Boys and Girls Jointly and Separately (N = 1,065)

	on no	minatio	tion based ons from boy s jointly	ys		nomina	tion based tions from only		Peer rejection based on nominations from girls only				
Variable	В	SE	В	SE	В	SE	В	SE	В	SE	В	SE	
Bullying	0.50**	0.05	0.57**	0.07	0.52**	0.11	0.47**	0.16	0.47**	0.06	0.67**	0.08	
Helping	-0.34**	0.05	-0.37^{**}	0.06	-0.32^{**}	0.10	-0.36**	0.12	-0.34**	0.08	-0.45^{**}	0.09	
Gender of dislike nominee $(1 = boys)$	0.12^{+}	0.07	0.12^{+}	0.07	-0.96**	0.21	-0.94**	0.22	0.87^{**}	0.13	0.88^{**}	0.13	
Bullying × Gender			-0.10	0.08			0.09	0.17			-0.26^{**}	0.10	
Helping × Gender			0.06	0.09			0.12	0.12			0.20	0.14	
Pseudo R-square	0.100		0.101		0.041		0.042		0.113		0.117		

Note. White-Huber standard errors that adjust for clustering of individuals within classrooms are reported. Pseudo R-squares as obtained from Tobit analyses are reported.

p < .01. + p < .10.

nisms for acceptance and rejection. In addition, there was a large amount of explained variance for acceptance (about 25%) and only a modest amount of explained variance for rejection (about 4% for boys and 12% for girls). It is very likely that this difference is due to the goal-framing prediction that gender plays a much larger role in the realization of interaction goals than avoidance of disturbance in goal realization. As can be seen from Table 3, for both sexes, gender is the factor that explains acceptance the most. For rejection (Table 4), gender is still a sizable factor, but much smaller. A related lesson is that even though gender plays an important role, acceptance and rejection are not simply an in-group (same-gender acceptance) and out-group (cross-gender rejection) phenomenon. This also fits with the results of a recent study by Card, Hodges, Little, and Hawley (2005). The characteristics they investigated and the methodology of nominations they used were somewhat different from ours, but they too found no evidence of a straightforward in-group/out-group effect.

Our study had a number of strengths and limitations. One strength is that it explicitly introduced a theory of evaluations that unravels the mechanism that may lie behind preadolescent acceptance and rejection. From a developmental point of view, the advantage of the theory is that it contextualizes the determinants of affective evaluations. For example, as children enter adolescence, it is likely that their goals change (see Ojanen et al., 2005) and that the mental constructs that guide what is considered useful and disruptive for goal pursuit and therefore liked and disliked will also change. This provides a useful heuristic for tracing such changes and their affective and behavioral consequences in future research. Particularly, closer attention to interaction goals and the accompanying knowledge structures about ways to realize them (such as sex-schemas for preadolescents) seems warranted.

Another strength is the separate inclusion of boys' and girls' nominations, each with cross-gender nominations. Not many researchers have done this before. The doubling of explained variance in moving from analyzing the gender simultaneously (10%) to analyzing gender separately (about 25%) speaks in favor of paying attention to the context of evaluation. Probably because of the use of relatively small samples without a proportional number of boys and girls, most research on peer acceptance and peer rejection has so far focused solely on boys (e.g., Dodge, Coie, Pettit, & Price, 1990; Gifford-Smith & Brownell, 2003; Rodkin, Farmer, Pearl, & Van Acker, 2000; Salmivalli, Kaukiainen, & Lagerspetz, 2000) or on girls (e.g., Prinstein & La Greca, 2004). Other researchers have restricted nominations to same-gender peers (e.g., Henington, Hughes, Cavell, & Thompson, 1998; LaFontana & Cillessen, 2002; Wentzel, 1994). Where children were allowed to nominate across gender boundaries, investigation was focused on the extent to which the relation with behavior differs for boys and girls regardless of the gender of the nominator (e.g., Björkqvist, Lagerspetz, & Kaukiainen, 1992; Cillessen & Mayeux, 2004; Pakaslahti & Keltikangas-Järvinen, 2001; Rubin et al., 1998). Thus, peer acceptance and peer rejection in those studies were based on nominations from both boys and girls together. Another strength of this study is the large sample. Most studies in this field have dealt with relatively small samples. Two studies in which nominations given by boys and girls were separated did not reveal remarkable differences between same-gender and cross-gender nominations. Relatively small samples were used in both, about 200 (pre)adolescents (Bukowski et al., 1993) and

209 children in the other (Salmivalli et al., 2000). By contrast, a sample of more than a thousand children was used in the present study, including proportional numbers of boys and girls. In view of the large sample and the use of peer nominations, which provide reliable and valid information (cf. Bukowski et al., 1993; Bukowski & Hoza, 1989), findings can be considered rather robust.

Some limitations of the present study should also be taken into consideration. First, due to the nature of our sample, the findings can only be generalized to a population of preadolescents who attend regular elementary school and did not repeat grades. Second, nominations used in this study only pertain to the class. By design, respondents were to nominate only peers in their own class. This may have increased the same-gender effect because research indicates that in late childhood and preadolescence crossgender interaction occurs mostly within the context of family and neighborhood and thus outside school (A. B. Smith & Inder, 1990). In line with this, we may have unwittingly contributed to the same-gender effect because we did not differentiate structured and unstructured contexts, though previous research has shown that the former facilitate same-gender preferences whereas the latter contribute to cross-gender interactions (Strough & Covatto, 2002). Third, neither bullying nor helping were specified or defined for the respondents. This left room for each respondent's own interpretation as to what is meant by bullying. A counter argument, however, is that giving a definition does not preclude respondents from using their own working definition (cf. Salmivalli, 2002). Fourth, we did not measure goals explicitly but simply assumed on the basis of past research that the interaction goals of preadolescents are best realized with peers of the same gender. Future research might take goals (and the sex-schemas concerning their realization) explicitly into account.

Despite the limitations, we believe that the support found for goal-framing theory, the increased clarity about gender-homophily effects, the separate consideration of same- and cross-gender nominations from girls and boys, the large sample and the rather clear results help in disentangling the complex evaluations that lie at the basis of preadolescents' peer acceptance and rejection. Thereby we might also get a better handle on the ambiguous or contradictory results of previous studies of the possible causes of peer acceptance and rejection, and we are likely to have learned something about the design of studies in the future.

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Received September 8, 2005 Revision received January 1, 2007 Accepted May 24, 2007

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