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Why can't I join? Peer rejection in early childhood education and the role of oral communicative competence

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ABSTRACT

The present study investigated the relation between oral communicative competence and peer rejection in early childhood education, as well as gender differences in this relation. Participants were $N = 447$ children aged 4–6 years. Children's level of oral communicative competence was measured using the Nijmegen Test for Pragmatics and a sociometric method with peer nominations was used to assess their level of peer rejection. Regression analyses revealed that, after controlling for gender, age, and SES, oral communicative competence accounted for unique variance in peer rejection and was negatively related to the extent to which children were rejected by peers: children with poorer oral communicative competence experienced higher levels of peer rejection. No gender differences in this relation were found. Future research demonstrating the causal effect of oral communicative competence on peer rejection can provide early childhood education teachers who try to prevent or reduce peer rejection a strong argument to focus on the promotion of children's oral communicative competence.

1. Introduction

Children cannot fully develop themselves without peers. Through peer interactions, children learn how they should behave in social life and develop qualities that are indispensable for both social and emotional functioning (Hay, Payne, & Chadwick, 2004). As a consequence, being rejected by peers, and thereby missing out on the important and unique benefits of peer interactions, has detrimental effects. Specifically, prior studies have shown that peer rejection is a major risk factor with regard to difficulties such as loneliness, depression, and anxiety (Kochenderfer-Ladd & Wardrop, 2001; Pedersen, Vitaro, Barker, & Borge, 2007; Prinstein & Aikins, 2004; for a review see Reijntjes, Kamphuis, Prinzie, & Telch, 2010). Moreover, rejected children have been found to engage in aggressive behavior and criminal activities more often, and to experience more academic failure with a higher possibility of school-dropout (Dodge et al., 2003; Hendrickx, Mainhard, Boor-Klip, & Brekelmans, 2017; King, 2015; Ladd, 2006). The finding that rejection by peers is relatively stable over time further complicates the problem of peer rejection: research demonstrated that approximately forty-five percent of the children who were identified as rejected remained rejected over a period of more than three months (for a review see Cillessen, Bukowski, & Haselager, 2000). The devastating consequences and the relative stability of peer rejection over time indicate the need to identify factors that contribute to it: why do children

become rejected by their peers?

Whether a child becomes rejected by peers largely depends on the social interactions he or she engages in (Hay et al., 2004). Based on an extensive review of studies into childhood peer relationships, Hay et al. (2004) proposed a model in which they identified six factors that contribute to a child's success in interactions with peers: (1) joint attention (the ability to regulate others' attention by, for example, pointing to something), (2) emotion regulation (the ability to control negative emotions), (3) inhibitory control (the ability to inhibit impulses), (4) imitation (the ability to match one's behavior to that of others), (5) causal understanding (the ability to infer the intentions of others), and (6) language (the ability to use speech to express one's needs and resolve conflicts verbally). Hay et al.'s model (2004) is useful in understanding the underlying cognitive and emotional processes that facilitate social interactions, but it is important to note that the strength of the evidence for these underlying processes is somewhat mixed. Specifically, although it seems reasonable to suggest that language plays an important role in effective peer interactions, there still exists a gap in the current body of research. For example, previous studies into the relation between language and peer relationships generally focused on vocabulary, which is only one specific part of language (e.g., Menting, van Lier, & Koot, 2011). The present study aimed to broaden the scope of this research area by investigating the role of the more inclusive notion of oral communicative competence. We argue that oral

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Fig. 1. Organizational framework for assessing pragmatic abilities (Roth & Spekman, 1984).

communicative competence is an understudied component of language that might influence whether children are able to engage in positive interactions with peers and, consequently, affect their level of peer rejection.

Oral communicative competence is a complex and multifaceted concept that refers to the ability to use language effectively and appropriately in different social situations (Archer, 2000; Celce-Murcia, 2008; Samter, 2003). Several models were developed in order to represent its different aspects (for an overview see Celce-Murcia, 2008). In the present study, the instrument that was used to measure oral communicative competence is directly based on the model of Roth and Spekman (1984, see Fig. 1). We therefore focus on their model in defining oral communicative competence. To capture the complexity of this construct, Roth and Spekman (1984) distinguished three components: (1) communicative intentions, (2) presupposition, and (3) social organization of discourse. We will give a brief explanation of these three components. First, communicative intentions encompass the intentions a speaker wants to convey and its effect on the listener. A speaker can have different intentions (e.g., regulating others' behavior) that can be expressed directly (requiring only a literal interpretation from the listener: 'please close the window') or indirectly (requiring a degree of inference: 'I'm cold'). Second, presupposition refers to a speaker's message in relation to the specific information needs of the listener. In fact, in order for communication to be successful, a speaker needs to differentiate between old and new information, which requires one to take the perspective of the listener into account (also referred to as 'role taking'). Finally, social organization of discourse reflects the ability to maintain a dialogue over several conversational turns. In order to do so, one needs to be able to fulfill both the role of speaker and listener. An important skill in this case is turn taking (e.g., by allowing pauses).

The three aforementioned components of Roth and Spekman's model (1984) are all highly influenced by a fourth and most important component: the context. In fact, it is the social context that influences the type and form of communicative intentions, the amount of information that needs to be provided and the manner in which conversations are organized (Roth & Spekman, 1984). In becoming more communicatively competent, it is therefore vital to take the communicative context into account (Archer, 2000; Celce-Murcia, 2008; Samter, 2003). One such specific context is children's peer group. Children who are not able to adapt their language use to this communicative context are likely to be an unattractive partner to their peers (Menting et al., 2011; Nærland, 2011). For example, a child who fails to make relevant contributions to a conversation or who does not take the perspective of the interlocutor into account might frequently encounter

misunderstandings and conflicts in peer interactions (Menting et al., 2011). Difficulties in interactions with peers might, in turn, increase a child's risk of developing problematic peer relationships (Gulay, 2011; McCabe & Meller, 2004; Nærland, 2011). As the ability to communicate effectively and appropriately is a prerequisite for successful participation within the peer group, it is reasonable to suppose that children's level of oral communicative competence plays a significant role in the extent to which they are rejected by their peers.

Previous research into the relation between oral communicative competence and peer rejection is scarce, because studies tend to focus primarily on the relation between peer rejection and formal aspects of language ability such as vocabulary knowledge (e.g. Braza et al., 2009; Gulay, 2011). For example, in a study by Menting et al. (2011) children with poorer receptive language skills (i.e., vocabulary knowledge) were found to be more likely to be rejected by their peers which was, in turn, related to higher levels of aggressive behavior. Although one might expect vocabulary knowledge to be related to children's oral communicative competence, the question of whether specifically productive and context-dependent language abilities are associated with peer rejection remains largely unanswered. As a first step to fill this gap, in a recent exploratory study, we investigated the relation between oral communicative competence and peer rejection and acceptance in a small sample ($N = 54$; van der Wilt, van Kruistum, van der Veen, & van Oers, 2016). Children were asked to nominate a peer they least liked to play with (negative nomination) and a peer they most liked to play with (positive nomination). Peer rejection was then operationalized as the total number of negative nominations a child received whereas peer acceptance was assessed by counting the number of received positive nominations. Correlational analyses showed no significant relation between oral communicative competence and peer rejection, but a positive relation was found between oral communicative competence and peer acceptance (although this relation only applied to boys). So, for boys, a higher level of oral communicative competence was associated with a higher level of peer acceptance.

Although these were promising outcomes by themselves, there were several limitations of this particular study. Firstly, the results could not be generalized, because a rather small (i.e., $N = 54$) and focused sample was used (i.e., Dutch/Caucasian children with highly educated parents). Secondly, there were some methodological shortcomings. In fact, as mentioned previously, peer rejection and acceptance were operationalized as the number of negative nominations and the number of positive nominations, respectively. It has been suggested, however, that children who are at risk for negative developmental outcomes do not only receive many negative nominations, but additionally receive few positive nominations (for a review see Gifford-Smith & Brownell, 2003). In that case, in order to measure peer rejection, children's degree of acceptance should be taken into account by subtracting children's number of received positive nominations from their number of received negative nominations (e.g., Menting et al., 2011). To overcome these limitations and extend our previous exploratory study, in the present study we investigated the relation between oral communicative competence and peer rejection with a large, heterogeneous sample, using more sophisticated and reliable methods for measuring peer rejection.

The previously mentioned stability of peer rejection indicates the need to identify rejected children at an early age (Wu, Hart, Draper, & Olsen, 2001). Yet, at what age does peer rejection start to occur? The period of early childhood has proved to be a crucial one in this case. Specifically, when children enter early childhood education institutions, they begin to spend more time in groups. From that moment on, they start to differentiate between true friends and occasional playmates, they build their first friendships (Mostow, Izard, Fine, & Trentacosta, 2002; Slaughter, Dennis, & Pritchard, 2002), and peer reputations are gradually established (Hay et al., 2004). Hay et al. (2004) described some interesting developmental trends in children's early peer relationships. For example, although the frequency of peer conflicts during early childhood is similar to toddlerhood, the nature of

these conflicts changes: children tend to fight less about the possession of certain resources, such as toys, and start to argue about their ideas and to discuss forms of play. Speaking of play, children's spontaneous pretend play increases in complexity during the period of early childhood and becomes critical for building and maintaining friendships as it requires children to cooperate intensively. Besides dyadic friendships, however, early childhood is a period in which children start to engage in interactions involving more than one person at a time. The most remarkable characteristic of these early interactions is its gender segregated nature: girls prefer to play with girls and boys prefer to play with boys (Fabes, Martin, & Hanish, 2004; Laws, Bates, Feuerstein, Mason-Apps, & White, 2012). The characteristics and mechanisms that work in forming peer relationships in early childhood years serve to structure the larger peer group and operate to determine a child's place within it.

Moreover, regarding oral communicative competence, it has been found that children's ability to communicate develops rapidly during early childhood (Nærland, 2011). To illustrate, young children are increasingly able to take turns in face-to-face interaction (Berk, 2009; Brooks & Kempe, 2012). At the same time, they still tend to communicate less effectively when their partner does not visually share the same environment (for example during a telephone talk) and are often unaware of ambiguities and misunderstandings in communication (Berk, 2009; Brooks & Kempe, 2012). These observations seem to indicate that young children have already acquired some skills that are important for communicative effectiveness (e.g., abiding by the rules of turn taking), but that other skills (e.g., taking the perspective of the interlocutor into account) are still in development. Indeed, during the early years, children gradually learn new communicative strategies. For example, the ability to add to previous utterances of peers instead of merely commenting to what has been said increases dramatically with age (Berk, 2009; Parker, Rubin, Erath, Wojslawowicz, & Buskirk, 2006). Generally, compared to the toddler years, four-year-olds become more able to express themselves verbally which allows them to solve peer conflicts in a prosocial manner (Hay et al., 2004). As a consequence, group norms emerge in which antisocial behavior becomes less accepted (Parker et al., 2006). This places children with communicative deficiencies at risk since they, as argued before, tend to experience more conflicts in their interactions with peers (e.g., Braza et al., 2009; Menting et al., 2011).

Because there are indications that social reputations are shaped during early childhood and oral communicative competence is still in development and seems to play a particular important role in this period, the present study investigated the relation between oral communicative competence and peer rejection in early childhood education classrooms. We thereby aimed to provide insights that may support teachers in early childhood education who try to prevent or reduce peer rejection in their classroom. In addition to this primary purpose, we aimed to examine gender differences in the relation between oral communicative and peer rejection since outcomes of previous studies suggest that this relation might differ for boys and girls. For example, in a study by Braza et al. (2009) a significant, positive relation was found between expressive vocabulary and social acceptance, but this relation only applied to boys. It was suggested that the gender difference in the examined relation could be explained by boys' higher tendency to exhibit aggressive behavior: adequate language abilities might help to inhibit aggressive behavior which, in turn, might contribute to peer acceptance. So, well-developed language abilities could be of greater importance for boys than for girls. Importantly, the study of Braza et al. focussed on expressive vocabulary instead of oral communicative competence. In our own exploratory study (van der Wilt et al., 2016), however, we found that the relation between oral communicative competence and peer acceptance only applied to boys as well. Although both studies suffered from methodological limitations such as relatively small and homogenous samples and focussed on acceptance instead of rejection, they might indicate that gender differences exist in the

relation between oral communicative competence and peer rejection. To our knowledge, the present study is the first large-scale study in which these possible gender differences are taken into account.

To summarize, the goal of this study was to investigate the relation between oral communicative competence and peer rejection in early childhood education, as well as to examine possible gender differences in this relation. We hypothesized that the level of oral communicative competence would be negatively related to the level of peer rejection. Further, based on previous findings, we expected that this relation might only apply to boys. Finally, as research has demonstrated that children's gender (e.g., Menting et al., 2011), age (e.g., Nærland, 2011), and socioeconomic status (SES; e.g., Huaqing Qi & Kaiser, 2003) affect their level of peer rejection, these three variables were taken into account to control for their possible effects.

2. Method

2.1. Ethical considerations

The present study was part of a larger research project investigating the possibilities to promote the oral language abilities in 4- to 6-year-old children (van der Veen, 2017). For the larger research project, ethical approval was provided by the Scientific and Ethical Review Board of the Faculty of Behavioural and Movement Sciences of the Vrije Universiteit Amsterdam. Prior to the project, all parents received a letter with information about the study and were given the opportunity to withdraw their child from the project. No parents withheld assent. Further, the participating teachers were informed about the purpose and procedure of the project in an interactive meeting. During the study, all data were anonymously processed and saved. Data were only used for research purposes and were not distributed to others except for the participating teachers.

2.2. Participants

The sample consisted of $N = 447$ children from nineteen early childhood education classrooms in ten schools in different parts of the Netherlands. In the Netherlands, the vast majority of children start primary education shortly after their fourth birthday and preschools (or kindergartens) are integrated into primary schools in which the first and second grades are often mixed in the same class. However, the first two grades of primary school still retain many of the characteristics of former preschools, such as play as one of the main activities. In the present study, class sizes ranged from 13 to 29 children. The total sample was composed of 234 boys and 213 girls with ages ranging from 3.83 to 6.50 years and a mean age of 4.97 years ($SD = 0.65$). The Dutch language was the dominant language spoken at home for 81.9 percent of the children. 74.5 percent of the children had the Dutch nationality. Other backgrounds were Moroccan (6.9%), Turkish (3.6%), Surinam (3.8%), and other western (5.1%) and non-western (6.0%) backgrounds. Children's SES was measured by using the average of the two parents' levels of education. Parents had low (15.7%), medium (31.5%), and high (44.5%) education levels.

2.3. Measures

2.3.1. Oral communicative competence

Oral communicative competence was measured with two out of three scales of the Nijmegen Test for Pragmatics (Embrechts, Mugge, & van Bon, 2005): Communicative Functions (e.g., providing information, negotiating, and requesting clarification) and Conversation Skills (e.g., turn-taking, repeating something in case of ambiguity, and initiating a conversation). This validated and standardized test is designed to measure the oral communicative abilities of children aged 4–7 years and consists of a scale model of a house with nine associated pictures of the different rooms in the house. A verbal response of the child is

elicited through a story about the daily life of two children, Peter and Lotje, who find themselves in and around their house (e.g., in the kitchen, where Peter asks for juice, or in the attic, where Peter and Lotje are dressing up). For example, one item goes as follows: ‘Grandma and Lotje are going inside. Lotje’s friend has to go home. What does Lotje say to her friend?’ The total test used in this study consisted of 37 items. Each item was scored dichotomously, depending on whether the answer was correct or incorrect (in case of the previous example: ‘Bye!’ = 1 and ‘She has to go inside’ = 0). The total score on oral communicative competence was obtained by summing the number of correct answers on the test.

The Nijmegen Test for Pragmatics is directly based on the aforementioned model of Roth and Spekman (1984): the subscale Communicative Functions reflects the first component (communicative intentions) whereas Conversation Skills is based on a combination of the second and third component (presupposition and social organization of discourse). Appendix A shows a list of the sub abilities included in the two scales of the Nijmegen Test for Pragmatics (accompanied by short descriptions). Extensive research into the psychometric properties of the test provided support for the reliability of the complete test and the sub scales Communicative Functions and Conversation Skills (Cronbach’s $\alpha = .92; .82; .83$, respectively; Embrechts et al., 2005). In the current study, the internal consistency of the two subscales of the Nijmegen Test for Pragmatics was found to be good as well (Omega = .92, GLB = .94, Cronbach’s $\alpha = .91$). It has been demonstrated, however, that the correlation between the two subscales is so high that the scales cannot be meaningfully distinguished (correlation coefficient of .78, Embrechts et al., 2005). Outcomes of a correlational analysis showed that both subscales were highly correlated in the present study ($r = .79, n = 447, p < .001$). In addition, although a factor analysis revealed the presence of nine components with eigenvalues exceeding 1, the first component explained 25% of the total variance whereas the other eight components each explained only 3–5%. Moreover, an inspection of the screeplot revealed a clear break after the first component. These findings are in line with findings of previous research into the factorial structure of the test (Embrechts et al., 2005) and indicate there might be one factor underlying the items of the Nijmegen Test for Pragmatics, but not two. As a consequence, we made no distinction between the two scales in our analyses.

2.3.2. Peer rejection

There are several ways to measure children’s level of peer rejection, including peer nominations, sociometric ratings, and evaluations of peer rejection as rated by teachers or parents (Bierman, 2004). The most commonly used approach in sociometric research is the nomination procedure, which was used in the present study as well. During this procedure, children are asked questions about whom they like (positive nomination) and whom they dislike (negative nomination; Gifford-Smith & Brownell, 2003). Following previous research (e.g., Menting et al., 2011), in the present study peer rejection was identified as follows: for each child, the received number of positive and negative nominations were counted, resulting in positive and negative nomination scores. Next, in order to control for differences in classroom sizes, these scores were standardized by transforming them to z-scores within classroom. Finally, peer rejection was calculated by subtracting the standardized positive nomination scores from the standardized negative nomination scores. Previous research revealed that the use of peer sociometrics is a reliable method for measuring children’s level of peer rejection in preschool classrooms (reliability coefficient of .79; Wu et al., 2001).

2.4. Procedure

2.4.1. Oral communicative competence

The data for oral communicative competence were obtained by testing children individually on the Nijmegen Test for Pragmatics. Test

administrations took approximately twenty minutes per child. Each child was tested by one of the trained test-assistants in a room adjacent to his or her classroom. The test administrations were audiotaped using a voice recorder so the answers could be scored afterwards by one of the test-assistants. In the present study, with a Cohen’s Kappa of .86, the inter-rater reliability of the Nijmegen Test for Pragmatics was found to be strong (Landis & Koch, 1977).

2.4.2. Peer rejection

Sociometric data were obtained by the first author of this article within one month after the test administration of the Nijmegen Test for Pragmatics. To familiarize the children with the procedure, they first participated individually in an orientation activity which simulated the actual sociometric task. Instead of nominating peers, children were asked to nominate various types of food by pointing to pictures of foods they did and did not like. After the orientation activity, children were shown pictures of all the children in their class. To assure that children attended to each child, the examiner guided them through the photographs of their classmates and asked them to name each child. Subsequently, children were requested to nominate three children they liked by answering the following question: “With whom do you like to play?” This question was repeated two more times. As in other studies (e.g., Braza et al., 2009), same-sex and opposite-sex nominations were allowed. Next, the following question was asked: “With whom do you not like to play?” Again, the question was repeated two more times so in the end all children selected six pictures of peers: three positive and three negative nominations. To distract the children and reduce the possibility that they would discuss their peer nominations with each other, after the sociometric procedure children were shown pictures of toys and asked to nominate toys they did and did not like to play with. The total procedure took approximately ten minutes per child.

2.5. Analyses

2.5.1. Missing data

The measures were scored and analysed using the Statistical Package for Social Scientists (SPSS, standard version 21). There were 6.4% missing data points on the items of the Nijmegen Test for Pragmatics and 2.7% for the sociometric method. Data collection occurred during two days per class (one day for the administration of the Nijmegen Test for Pragmatics and one day for the administration of the nomination procedure). Missing data were due to the absence of children on the day of administration (because of illness or change of class or school) and therefore beyond our control. Missing values were imputed using the commonly used Expectation-Maximization (EM) method in SPSS after finding no statistically reliable deviation from randomness using Little’s MCAR test, $X^2(349) = 379.43, p = .126$. The imputed dataset was used in subsequent analyses.

2.5.2. Assumption of normality

An inspection of the histogram and corresponding P-P plots of the standardized scores on peer rejection indicated that the data of our dependent variable were normally distributed. To further explore the distribution of this variable, skewness and kurtosis values were obtained which appeared to be close to zero (0.058 and 0.252, respectively). This confirmed that the assumption of normality was met for the data on peer rejection (Field, 2009). However, a visual inspection of the data on oral communicative competence, and the corresponding skewness and kurtosis values (−0.914 and 0.384, respectively), indicated that these data were not normally distributed. It was expected, though, that this violation of the assumption of normality would not cause any major problems, because most of the parametric techniques are reasonably robust or tolerant of violations of this assumption with large sample sizes (e.g., with $N > 200$; Gravetter & Wallnau, 2004).

2.5.3. Data analysis plan

In order to explore the relations between oral communicative competence, peer rejection, and age, correlational analyses were carried out. In addition, a hierarchical multiple regression analysis was performed to assess the unique amount of variance explained in peer rejection by oral communicative competence. To statistically control for the effects of gender, age, and SES, these variables were included in the first step of the analysis. In the second step, oral communicative competence was added to the model. To measure whether the contribution of oral communicative competence to peer rejection depended on gender, the interaction term of gender with oral communicative competence was included in the third step. In comparing the different models, *F*-ratios were used to assess whether the changes in the explained variance (R^2) were significant (Field, 2009). Finally, post hoc analyses were performed in order to clarify the outcomes of the hierarchical regression analyses.

3. Results

3.1. Descriptive analyses

The means and standard deviations for each main variable are reported in Table 1. Although the standardized scores of peer rejection were used in subsequent analyses, the unstandardized scores are also reported in Table 1 in order to facilitate the interpretation of the scores.

3.2. Correlational analyses

To explore the correlations between oral communicative competence, peer rejection, and age, Pearson's correlations (*r*) were calculated for the total sample and for boys and girls separately (see Table 2). A significant small, negative relation was found between oral communicative competence and peer rejection, with low levels of oral communicative competence associated with high levels of peer rejection. Exploration of the link with age revealed a large, positive relation with oral communicative competence and a small, negative relation with peer rejection: older children had higher scores on oral communicative competence and were less rejected than their younger peers. The strength of the correlation between oral communicative competence and peer rejection was compared between boys and girls, revealing no gender differences in this relation ($Z_{\text{Difference}} = -.80$, $p = .442$, two tailed).

3.3. Hierarchical multiple regression analyses

A three-stage hierarchical multiple regression analysis was performed to investigate how much of the variance in peer rejection could be explained by oral communicative competence (Table 3). Gender,

Table 1

Descriptive statistics for oral communicative competence, peer rejection, positive nominations, and negative nominations (N = 447).

	Mean (SD)		
	Total sample	Boys	Girls
Oral communicative competence	23.90 (7.99)	23.29 (7.67)	24.57 (8.29)
Unstandardized peer rejection	−0.01 (3.32)	0.45 (3.56)	−0.52 (2.96)
Unstandardized positive nominations	2.77 (2.04)	2.78 (2.00)	2.76 (2.09)
Unstandardized negative nominations	2.76 (2.23)	3.23 (2.51)	2.24 (1.75)
Standardized peer rejection	0.00 (1.52)	0.18 (1.62)	−0.20 (1.39)
Standardized positive nominations	0.00 (0.98)	0.01 (0.97)	−0.01 (1.00)
Standardized negative nominations	0.00 (0.98)	0.19 (1.09)	−0.21 (0.79)

Table 2

Correlations between oral communicative competence, peer rejection, and age (N = 447).

	Variable	Oral communicative competence	Peer rejection	Age
Total sample	Oral communicative competence	–	−.28***	.51***
	Peer rejection		–	−.23***
Boys	Oral communicative competence	–	−.31***	.47***
	Peer rejection		–	−.18**
Girls	Oral communicative competence	–	−.24***	.54***
	Peer rejection		–	−.27***

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

age, and SES were entered at stage one of the analysis to statistically control for their potential effect. At stage two, oral communicative competence was added to the model. Finally, the interaction term of gender with oral communicative competence was added at stage three. At stage one, gender, age, and SES contributed significantly to the regression model, $F(3) = 10.54$, $p < .001$, and explained 7.2% of the variance in peer rejection. When oral communicative competence was included in the analysis an additional 2.3% of the variance in peer rejection was explained and this change in R^2 was large and significant, $F(1) = 10.34$, $p = .001$. Including the interaction between gender and oral communicative competence in the third step resulted in an additional 0.3% of explained variance, but this change in R^2 was not significant, $F(1) = 1.55$, $p = .213$. The model containing two stages therefore explained our data best. Together, the four terms of this model explained 9.5% of the variance in peer rejection. The standardized coefficients of this two-stage model indicated that, compared to gender, age, and SES, oral communicative competence explained the largest percentage of variance.

4. Discussion

The purpose of this study was to examine the relation between oral communicative competence and peer rejection in early childhood education, and to investigate possible gender differences herein. Results indicated that, compared to gender, age, and SES, oral communicative competence explained most of the variance in peer rejection and was negatively related to the extent to which children were rejected by their peers. These findings support the hypothesis that children with a lower level of oral communicative competence would be more frequently rejected by their peers. However, no support was found for the hypothesis that this relation would only apply to boys. So for both boys and girls a lower level of oral communicative competence was associated with a higher level of peer rejection. This finding adds to previous studies by showing that not only language competencies like vocabulary knowledge play a role in peer rejection (e.g., Menting et al., 2011), but that oral communicative competence is involved as well. As mentioned before, the relation between oral communicative competence and peer rejection is likely to be indirect: children with poorer communicative abilities may experience more difficulties in their interactions with peers which, in turn, could be the reason why they are more often rejected by them (Gulay, 2011; Menting et al., 2011). In future research, it would be interesting to test this theory by investigating whether peer interactions indeed mediate the relation between oral communicative competence and peer rejection.

The fact that no significant gender differences were found in the relation between oral communicative competence and peer rejection does not seem to support research in which the relation between language abilities and peer acceptance differed for boys and girls (Braza et al., 2009; van der Wilt et al., 2016). In previous studies, smaller and

Table 3
Hierarchical regression analysis for the predictors of peer rejection (N = 447).

Terms	B	SE B	95% CI	β	R ²	ΔR^2
Stage 1					.07	.07
Gender	-.34	.15	-.63 to -.06	-.12*		
Age	-.45	.11	-.67 to -.23	-.19***		
SES	-.25	.09	-.31 to -.05	-.13**		
Stage 2					.10	.03
Gender	-.33	.14	-.61 to -.04	-.11*		
Age	-.24	.13	-.49 to -.01	-.11		
SES	-.19	.09	-.27 to -.00	-.10*		
Oral communicative competence	-.04	.01	-.05 to -.01	-.18**		
Stage 3					.10	.00
Gender	-.32	.14	-.60 to .04	-.11*		
Age	-.25	.13	-.50 to .01	-.11		
SES	-.18	.09	-.26 to .01	-.10*		
Oral communicative competence	-.05	.01	-.07 to -.02	-.24**		
Oral communicative competence $\times$ gender	.02	.02	-.01 to .06	.08		

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

more focused samples were used and the focus was on peer acceptance instead of rejection (Braza et al., 2009; van der Wilt et al., 2016). These differences could explain why the results of this study could not support our second hypothesis. However, we believe that more research is required in order to establish whether oral communicative competence is indeed equally related to peer rejection for boys and girls (as the outcomes of the present study suggest).

Together with previous studies, the present study provides strong evidence for an association between young children's oral communicative competence and the extent to which they are rejected by peers. However, this study does suffer from several limitations. First, in measuring peer rejection, it has been found that teacher reports are more reliable than information provided by peers, and might therefore be preferred (Wu et al., 2001). On the other hand, the reliability of peer reports has proved to be sufficient and the perception of children's own peers is what ultimately determines children's position within the peer group (Wu et al., 2001). Among peer reports, however, multiple methods exist. Although the peer nomination procedure is widely used to indicate a child's level of peer rejection (Rubin, Bukowski, & Bowker, 2015), some authors have argued that other methods, such as a rating scale, requiring children to rate peers on a Likert scale according to how much they like them, are more appropriate (e.g., Bukowski, Cillessen, & Velasquez, 2012; Bukowski, Sippola, Hoza, & Newcomb, 2000). An advantage of the rating scale is that children are asked to evaluate all of their peers instead of forcing them to limit their peer nominations. The nomination procedure, on the other hand, is more straightforward and requires less time to administer. Nevertheless, as there is still discussion about which sociometric method is best and the two methods appear to have unique strengths and weaknesses (Maassen, Van der Linden, Goossens, & Bokhorst, 2000), future studies into children's peer relationships could include both.

Second, oral communicative competence, a multifaceted construct, was measured using only one instrument. Although the Nijmegen Test for Pragmatics consists of two subscales and multiple items, the high correlation between the subscales prevented us from distinguishing between them in our analyses. Previous research, however, suggested that not all components of oral communicative competence are equally linked to children's level of peer rejection. More specifically, a study by Murphy and Faulkner (2006) showed that, for example, 'providing directives' was related to (un)popularity whereas 'disagreeing without explanation' was not. Another limitation of the Nijmegen Test for Pragmatics could be that children interact with an adult during the test administration whereas the relation between oral communicative competence and peer rejection seems to be mediated by interactions with peers. In previous research it was emphasized that competence in adult-child interaction cannot be directly converted into competence in

child-child interaction (Nærland, 2011). Thus, future research could use a measure similar to the Nijmegen Test for Pragmatics, but should extend the present findings by distinguishing between different aspects of oral communicative competence and including peer interactions. Perhaps a combination of quantitative (e.g., as in the present study) and qualitative approaches (e.g., as in Lansford et al., 2006) is suited to address this issue.

The fact that the total model in this study explained 9.5% of the variance in peer rejection indicates that there are other factors involved in peer relationships. This is in line with the review of Hay et al. (2004) in which multiple child characteristics, such as children's level of aggressiveness and shyness, were identified as significant contributors of peer relationships. Problems in emotion regulation, social understanding, and executive functioning have been proposed to underlie these individual differences (Hay et al., 2004). In addition, not only factors that are associated with an individual child might be important; a part of the variance in peer rejection could be explained by group characteristics. Bierman (2004) emphasized indeed that peer rejection is a group-oriented measure since the degree to which a child is rejected depends on the way he or she is viewed by the group. Correspondingly, Laws et al. (2012) suggested that interventions to decrease children's level of rejection should not only focus on the individual child, but should concentrate on the group of which the child is part as well.

Although it would be interesting to investigate in future research which additional factors affect the extent to which children are rejected by peers, oral communicative competence may be one of the few factors that could be fairly easily and effectively promoted and therefore deserves more attention. Future research into cause-effect relations could demonstrate that children's level of oral communicative competence influences the extent to which they are rejected by their peers and can provide teachers in early childhood education who try to improve children's social relationships an argument for specifically focusing on their pupils' oral communicative competence. In a recently published article, we provide practical tools for teachers who aim to stimulate children's oral communicative competence (van der Veen, van der Wilt, van Kruistum, van Oers, & Michaels, 2017). In addition, outcomes of studies into causality could be helpful in further sharpening and refining existing interventions directed at the promotion of young children's socio-cognitive development. Prior research has shown that this might be a promising approach: children who received coaching sessions in which they were taught multiple social interaction strategies (e.g., taking turns, greeting others, and asking for information) showed reduced rates of initiating and receiving negative social interactions (Bierman, 2004). The present study provides further support for the fact that such an intervention should be implemented in early childhood education already (Hay et al., 2004).

To conclude, the results of this study show that children with poorer oral communicative competence experienced higher levels of peer rejection. Future research should examine the precise nature of this relation in order to establish whether it is a causal relation, or perhaps a reciprocal one. Further, we believe that it would be interesting to analyse the possible mediating role of peer interactions in the relation between oral communicative competence and peer rejection. This could further our understanding of young children's socio-cognitive

development and could help improve interventions directed at the promotion of children's socio-cognitive abilities.

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Appendix A

Sub ability	Description
Communicative Functions	
Requesting explanation	Asking for an explanation in order to clarify something
Requesting clarification	Asking for a further explanation
Describing feelings	Expressing emotions and feelings
Providing a suggestion	Providing ideas in order to solve a problem
Providing information	Providing new information in order to provide a clear picture
Providing instruction	Providing assignments that need to be followed
Asking for information	Asking for information in order to get a clear picture
Asking for action	Request for performing an action
Talking about what others are doing	Talking about the activities of others
Asking about a wish	Asking about the needs or wishes of someone else
Providing explanation	Clarifying the consequences of something
Negotiating	Trying to reach agreement
Conversation Skills	
Repeating in case of unclarity	Repeating or clarifying something
Specific calling for attention	Specific calling for attention of one person who one wants to attend
Providing a reason in case of a judgement	Providing a motivation for your view
Taking prior sentences into account	That what is told is logically related to the previous sentences
Taking the prior knowledge of the listener into account	When something is brought up that is unknown to the listener, further explanation is provided
Talking outside the here-and-now	Talking about something that is not present in the situation
Turn-taking	(Verbally) responding in turns
Initiating contact	Greeting or introducing oneself in order to start a conversation
Ending contact	Greeting or saying goodbye in order to end a conversation

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