

# Gender differences in the relationship between oral communicative competence and peer rejection in preschool

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## ABSTRACT

This study investigated gender differences in the relationship between oral communicative competence (OCC) and peer rejection in preschool. It was hypothesized that children with poorer OCC would be more often rejected by their peers and that the strength of this relationship would differ for boys and girls. No relationship was found between OCC and peer rejection. However, a positive relationship was observed between OCC and peer acceptance, but this relationship only applied to boys. It is suggested that preschool teachers trying to enhance peer acceptance should take the promotion of OCC into account.

## Keywords

Oral communicative competence, peer rejection, peer acceptance, preschool, gender differences.

## INTRODUCTION

As children we have probably all experienced a situation of being shut out. This might have strengthened us and prepared us for the big world outside. However, there are children for whom isolation is a daily recurring phenomenon. Those children are victim of peer rejection. Peer rejection is a concept that summarizes the negative feelings of the peer group about a particular child (1). Of primary interest for researchers has been the link between peer rejection and aggressive behavior: rejected children have been shown to engage in aggressive behavior more often (4). As research has shown, aggressive behavior of rejected children leads to further victimization and rejection by peers which, in turn, leads to more aggression on the part of the rejected children (5). The link between rejection and aggression seems to be a self-perpetuating cycle which makes rejection a persistent problem and aggression a long-term negative effect of rejection (4; 7).

Because of the long-term negative effect of peer rejection, it is important to reduce peer rejection in school settings

and beyond by identifying contributing factors. Several studies have focused on the relationship between language abilities and peer rejection. For example, Menting, van Lier, & Koot (6) identified a relationship between poor receptive language skills (e.g., vocabulary knowledge) and peer rejection in preschool. In the present study the relationship between language abilities and peer rejection was further explored by focusing on children's oral communicative competence, a concept that encompasses the "totality of (...) knowledge and skill that enables a speaker to communicate effectively and appropriately in social contexts (9). The concept of OCC has many similarities with pragmatics as the latter is defined by Roth and Spekman as the ability to use language in a manner that suits the interactional context (8). Several studies have been conducted into the relationship between language abilities and peer interactions, but the focus tends to be on receptive language abilities such as vocabulary knowledge (6). As a result, much remains unclear about how OCC is related to peer interactions and difficulties therein.

The issue of when efforts to prevent or reduce peer rejection should be made is related to the question at what age peer rejection arises. Prior research has indicated that stable preferences for particular children emerge when children are three years of age, meaning that in preschool some children become rejected by their peers (5). This might be due to the major transition that takes place when children start preschool (between the ages of two and five). During this period, the ability to relate to peers in groups as opposed to one-to-one interactions is required (5). Because there are indications that individual differences in social status emerge quickly, attempts to affect peer rejection should begin rather early (7). In addition, stable differences in competence in interacting with peers also seem to emerge in the first three years of life (5). Therefore, in the present study the relationship between OCC and peer rejection was investigated in preschool.

In addition, much remains unknown about gender differences in the relationship between OCC and peer rejection. Many studies provide strong evidence that, in general, men are prone to assess their friendships in terms of non-verbal actions while women organize their friendships around the discussing of feelings (12). The importance of communication in women's friendships suggests that the relationship between OCC and peer

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rejection could be stronger for women than for men, and perhaps also stronger for girls than for boys. In contrast, a recent study indicates that boys, but not girls, with higher scores on a vocabulary test were more accepted by their peers (2). Although this study did not address OCC as such and focused on acceptance instead of rejection, the outcome could suggest that the hypothesized relationship with peer rejection might be stronger for boys than for girls. As it is still unclear whether such a relationship is stronger for girls or for boys in preschool, the aim of the present study was to fill this gap and examine whether gender is of influence.

To summarize, in the present study we investigated whether a relationship existed between OCC and peer rejection by focusing on (1) pragmatic abilities, (2) preschoolers, and (3) gender differences. We hypothesized that children with poorer OCC would be more often rejected by their peers. In addition, we expected that the strength of this relationship might differ for boys and girls, although we had no particular hypothesis regarding the direction of the difference.

## **METHOD**

### **Participants**

The participants were part of a larger research project investigating the possibilities to promote oral language development in 4- to 5-year-old children (12). To investigate the relation between OCC and peer rejection, a sample of  $N = 54$  children was investigated. The children went to an elementary school in Amsterdam, The Netherlands. Two preschool classes were incorporated in the present study with  $n = 25$  in class 1 and  $n = 29$  in class 2. The sample consisted of 31 boys (57%) and 23 girls (43%) with ages ranging from 3.83 to 6.25 years, and a mean age of 5.03 years ( $SD = 0.68$ ). Teachers indicated that almost all children had highly educated parents and a Dutch/Caucasian background.

### **Ethical considerations**

For the larger project we obtained ethical approval from our faculty's committee of Science and Ethics. Prior to the study, all parents received a letter with information about the research. Parents could contact the teacher or researcher if they did not want their child to participate. None of the parents objected. Further, the participating teachers were informed about the purpose and procedure of this study during a two-hour meeting. During the research, 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. No names of schools, children, or teachers were used in publications.

### **Measures**

OCC was measured with the Nijmegen Test for Pragmatics (NPT, 4). The test is based on the Roth and Spekman's (8) aforementioned definition of pragmatics. The NPT measures the productive pragmatic skills of children aged 4-7 years and consists of a scale model of a house with associated pictures. A response of the child is elicited through a story about the inhabitants of the house who find themselves in all sorts of situations (for example: "Grandma is visiting. What does Lotje say to Grandma?"). The validity and reliability of the NPT was high (Cronbach alpha coefficient of .88). The total test used in this study consisted of 37 items. The items were dichotomously scored where for each item 0 indicated that the communicative skill was not adequate and 1 indicated that the communicative skill was adequate (in case of the previous example: "Hello, Grandma!" = 1 and "Do you want to play with me?" = 0).

Peer rejection was measured with a sociometric method. The sociometric method is used as a tool to index a child's place within the larger peer group (4). Following previous research (11), two questions were used: liked most (with whom do you prefer to play?) and liked least (with whom do you least like to play?). Same-sex and other-sex nominations were allowed. Each child was asked for one nomination with regard to both questions. Previous research revealed that peer sociometrics are a valid and highly reliable method for children in preschool (11; 13).

### **Procedure**

One school (with two teachers and their preschool class) participating in the larger study agreed to take part in the current study. Three test-assistants followed a training for using the NPT. All children were individually tested on the NPT, which took approximately 20 minutes per child. The children were tested by one of the test-assistants in a quiet place in their own school. The test administrations were audiotaped using a voice recorder so they could be scored afterwards by one of the test-assistants. After the children were tested on the NPT, they were asked to answer the two questions of the sociometric method. In line with previous research (7), this procedure was handled more flexibly to ensure children understood the question as intended by the test-assistant. The question was often rephrased, for example 'with whom do you *not* like to play'. The test-assistant registered the answers of the children and all children were thanked for their cooperation.

### **Statistical analyses**

The tests were scored and analyzed using the Statistical Package for Social Scientists (SPSS, standard version 21, 2013). To measure the degree of OCC for each child, all items of the NPT were computed which provided a total score on the NPT with low scores indicating a low level of OCC and high scores indicating a high level. To measure the degree of rejection for each child, the negative nominations were computed which provided a total score on peer rejection with low scores indicating a low level of peer rejection and high scores indicating a high level. So peer rejection is viewed as the number of 'liked least' nominations. During the data exploration

process it appeared that peer rejection and peer acceptance were unrelated concepts. Therefore, the degree of peer acceptance was also incorporated in subsequent analyses. To measure the degree of acceptance for each child, the positive nominations were computed which provided a total score on peer acceptance with low scores indicating a low level of peer acceptance and high scores indicating a high level.

## RESULTS

### Preliminary analyses

The data were first checked for outliers. There appeared to be an extreme score with a large influence on peer rejection which was deleted from the sample. Further analyses were performed on a sample of  $N = 53$  children. Normality tests indicated that the scores on OCC, peer rejection, and peer acceptance were (even after transforming) not normally distributed. Therefore, non-parametric techniques were used.

To control for differences in classroom size, the total scores on peer rejection and peer acceptance were standardized within classrooms by dividing them by the total number of children in the classroom minus 1 (a child could not nominate him- or herself). Subsequent analyses were performed with the standardized scores.

Mann-Whitney U Tests were conducted to investigate gender differences, revealing no significant difference in OCC levels of boys ( $Mdn = 30, n = 30$ ) and girls ( $Mdn = 31, n = 23$ ),  $U = 281.5, z = -1.15, p = .251$ . The magnitude of the difference in medians was small,  $r = .16$ . A Mann-Whitney U test also revealed no significant differences in peer rejection levels of boys ( $Mdn = .02, n = 30$ ) and girls ( $Mdn = .00, n = 23$ ),  $U = 305, z = -0.79, p = .43$ . The magnitude of the difference in medians was small,  $r = .11$ . Finally, a Mann-Whitney U test revealed no significant difference in peer acceptance levels of boys ( $Mdn = .04, n = 30$ ) and girls ( $Mdn = .04, n = 23$ ),  $U = 272.5, z = -1.35, p = .178$ . The magnitude of the difference in medians was small,  $r = .19$ . No gender differences were found in levels of OCC, peer rejection, and peer acceptance separately.

### Correlational analyses

The relationship between the level of OCC and peer rejection was investigated using Spearman Rank Order Correlation ( $\rho$ ). There was a non-significant, negative correlation between the two variables,  $r_s = -.12, n = 53, p = .404$ . This relationship was explored for girls and boys separately. There was a non-significant, positive correlation between the two variables for girls,  $r_s = .01, n = 23, p = .954$  and a non-significant, negative correlation between the two variables for boys,  $r_s = -.18, n = 30, p = .353$ .

To explore whether peer rejection and peer acceptance were related, the association between peer rejection and peer acceptance was investigated using Spearman Rank Order Correlation ( $\rho$ ). There was a non-significant, positive correlation between the two variables,  $r_s = .07, n = 53, p = .603$ . Since no relationship was found between the variables, it appeared that peer rejection and peer acceptance were not just each other's opposites. To

follow up on this finding, the relationship between the level of OCC and peer acceptance was explored outside the scope of the main research question using Spearman Rank Order Correlation ( $\rho$ ). There was a small, positive correlation between the two variables,  $r_s = .29, n = 53, p = .037$ , with high levels of OCC associated with high levels of peer acceptance. This relation was also compared for girls and boys separately. There was a non-significant, negative correlation between the variables for girls,  $r_s = -.06, n = 23, p = .783$ . However, there was a large, positive correlation between the variables for boys,  $r_s = .54, n = 30, p = .002$ , with high levels of OCC associated with high levels of peer acceptance. So only for boys, a relationship was found between OCC and peer acceptance.

## CONCLUSION

The findings raise the question of why a relationship was found between OCC and peer acceptance but not between OCC and peer rejection. One might expect acceptance and rejection to be each other's opposites: a child with a high level of acceptance has a low level of rejection and vice versa. In that case, a positive relationship between OCC and peer acceptance indicates, as hypothesized, a negative relationship between OCC and peer rejection. Since this is not the case in this study, peer rejection and peer acceptance seem to be unrelated concepts which has also been suggested in a previous study (4). This explains why a relationship was found with peer acceptance, but not with peer rejection.

The findings of this study are consistent with results of prior research indicating that language abilities affect peer acceptance (5). However, the findings of this study differ from those of previous research by Menting et al. in which a relationship was found between language skills and rejection by peers (6). It is possible that a different finding was obtained in the present study because a different measure was used of language skills. In the study of Menting et al., receptive knowledge of vocabulary was tested while the NPT used in the current study measures productive pragmatic skills. The use of productive and context-dependent language skills seemed to be better suited for exploring the possible link between difficulties in peer interactions and, consequently, of peer rejection. Furthermore, the findings from the present study raise a second question, namely why a positive relationship was found between OCC and peer acceptance for boys but not for girls. While these findings seem to contradict results obtained in studies showing that women place greater value in communication than men (12), they are in line with a previous study by Braza et al. (2) exploring the relationship between vocabulary knowledge and peer acceptance for 5-year-olds. In that study it was suggested that language abilities could help children to control their aggressive behavior which, in turn, helps them being accepted by peers. Since research has shown that boys have a higher tendency of being aggressive than girls, OCC might be of greater importance for them (2, 5, 6). This could be the reason why in the present study OCC and peer acceptance are more strongly related for boys than for girls.

Together, the study by Braza et al. (2) and the present study provide compelling evidence for an association between boys' language abilities and their acceptance by peers. However, the present study does suffer from several limitations. Firstly, by using a rather small and focused sample the results of this study cannot be generalized. In future research the relation between OCC and peer acceptance should be investigated with larger groups and for children with a variety of backgrounds. Secondly, more research is needed into the relationship between OCC and peer acceptance for boys, for example to investigate whether poor OCC hinders their acceptance by peers, or whether low acceptance by peers affects their OCC (or both). In addition, more insight is required into why such processes might differ for boys and girls.

Further research into the relationships between OCC and peer acceptance could have important practical implications. The present study seems to point to the significance of OCC for peer acceptance, although only for boys. If future research can demonstrate that the former has an impact on the latter, then teachers trying to enhance peer acceptance should take the promotion of OCC into account. The present study indicates that not only language competencies like vocabulary knowledge or use of grammar are of importance for peer acceptance, but that pragmatic abilities are important as well. In addition, the present study provides further support for the claim that attempts to affect peer acceptance should begin early, in preschool already (5; 7).

To conclude, this study revealed a relationship between OCC and peer acceptance for boys. Future research should explore whether this relation is a causal relationship. Those results can further our understanding of the possible predictors of peer acceptance in preschool, and enable interventions directed towards enhancing peer acceptance by focusing on those predictors.

#### ROLE OF THE STUDENT

Femke van der Wilt was one of the test-assistants of the Model2Talk project. The topic of OCC was proposed by supervisor Chiel van der Veen, MSc. The research question, design and execution of the sociometric method, the processing of the results as well as the formulation of the conclusions and the writing were done by the student.

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