

Language skills, peer rejection, and the development of externalizing behavior from kindergarten to fourth grade

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Background: Children with poorer language skills are more likely to show externalizing behavior problems, as well as to become rejected by their peers. Peer rejection has also been found to affect the development of externalizing behavior. This study explored the role of peer rejection in the link between language skills and the development of externalizing behavior. **Methods:** Six hundred and fifteen (615) children were followed from kindergarten to grade 4. Receptive language skills were measured with the Peabody Picture Vocabulary Test in grade 2. Teachers reported externalizing behavior and peer reports of social rejection were measured annually. **Results:** Children with poorer receptive language skills showed increasing externalizing behavior, while children with better receptive language skills showed decreases in externalizing behavior. Children with poorer receptive language skills experienced peer rejection most frequently. The link between receptive language skills and the development of externalizing behavior was mediated by the development of peer rejection. Findings suggested that this mediational link applied mostly to boys. **Conclusion:** Children with poorer language skills are at increased risk of becoming rejected by mainstream peers, which adds to the development of externalizing behavior. **Keywords:** Elementary school children, language skills, externalizing behavior, peer rejection, sex differences.

Children with poorer language skills have been described to be at risk of developing externalizing behavior problems, such as aggression, destruction, and defiance. Indeed, theories on the development of childhood externalizing behavior have stressed the importance of minor neuropsychological problems, including verbal deficits, as factors underlying the early manifestation of externalizing behavior (Moffitt, 1990, 1993). Empirical studies reported that poor language skills were linked to externalizing behavior development and later antisocial outcomes (Hill, 2002; Moffitt & Caspi, 2001; Nigg & Huang-Pollock, 2003; Séguin, Parent, Tremblay, & Zelazo, 2009). Although this shows that children with poorer language skills are at risk of developing externalizing behavior problems, it is unclear how language skills contribute to the development of such problems. One possible pathway is that poorer language skills hamper children's abilities to build satisfactory relations with peers. The aim of this study is to explore this possibility by testing hypotheses on the role of poor peer relations in the link between language skills and development of externalizing behavior in a Dutch general population sample of children, followed from kindergarten to grade 4 elementary school.

Several authors have suggested that children with poorer language skills are at increased risk for encountering difficulties in building good relationships with other people, including peers. For instance, Keenan and Shaw (1997) put forward the

notion that a proper language development helps preschool children to interpret others, and to communicate their needs to others. This is thought to lead to less distress and frustration, and a feeling of being more in control of the environment, resulting in a decrease of behavior problems. With the transition to elementary school, relationships with peers become increasingly prominent in children's development. Children with lower verbal abilities likely run into problems in their interactions with peers because of their lower ability to interpret their verbal expressions and to communicate effectively. As externalizing behavior has been shown to be influenced by poor peer relations (Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006), children with poorer language skills might show more externalizing behavior because they have difficulty in establishing satisfactory relations with peers. Problematic peer relations may thus mediate the link between language skills and the development of externalizing behavior. In line with this, Moffitt (1993) theorized that early neuropsychological deficits, including verbal deficits, in addition to environmental risks such as poor peer relations, contribute to the development of childhood externalizing behavior. Moffitt and Caspi (2001) indeed found that children with serious antisocial behavior during childhood were characterized by both early neurocognitive problems and being rejected by peers. Moreover, in his review on academic underachievement/intelligence and externalizing behavior problems, Hinshaw (1992) concluded that 'externalizing behavior may be more predictable from [...] deficits in verbal mediation of

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social stimuli than from lowered intelligence per se' (p. 148). In short, children with poorer language skills likely have lowered abilities to adequately regulate emotions, interpret social interactions, and communicate with peers. This may increase these children's risk to become rejected by peers, which in turn influences the development of externalizing behavior.

In accordance with this reasoning, there is empirical evidence supporting links between language skills and peer rejection, and between peer rejection and externalizing behavior. Children with lower language abilities, expressed as a poor vocabulary, have indeed been found to have difficulty labeling, regulating, and communicating their own and recognizing other people's feelings and emotions (Cook, Greenberg, & Kusche, 1994; Kopp, 1989; Mostow, Izard, Fine, & Trentacosta, 2002). At the same time, these children seem to have problems interpreting intentions/cues of peers and understanding social interaction (Astington & Jenkins, 1999; Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). Both types of difficulties likely result in problematic peer relationships (Dodge, Murphy, & Buchsbaum, 1984; Mostow et al., 2002). Although relatively scarcely reported, there is some empirical support for a link between language skills/cognitive abilities and peer relations. Several studies found that rejected children had on average lower cognitive abilities than non-rejected children (Bellanti & Bierman, 2000; Newcomb, Bukowski, & Pattee, 1993). Other studies using measures of verbal abilities found that rejected children had poorer receptive language skills than popular children (Slaughter, Dennis, & Pritchard, 2002), and that better verbal abilities were positively associated with peer acceptance in boys (Braza et al., 2009).

Peer rejection itself has been amply linked with externalizing behavior (Parker et al., 2006; Rubin, Bukowski, & Parker, 2006). In fact, Ladd (2006) found that experiences of peer rejection added to the development of externalizing behavior over the elementary school period, above and beyond pre-existing problem behaviors. Moreover, rejected children's levels of externalizing behavior were found to increasingly deviate from their non-rejected counterparts over the course of elementary school (Keiley, Bates, Dodge, & Pettit, 2000).

In sum, there is empirical evidence for links between language skills and externalizing behavior, between language skills and peer rejection, and between rejection and externalizing behavior. However, many of the aforementioned empirical studies on these links were of cross-sectional nature, and – to our knowledge – no study investigated them simultaneously in a longitudinal design. This makes the theory-based hypothesis that the link between language skills and the development of externalizing behavior may be mediated by peer rejection yet untested. The goal of this study is therefore to test

the role of peer rejection in the link between language skills and the development of externalizing behavior from kindergarten to fourth grade elementary school. We expect that the link between (poor) language skills and the development of externalizing behavior runs through children's failures to establish satisfactory social relations with mainstream peers.

In studying this link, possible sex differences need to be taken into account. With respect to language skills, elementary school girls are often found to outperform boys (Halpern, 2000), while others reported no sex difference or even that boys performed better when using measures of (receptive) vocabulary (Hyde & Linn, 1988; Moffitt, Caspi, Rutter, & Silva, 2001). However, boys are more likely to experience peer rejection, and to show higher levels of externalizing behavior compared to girls (Moffitt et al., 2001). More important for this study, it is unclear whether the links between language skills, peer relations and externalizing problems are similar for boys and girls. Braza and colleagues (2009) reported that boys, but not girls, with higher verbal abilities were more likely to be accepted by their peers. Moreover, peer rejection may be more strongly linked to externalizing behavior in boys (see Moffitt et al., 2001), and it has been shown that boys are more focused on social status and more likely to respond with externalizing behavior when their social status is threatened than girls (Rudolph, 2002). Given these findings, we expected peer rejection to mediate the link between language skills and externalizing behavior in boys, but not in girls.

Methods

Participants

Children came from 30 elementary schools that were recruited in 2004, when children were in kindergarten. In order to enhance generalization, schools were recruited from two urban areas in the western part of the Netherlands and a rural area in the eastern part of the Netherlands. The first 30 schools that accepted our invitation to participate in the project were included in the project. Children were eligible for inclusion if they moved on from kindergarten to first grade ($N = 750$) or if they entered a participating classroom ($N = 111$) in 2005. Signed parental informed consent was obtained for 88% of the children, resulting in a total sample of 759 children. Children's age at first assessment was 6.0 years ($SD = .47$). The sample was evenly composed of males (50.3%) and females. Fifty-seven percent of the children were from Dutch/Caucasian background. Other backgrounds were Morocco (11%), Turkey (10%), Surinam (6%), Netherlands Antilles (5%), and other ethnical backgrounds (12%). Thirty-eight percent of the children came from low socioeconomic status (SES) families. This is largely comparable to the general population (31%; Statistics Netherlands, 2009).

Receptive language scores, assessed in second grade, were available for 615 children (81% of the sample). Receptive language scores were missing due to grade

retention in first grade, moving to another school, or because of absence during the measurement. These 615 children did not differ from the target sample with respect to sex distribution ($\chi^2(1) = .21, p = .71$). However, children with missing data had higher levels of externalizing behavior ($F(1, 757) = 16.03, p < .01$) and higher levels of peer rejection ($F(1, 754) = 7.21, p < .01$) in first grade than children with available data.

Some of the children received a preventive intervention targeting problem behavior (Good Behavior Game, GBG; Barrish, Saunders, & Wolf, 1969). Classes were randomly assigned to the GBG or control condition. The intervention was implemented in grades 1 and 2. Missing data on receptive language was not related to intervention status, $\chi^2(1) = .00, p = 1.00$. Testing for intervention effects was not an objective of this study. Details on GBG impact were described previously (Witvliet, van Lier, Cuijpers, & Koot, 2009), who reported improvements in peer relations and reductions in externalizing behavior among GBG children when compared to controls.

Measures

Receptive language was assessed in second grade, using the Dutch version (Schlichting, 2005) of the standardized 204-item Peabody Picture Vocabulary Test, third edition (PPVT-III-NL). The PPVT-III is designed to measure receptive vocabulary and has been found reliable and valid (Dunn & Dunn, 1997). Children were tested individually in their school by trained test administrators in a quiet room. A Word Comprehension Quotient (WCQ) score was calculated based on the raw total number of correct answers using age equivalents. Previous studies found the PPVT to correlate .88 with WISC verbal IQ scores (Hodapp & Gerken, 1999), and between .61 and .88 with scores on the Expressive Vocabulary Test (Smith, 1997).

Teacher ratings of externalizing behavior were assessed with the Problem Behavior at School Interview (PBSI; Erasmus MC, 2004). The PBSI is a 42-item face-to-face teacher interview, in which teachers rated behaviors on a five-point Likert scale, 0 (*never*) to 4 (*often*). Scores from kindergarten (spring), grade 1 (spring), grade 2 (fall and spring), grade 3 (fall and spring) and grade 4 (spring) were available. The conduct problems (CD problems) and oppositional defiant problems (ODD problems) scales were used. The CD problems scale consisted of 12 items, like *'this child starts fights'*, *'this child attacks others physically'*, and *'this child destroys property belonging to others'*. Cronbach's alpha ranged from .90 to .98 across the assessments. The ODD problems scale had 7 items, for instance *'this child argues frequently'*, *'this child is stubborn'*, and *'this child disobeys school rules'*, with Cronbach's alpha ranging from .89 to .96. The CD and ODD problems scale scores (r ranged from .83 to .84 across data points) were summed, and divided by the number of items to achieve an overall externalizing behavior score.

Peer rejection scores were obtained by peer nominations (Coie, Dodge, & Coppotelli, 1982). Peer nominations were administered individually at the participants' school by trained interviewers in grades 1 to 3. In grade 4, children filled out the questionnaire in the classroom,

with one interviewer reading instructions and other interviewers providing assistance. Children were asked to nominate an unlimited number of classmates whom they liked and whom they disliked. These total liked and disliked scores were divided by the total number of children in the classroom minus one (children could not nominate themselves). Because this study focuses on problematic peer relations, the 'like' scores of each child were subtracted from his or her 'dislike' scores to obtain a peer rejection score, as an opposite of social preference. The rejection scores were not standardized within classrooms, as this allows us to adjust for possible intervention effects. Scores ranged from -1 (no rejection) to 1 (rejected by all classmates).

Household SES was measured using the working population classifications of occupations scheme (Statistics Netherlands, 1993, 2009). The highest SES score of the parents was used. Low SES was defined as being unemployed, or holding an elementary job or less.

Child's gender and intervention status were dummy-coded as 0 = female, 1 = male, and 0 = control, 1 = GBG, respectively.

Statistical approach

The analyses were performed in three steps. First, to assess the plausibility of mediation by peer rejection of the link between receptive language and externalizing behavior, we tested whether receptive language was linked to both the development of externalizing behavior and peer rejection. A dual latent growth model was used (Muthén & Khoo, 1998), in which the repeated measurements of externalizing behavior and peer rejection were represented by two latent growth parameters each, an intercept and linear slope. The intercept represents the initial level, which was centered at the grade 2 assessment, when receptive language was measured. The linear slope parameter represents the change of externalizing behavior and rejection, respectively, over time.

In the second step, the possible mediating role of peer rejection was tested. Directional paths from receptive language to the growth parameters of externalizing behavior and rejection, as well as paths from the growth parameters of rejection to those of externalizing behavior, were specified. Mediation was established when (a) prior significant links between receptive language and the growth parameters of externalizing behavior became non-significant when accounting for rejection (Baron & Kenny, 1986), and (b) when the indirect paths from receptive language, via the growth parameters of rejection, to externalizing behavior were significant (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002).

In the third step, we tested for sex differences. A multiple group model (boys versus girls) was fitted to test whether the strength of the associations was similar across boys and girls.

All models were fitted in Mplus 5.1 (Muthén & Muthén, 1998–2009). Model fit was determined via the Comparative Fit Index and Tucker Lewis Index (CFI/TLI; with values > .95 indicating acceptable fit), and the Root Mean Squared Error of Approximation (RMSEA; value $\leq .06$ being acceptable) (Hu & Bentler, 1998). An MLR estimator, which produces robust standard errors,

was used to account for the non-normal distribution of externalizing behavior scores. All regression paths were controlled for intervention status and low SES.

Results

Descriptive statistics

The descriptive statistics in Table 1 show that boys scored higher on externalizing behavior and on peer rejection than girls at all time points. Receptive language scores did not differ across sexes. Significant growth factor variances of the intercept ($\text{var} = .23$, $SE = .02$) and slope ($\text{var} = .01$, $SE = .002$) of externalizing behavior, and for the intercept ($\text{var} = .05$, $SE = .004$) and slope ($\text{var} = .004$, $SE = .001$) of peer rejection, showed that both at the levels as well as in the growth with age significant individual differences were present in externalizing and peer rejection scores. Testing for additional slope parameters showed that these had non-significant variances and were therefore not added to the model.

Links of receptive language skills with externalizing behavior and peer rejection

We examined whether receptive language skills predicted the growth parameters of externalizing behavior and peer rejection. A dual growth model was fitted, in which growth parameters of externalizing behavior and rejection were regressed on receptive language scores. At this stage, no links between the growth parameters of rejection and externalizing behavior were allowed (i.e., non-mediation model).

Although it was not an objective of this study to test for intervention effects, we wanted to ascertain whether the path estimates were similar across control and intervention children. A multiple group model was fitted (control versus GBG children), in which the links between receptive language with

Table 1 Means and SDs of externalizing behavior, peer rejection, and receptive language skills for boys and girls

	Boys		Girls		Test <i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Externalizing behavior					
Kindergarten	.86	.69	.51	.47	46.18*
1st grade	.84	.67	.48	.46	61.64*
2nd grade (fall)	.78	.64	.51	.48	32.85*
2nd grade (spring)	.74	.65	.50	.54	24.77*
3rd grade (fall)	.82	.70	.42	.45	61.24*
3rd grade (spring)	.77	.69	.45	.52	36.85*
4th grade	.90	.78	.44	.47	56.10*
Peer rejection					
1st grade	-.01	.26	-.15	.22	50.97*
2nd grade	-.05	.31	-.22	.24	58.41*
3rd grade	-.09	.30	-.19	.28	14.66*
4th grade	-.11	.32	-.20	.28	10.42*
Language Skills	96.10	14.94	96.32	13.32	.04

* $p < .01$.

externalizing behavior and rejection were freely estimated and compared to a model in which these links were constrained to be equal across the GBG and control group. A chi-square difference test (Satorra, 2000) showed that the strengths of the associations were similar across the groups, $\Delta\chi^2(4) = 6.14$, $p = .19$. Therefore, results for the entire sample are given, and all regression paths were controlled for intervention effects.

Results are presented in Table 2. No significant links between receptive language and the intercept of externalizing behavior or peer rejection were found. However, receptive language significantly predicted the slopes of both trajectories. A graphical illustration of the effect of high (≥ 1 SD above mean) versus low (≥ 1 SD below mean) scores on receptive language on the development of externalizing behavior is given in Figure 1, top. Children with lower language skills showed increases in externalizing behavior, whereas children with higher language scores showed decreases in externalizing behavior. Figure 1 (bottom) also shows that rejection scores of children with higher receptive language scores decreased more over time than those of children with lower receptive language scores.

Peer rejection as a mediator between receptive language skills and externalizing behavior

In the second step, we specified the mediation model. We imposed regression paths, from the intercept and slope of peer rejection to respectively the intercept and slope of externalizing behavior, and from the intercept of rejection to the slope of externalizing behavior. The link from the intercept of rejection to the slope of externalizing behavior was not significant ($B = -.02$, $SE = .04$, $p = .66$), and was removed from the model. This mediation model significantly better fitted the data than the non-mediation model ($\Delta\chi^2(2) = 231.5$, $p < .01$) and had a good fit to the data, $CFI = .96$, $TLI = .95$, $RMSEA = .05$. We tested whether the path estimates in this mediation model were similar across GBG and control group children. Again, no significant differences between the two groups were found, $\Delta\chi^2(6) = 10.49$, $p = .11$.

Results are in Figure 2. It shows that when rejection was specified as a mediator, the previously significant link between receptive language and the slope of externalizing behavior was no longer significant, which suggests mediation (Baron & Kenny, 1986). Receptive language was significantly and negatively related to the slope of rejection. Furthermore, the regression path from the slope of rejection to the slope of externalizing behavior was positive and significant. We therefore tested for the joint significance of the paths from receptive language, via the slope of rejection to the slope of externalizing behavior. This indirect path was significant, $B = -.001$, $SE = .00$, $\beta = -.12$, $p < .05$, which supports mediation (MacKinnon et al., 2002). Note that this

Table 2 Parameter estimates, standard errors and beta's for externalizing behavior and peer rejection, and covariates

	Intercept			Slope		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Externalizing behavior						
Male	.342	.038	.364**	.022	.013	.181
GBG	-.036	.041	-.036	-.019	.014	-.151
Low SES	.152	.053	.157**	-.016	.016	-.125
Language Skills	-.003	.002	-.080	-.001	.001	-.312*
Peer rejection						
Male	.135	.018	.307**	-.014	.008	-.113
GBG	-.058	.019	-.126**	-.026	.009	-.192**
Low SES	.060	.023	.132**	-.009	.010	-.069
Language Skills	-.001	.001	-.058	-.001	.000	-.146*

Note: GBG = Good Behavior Game.

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

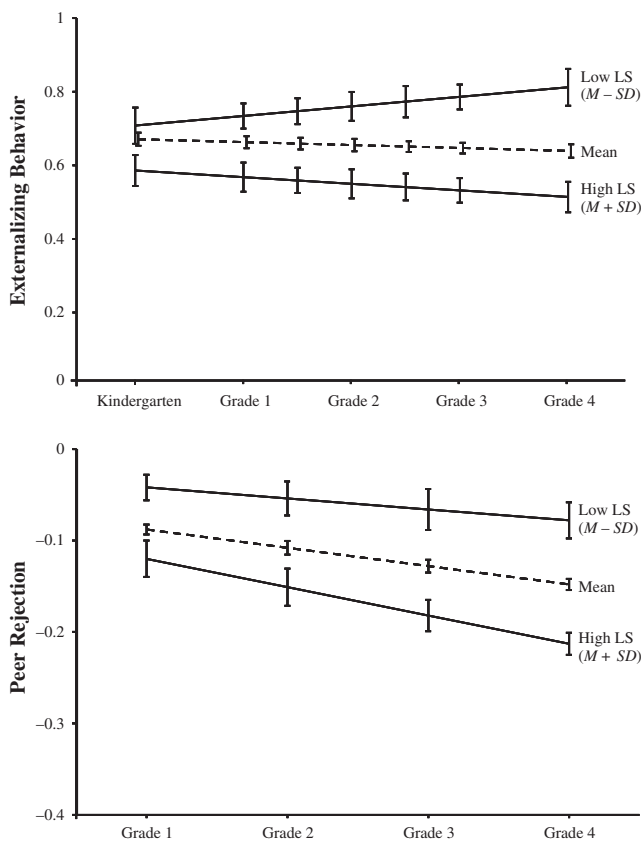


Figure 1 Estimated average development of externalizing behavior (top) and peer rejection (bottom) in children (represented by the dotted line), and in those children with high (≥ 1 SD above mean) versus low (≥ 1 SD below mean) receptive language skills (LS) scores

indirect path via the intercepts was not significant ($B = -.001$, $SE = .001$, $\beta = -.04$, $p = .15$).

Sex differences

A multiple group model was fitted to test whether the results applied equally to boys and girls. All regression paths were first constrained to be equal across sexes, and compared to a model in which all paths were freely estimated across boys and girls. Results

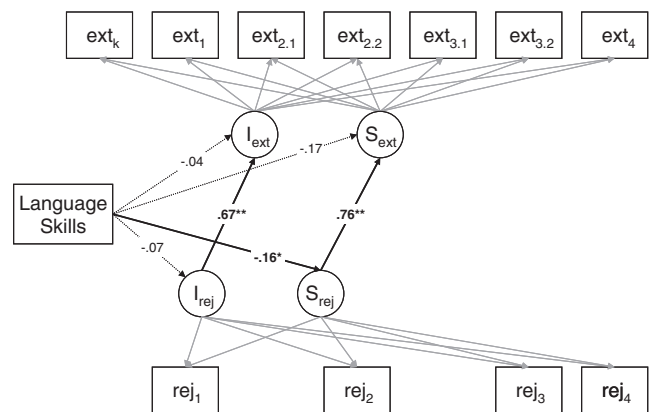


Figure 2 Results of mediation by peer rejection of the link between receptive language skills and the growth parameters of externalizing behavior. I = intercept; S = slope; ext = externalizing behavior; rej = peer rejection. Estimates reflect standardized regression coefficients. * $p < .05$; ** $p < .01$

showed that only the path from the slope of rejection to the slope of externalizing behavior differed between both sexes, $\Delta\chi^2(1) = 13.8$, $p < .01$. This link was significant for boys ($B = 1.74$, $SE = .72$, $p < .05$), but not for girls ($B = .19$, $SE = .18$, $p = .28$). The link from receptive language to the slope of rejection was non-significant in girls ($B = -.001$, $SE = .00$, $p = .13$), and marginally significant in boys ($B = -.001$, $SE = .00$, $p = .06$). The overall indirect effect was non-significant for girls ($B = .00$, $SE = .00$, $\beta = -.05$, $p = .39$). Possibly because of low statistical power, this indirect path was also non-significant for boys ($B = -.001$, $SE = .001$, $\beta = -.21$, $p = .15$), despite that the standardized path estimate was larger than the overall indirect path estimate found in the total sample ($\beta = -.12$).

Discussion

This study found that over the period of kindergarten to fourth grade elementary school, externalizing

behavior scores increased in children with poorer language skills, while they decreased among children with better language skills. Peer rejection decreased in all children, but less strongly among children with poorer language skills. This implies that the relative difference in externalizing behavior and peer rejection between children with poorer versus better language skills increased over time. More importantly, the increasing differences in experiences of peer rejection mediated the link between language skills and the development of externalizing behavior.

By studying the influence of language skills on externalizing behavior and peer rejection, we complemented previous studies that examined these links separately (Bellanti & Bierman, 2000; Braza et al., 2009; Hill, 2002; Nigg & Huang-Pollock, 2003). The finding of a mediating role of peer rejection in the link between language skills and externalizing behavior development is in line with theoretical notions offered by Moffitt (1993) and the suggestion made by Hinshaw (1992). Thus, poorer language skills seem to place children at risk for experiencing poor relations with peers, and this experience adds to the development of childhood externalizing behavior, in response to peer difficulties and as a means to cope with the undesirable interactions originating from these. Our results thereby extend the hypothesis on the role of language skills forwarded by Keenan and Shaw (1997) to the peer context. These authors theorized that the effect of preschool children's language skills on the development of externalizing behavior is mediated by the quality of relationships with parents. Our results indicate that this process also pertains to the relationships with peers after the transition to elementary school.

It is important to note that our findings suggested that this pathway was mostly applicable to boys. Although the overall mediation test for boys was not significant, possibly due to low statistical power, the separate paths that comprise the mediation were (marginally) significant. This was not the case for girls. The finding that boys' externalizing behavior is more affected by experiences of peer rejection than girls' externalizing behavior was previously demonstrated (Moffitt et al., 2001). This sex difference may be explained by the fact that boys are more sensitive to social status threat than girls, and that they respond more to this threat with externalizing behavior than girls, who are more likely respond with internalizing symptoms (Rudolph, 2002).

This study has limitations. First, language skills were measured only once in our study. However, this likely did not affect our results, as a review study found a median long-term stability coefficient of .77 in receptive language scores among elementary school children (Bochner, 1978). Moreover, language skills were linked to the slope parameter, indicating that it was predictive over time, not just concurrently. Second, only receptive language was used to

measure language skills, thereby ignoring other aspects of verbal competence, such as expressive language or verbal IQ. However, because correlations of receptive language with verbal IQ and expressive language are high (see Hodapp & Gerken, 1999; Smith, 1997), receptive language is likely a fair measure to assess language skills that are important in this context. Third, an externalizing behavior score was used, tapping behaviors that may apply mostly to boys. Girls may be more likely to respond with relational aggression when experiencing peer rejection, as compared to physical, overt aggression (Dodge et al., 2003), or even with internalizing problems (Rudolph, 2002). Any findings on sex differences discussed above may therefore depend upon the outcome studied here. Fourth, this study focused only on verbal skills. Other studies have found that spatial, next to verbal, cognitive skills were linked to externalizing behavior development (Nigg & Huang-Pollock, 2003; Raine, Yaralian, Reynolds, Venables, & Mednick, 2002). Therefore, we would like to see our results replicated using measures of various neuropsychological functions in children.

Conclusion

Our results highlighted the role of poor relations with peers in the link between language skills and externalizing behavior development. This is in line with theories suggesting that the risk of children with lower (neuro)cognitive abilities, here expressed as receptive language skills, developing externalizing behavior problems is increased because these children may run into difficulties with their social environment (cf., Moffitt, 1993). These results imply that in order to understand the pathways through which language skills link to the development of childhood externalizing behavior, those environmental risks should be taken into account. However, the processes of how children with poorer language skills become rejected by their peers (e.g., verbal labeling or recognizing of emotions, difficulties with verbally handling conflicts) are yet unclear and need to be further examined. Moreover, practitioners should pay attention to (problematic) peer relationships when they encounter children with poorer language skills, because, when rejected, these children likely show increasing levels of externalizing behavior. These findings also present an opportunity to tackle (further) development of externalizing behavior in children with relatively stable vulnerabilities, such as poor language skills, by targeting changeable risk factors. For instance, the negative effects of poor language skills on peer relations may be compensated by improving children's skills linked to both language skills and peer relations, such as emotion knowledge and regulation. Finally, following the finding that this process already starts at the

beginning of elementary school, early efforts to prevent peer rejection are recommended.

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Key points

- Children with poor language skills are at increased risk for showing externalizing problems and encountering difficulties in building adequate social relationships, including those with peers.
- The relative risk in externalizing behavior and peer rejection between children with poorer versus better language skills increases over the early school period.
- The increasing differences in experience of peer rejection mediate the link between language skills and the development of externalizing behavior.
- The association between poor language skills and externalizing behavior may be disrupted by improving peer relationships.

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