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REVIEW ARTICLE

Why Do Children Become Rejected by Their Peers? A Review of Studies into the Relationship Between Oral Communicative Competence and Sociometric Status in Childhood

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Abstract
Being rejected by peers has devastating consequences for a child's future social-cognitive development. It is therefore important to investigate factors that contribute to childhood peer rejection. In doing so, the present review specifically focused on sociometric status, a concept that refers to a child's position within the peer group (e.g., liked or disliked). Although previous studies indicated that children's ability to communicate effectively might partly determine their sociometric status, much was still unclear about this relation. Therefore, in the present review, a total of 25 studies into the relation between children's (aged 1 to 12 years) level of oral communicative competence and their sociometric status was systematically reviewed. Results generally pointed to a significant relation between the two variables. Specifically, rejected children communicate less responsive compared with popular children. However, several gaps in previous research were identified, resulting in five recommendations for future studies. First, the complexity of the construct of oral communicative competence asks for an approach in which multiple methods are combined (i.e., mixed methods). Second, future studies should be conducted in non-western countries as well to study possible cross-cultural differences. Third, as the majority of researches were small-scale exploratory studies, future research should include larger samples in order to generalize the findings outside the sample. Fourth, future studies should adopt longitudinal and experimental designs to investigate the direction of the relation of interest. And finally, as previous research showed that the interactional context, gender, and age might influence the relation between oral communicative competence and sociometric status, future studies could take these factors into account.

Keywords Oral communicative competence · Pragmatic language · Social communication · Sociometric status · Childhood · Interactional context · Gender differences

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Introduction

The Developmental Significance of Peer Relationships

Over the past few decades, a considerable amount of research has been conducted into childhood peer relationships (Bukowski et al. 2018). The concluding message is clear: Peers are of vital importance for children's social and emotional functioning in almost every aspect of their lives, including school. This is partly due to the fact that meaningful contacts with peers offer children unique opportunities for getting acquainted with the social norms involved in interpersonal relationships, and for practicing prosocial behavior (Shonkhoff and Phillips 2000). As a consequence, being rejected by the peer group, and thereby being excluded from meaningful contacts with peers, has devastating effects on a child's future development. In fact, compared with children who are accepted by their peers, rejected children have been found to experience higher levels of anxiety, loneliness, and depression (for a meta-analysis, see (Reijntjes et al. 2010)). Beside these internalizing problems, childhood peer rejection has also been associated with higher rates of aggressive behavior, conduct problems, and substance abuse in adolescence (Dodge et al. 2003; Miller-Johnson et al. 2002; Prinstein and La Greca 2004). In addition, correlations have been found between peer rejection and academic failure: Rejected children are more likely to get low grades and, ultimately, to drop out of school (French and Conrad 2001; Mercer and DeRosier 2008). Peer rejection is clearly a serious reason for concern. It is therefore important to investigate factors contributing to it: Why do children become rejected by their peers?

The Potential Role of Oral Communicative Competence

The present review has made an attempt to address this question by focusing on sociometric status, a concept that refers to a child's position within the peer group (e.g., accepted or rejected, liked or disliked, popular or unpopular; (Cillessen 2009)). Previous research has demonstrated that children's sociometric status is partly determined by the behavior they engage in (for reviews, see (Gifford-Smith and Brownell 2003; Newcomb et al. 1993)). In fact, multiple studies showed that children who are unable to regulate their aggressive behavior are at increased risk of being rejected by peers (e.g., (Menting et al. 2011; Pedersen et al. 2007)). Drawing on Vygotsky's cultural-historical theory, language might play an important role in explaining why some children have difficulties in regulating their behavior (Vygotsky 1978). Specifically, although Vygotsky regarded the initial function of language to be social (i.e., to interact with others), he suggested that language subsequently supports children to regulate their own and others' actions. In fact, he distinguished between two forms of speech: speech that is directed to others (social speech) and speech that is directed to self (inner speech; (Vygotsky 1978)). Whereas social speech is used for communicative purposes (i.e., to build relationships with others), inner speech is used for self-regulation, allowing a child to reflect on and modify his or her own behavior. Thus, language not only functions as a means to communicate but also enables a child to plan, coordinate, and review his or her actions (Vygotsky 1978). Building on empirical research and the work of Vygotsky, it seems reasonable to assume a relation between children's language competence and self-regulatory and communicative behavior and, consequently, their position within the peer group. Support for this conjecture was derived from a meta-analysis of the relation between language competence (the ability to understand and/or produce linguistic utterances) and social preference (the

degree to which one is accepted or rejected by peers; (Troesch et al. 2016)). Results of 42 studies indicated a positive relation between the two variables with a mean effect size of $r = .25$ (a medium effect according to (Cohen 1988)).

Although the meta-analysis of Troesch et al. (Troesch et al. 2016) pointed to a significant relation between language competence and social preference, a large part of the studies that were included in their meta-analysis focused merely on receptive language skills (e.g., vocabulary knowledge). This is in line with a broader tendency in this research area to concentrate primarily on aspects of language competence that are relatively easy to measure (Braza et al. 2009; Menting et al. 2011). Drawing on Vygotsky's (Vygotsky 1978) ideas about language use, however, it is to be expected that not only receptive language skills per se are of importance for children's success in peer interactions. Instead, Vygotsky emphasized the communicative function of language, indicating the significance of the ability to use language to communicate for other- and self-regulation (Vygotsky 1987). The present review specifically focused on this ability, referring to it with the term *oral communicative competence*. In doing so, the aim was to build on the previous meta-analysis of Troesch et al. and to provide a detailed picture of previous studies into the relation between oral communicative competence and sociometric status. Instead of a meta-analysis, however, this review took a narrative approach. This allowed for the inclusion of small-scale studies reporting observational data. The main purposes of the present review were to (1) describe these studies and search for differences and commonalities and (2) move beyond the studies included in the review and to provide a research agenda for future studies into the relation between children's level of oral communicative competence and their sociometric status.

Defining and Assessing Oral Communicative Competence

One major construct in this review is that of oral communicative competence. Oral communicative competence is a broad and multifaceted construct which makes it difficult to define and operationalize. Moreover, the problem of distinguishing it from terms like *pragmatic language* and *social communication* reflects the broader problem of terminology and definition in the entire range of language research (e.g., see (Bishop 2014, 2017)). Oral communicative competence was first introduced by the linguistic anthropologist Dell Hymes (1967) who defined it as the ability to convey and interpret messages to negotiate meanings interpersonally within specific social contexts. Hymes argued that, although successful communication requires knowledge of the structural aspects of language, such as the rules of grammar, socio-linguistic competence is needed as well (see also (Halliday 2003)). This socio-linguistic competence is encompassed in the concept of oral communicative competence and refers to the ability to use language in an acceptable and efficient manner in particular social contexts (Celce-Murcia 2008; Hymes 1972; Samter 2003). As the appropriateness of language use depends on settings, topics, and relationships among people, it is crucial to take the interactional context into account in becoming more communicatively competent (Halliday 2003; Hymes 1972). Thus, oral communicative competence is, in short, a context-dependent and multifaceted construct that consists of many sub-abilities that need to be integrated to communicate effectively (Celce-Murcia 2008; Samter 2003).

Given the complexity of oral communicative competence, researchers have adopted multiple methods to assess (aspects of) oral communicative competence (Bishop 2017; Roth and Spekman 1984). Originally, oral communicative competence has been primarily assessed within relatively isolated and artificial test situations (Roth and Spekman 1984). However,

this approach has been criticized, because the findings obtained in such situations might not be generalizable to other (more realistic) communicative contexts (Roth and Spekman 1984). Although most language experts now agree on the importance of language assessment in age-appropriate and familiar settings, there is still a tension between the use of standardized tests and observations in classroom settings (Bishop 2017). An important benefit of standardized tests is their relative objective and reliable assessment. The question is, however, whether such tests are sensitive enough to capture the full range of children's communicative abilities (Bishop 2017; Roth and Spekman 1984). In contrast, an advantage of classroom observations is that children's communicative behavior can be analyzed in great detail, on multiple levels, and in a naturalistic context (Roth and Spekman 1984). Like standardized assessments, however, classroom observations have limitations as well. For example, observational methods are often time-consuming and it has been found to be difficult to reach sufficient interrater agreement when using multiple observers (Bishop 2017; Roth and Spekman 1984). In the present review, both studies adopting standardized assessments and studies using classroom observations were included in order to cover as many aspects as possible of the complex construct of oral communicative competence.

Defining and Assessing Sociometric Status

Besides the concept of oral communicative competence, this review focusses on sociometric status. Previous studies have indicated that children who differ in their sociometric status also tend to differ in their behavioral profiles (Coie et al. 1982). Descriptions of sociometric group differences have been provided in a review by Gifford-Smith and Brownell (Gifford-Smith and Brownell 2003). Based on this review, we will give an overview of the most important correlates of each sociometric category. Specifically, compared with average children, children who are identified as popular have been found to possess superior social abilities: They are more often engaged in positive peer interactions, show well-developed social problem-solving skills, and have low levels of aggression. In contrast, children who are rejected by their peers tend to be less sociable than average children and are more disruptive and aggressive. Neglected children have been found to be less sociable and less aggressive than average children. Moreover, they are generally more withdrawn and are engaged in fewer peer interactions than their average peers. Children who are classified as controversial have a unique behavioral reputation. In fact, they have not only been found to be equally sociable as popular children but also as aggressive as or even more aggressive than children who are rejected. Controversial children are apparently able to buffer the negative effects of their aggressive behavior with their well-developed social skills. Finally, average children are regarded as a comparison group: Their behavior is generally described in terms of the degree to which children in the extreme sociometric groups deviate from it. Although the relative number of children in each group varies from study to study, on average, 11% is identified as popular, 13% as rejected, 9% as neglected, 7% as controversial, and 60% as average ((Newcomb et al. 1993); see also (Nelson et al. 2016)).

To assess children's position within the peer group, Moreno (Moreno 1934) developed a sociometric assessment strategy in which he asked children to nominate liked and disliked peers. This original nomination procedure was later adapted by Coie et al. (Coie et al. 1982) and is nowadays the most commonly used procedure in studies into peer relationships (Parker et al. 2006). Previous research has demonstrated that the nomination procedure is a reliable and valid method for measuring children's social position (Jiang and Cilessen 2005; Wu et al.

2001). During this procedure, children are typically asked to nominate up to three peers they like (positive nominations) and three peers they dislike (negative nominations). Over the years, nominations have been used to compute the dimensions of acceptance (number of positive nominations a child received) and rejection (number of negative nominations a child received; (Bukowski et al. 2000)). Usually, these nominations are also combined in order to include the dimensions of social impact (i.e., visibility; summing the number of positive and negative nominations) and social preference (i.e., likability; subtracting the number of negative nominations from the number of positive nominations; (Bukowski et al. 2000)). These dimensions, in turn, have been used to create the previously described sociometric groups (i.e., popular, rejected, neglected, controversial, and average children).

The Target Population

In describing previous studies into the relation between oral communicative competence and sociometric status, this review exclusively focused on studies targeted at children in the age of 1 to 12 years. We selected this age range, because peer preferences emerge from toddlerhood upwards (Hay et al. 2004; Parker et al. 2006) and we wanted to focus our review on childhood as many aspects of children's oral communicative competence develop during this period. Although oral communicative competence is likely to play a role in children's peer relationships during their entire childhood, its impact might differ depending on the specific period. In particular, when children enter early childhood education, they begin to spend an increasing amount of time in a fixed peer group (i.e., their own class) and become more frequently engaged in group activities (Hay et al. 2004; Parker et al. 2006). It is in this setting in which children obtain relatively stable positions within their peer group (Bierman 2004). In addition, due to children's language development during childhood, peer conflicts tend to decrease and children become more able to engage in prosocial behavior. As a consequence, group norms emerge in which antisocial behavior becomes increasingly unaccepted (Parker et al. 2006). This places children with language difficulties at risk for peer rejection (Vallotton and Ayoub 2011). Compared with early childhood, middle childhood (when children are between 6 and 12 years) is characterized by an increase in the complexity of peer relationships. It is therefore more likely that during this period, an entire web of interrelated factors is of influence on the extent to which children are liked or disliked by peers (Troesch et al. 2016). Moreover, when children have grown older, most of them have acquired the basic principles of successful communication, so there is less variability in the level of oral communicative competence between older children ((Hay et al. 2004; Parker et al. 2006); also see (Troesch et al. 2016)). These developments could explain why the relation between language competence and social preference has been found to be more pronounced in younger children than in older children (Troesch et al. 2016).

A fair amount of previous studies into the relation between children's ability to communicate effectively and their position within the peer group has focused specifically on children with speech and language impairments. In general, results revealed that these children experience a higher level of peer rejection than their peers with normal developing language skills (e.g., (Laws et al. 2012; Redmond 2011)). Laws et al. (2012), for example, found that children with speech and language impairments were less likely to be identified as someone who is liked by peers. Speech and language impairments apparently place a child at risk for being rejected by the peer group. One should be cautious, however, to generalize results from studies targeted at such specific groups of children to that of the general population. In fact, the

question is raised whether only severe language impairments place children at risk for peer rejection or whether a lack in oral communicative competence (but still in the range of normal language development) increases children's risk for being rejected by peers as well. Furthermore, one could imagine that directions for interventions might differ for children with specific speech and language impairments compared with children with normal developing language skills. Although generally a successful intervention is one that improves children's language skills so that they resemble those of the peer group, more modest goals (e.g., coping with language difficulties) are required for children with specific speech and language impairments (Bishop 2017). This review therefore excluded studies that were specifically aimed at children with speech and language impairments and only included studies in which a community sample was included (e.g., the entire class of a mainstream school).

The Present Study

In summary, the research question of the present narrative review was to what extent and how is oral communicative competence related to sociometric status in childhood? The aim was to identify previous studies into the relation between oral communicative competence and sociometric status in children aged 1 to 12 years and to provide an overview of their main results. However, this review does not merely focus on research outcomes. An additional aim was to evaluate specific methodological characteristics of studies (e.g., operationalization of variables and research design) that have previously been conducted into the relation between oral communicative competence and sociometric status. It is important to gather information of this sort in order to explain inconsistencies in research findings, to identify possible gaps or neglects in this field of research and to provide clear directions for future research.

Method

To identify all relevant studies, the first author used the electronic databases ERIC, PsycINFO, and Web of Science to search titles and abstracts of journal articles for each possible combination of two predefined lists of keywords (i.e., one for the concept of oral communicative competence and one focusing on sociometric status). Because of the complexity of the concept of oral communicative competence and the range of terms used to index a child's position within the peer group, several related terms (derived from previous literature research) were included in order to avoid missing relevant studies. Search terms for oral communicative competence included *oral communicative competence*, *communication skills*, *language skills*, *discourse skills*, *interaction skills*, *pragmatic skills*, *pragmatic language*, and *social communication*. With regard to sociometric status, the following search terms were used: *sociometric status*, *peer rejection*, *peer acceptance*, *(un) popularity*, and *social preference*. Boolean Operators were used to ensure that each possible combination of keywords was included in the search. The reference lists of the articles that were obtained from this search were hand-searched to identify other studies to include in the present review. Although no date limit was used, only peer-reviewed journal articles that were written in English were included. This primary search resulted in a total number of 302 articles.

In the next phase, the titles, abstracts, and keywords of the collected articles were reviewed in order to decide whether the studies met the following inclusion criteria. Studies were deemed eligible if (1) they reported on empirical research in which (one of) the main research

question(s) concerned the relation between (concepts similar to) oral communicative competence and sociometric status, (2) they included samples composed of children in the age of 1 to 12 years, without any disabilities or disorders (e.g., autism, attention deficit hyperactivity disorder, or specific language impairment), and (3) they were published in international peer-reviewed journals. When abstracts did not contain sufficient information, full texts were read. A random selection of 10% of the articles from the primary search was reviewed by the second author. With Cohen's kappa of 0.86, there was an excellent agreement on the selection of articles to be included in the current review (Higgins and Green 2008). A total of 265 articles did not meet the selection criteria and were excluded, resulting in a selection of 37 articles. The main reasons for exclusion were that (1) the research question was only focused on (concepts similar to) oral communicative competence or sociometric status, but not on both variables; (2) the sample consisted of children outside the age range (1 to 12 years); or (3) the sample focused on children with certain disabilities.

Full texts of these 37 articles were retrieved for further, detailed examination. In this phase, one article was excluded, because it concerned a theoretical reflection on the topic. Another four articles were excluded, because they did not focus on (a concept similar to) oral communicative competence, but on other aspects of language competence (e.g., receptive vocabulary knowledge). Finally, seven articles were excluded in this phase, because they focused on oral communicative competence and sociometric status, but did not investigate the relation between the two variables. This resulted in a final selection of 25 studies reporting on an overall sample of $N = 2637$ children aged 1–12 years (for details, see Table 1). The selected studies were analyzed with the help of four major categories. These include (1) research aim, (2) operationalization (measurement of main variables), (3) research design (i.e., sample size and analyses), and (4) main outcomes. Table 1 presents an overview of the studies included in this review, specified according to the four major categories. The results of the review are structured according to these categories.

Results

Research Aim

A common feature of the studies included in this review is, obviously, their interest in the association between children's ability to communicate effectively and their sociometric status. In the study of Black and Logan (Black and Logan 1995), for example, the main purpose was to examine the links between aspects of responsiveness and reciprocity in pre-schoolers' communication and their social position within the peer group. With regard to the direction of the relation of interest, the majority of studies focused on the question of how children's ability to communicate effectively might affect their position within the peer group. For example, based on research showing that children who fail to acquire the rules of language use have trouble in adapting to and being integrated into the peer group, Nærland (2011) expected pragmatic competence to significantly contribute to popularity. The interest in the question of how children's ability to communicate effectively contributes to their position within the peer group can be explained by the well-established impact of children's sociometric status on their socio-cognitive development. In fact, most of the included studies present an overview of the major consequences of being rejected by peers in order to indicate the importance of focusing on children's position within the peer group. There are, however,

Table 1 Description and main outcomes of the studies included in the review

Study/country	Research aim	Operationalization	Research design	Main outcomes
van der Wilt et al. (2016)/The Netherlands	To examine gender differences in the relation between oral communicative competence and peer rejection	Nijmegen Test for Pragmatics, assessing productive pragmatic skills individually in a standardized manner Peer nomination procedure: amount of received positive nominations indicated acceptance; amount of received negative nominations indicated rejection	$N = 54$ children (age range 3.83 to 6.25 years); correlation analyses; cross-sectional design	Oral communicative competence was associated with peer acceptance (although only for boys), but not with peer rejection.
van der Wilt et al. (2018a)/The Netherlands	To examine the relation between oral communicative competence and peer rejection, as well as gender differences in this relation	Nijmegen Test for Pragmatics, assessing productive pragmatic skills individually in a standardized manner Peer nomination procedure: amount of received negative nominations minus amount of received positive nominations indicated level of peer rejection	$N = 447$ children (age range 3.83 to 6.50 years); multiple regression analyses; cross-sectional design	After controlling for gender, age, and SES, oral communicative competence accounted for unique variance: children with poorer oral communicative competence experienced higher levels of peer rejection.
van der Wilt et al. (2018b)/The Netherlands	To examine whether children who differed in their sociometric status also differed in their level of oral communicative competence	Nijmegen Test for Pragmatics, assessing productive pragmatic skills individually in a standardized manner Peer nomination procedure resulting in five groups: (1) popular, (2) rejected, (3) neglected, (4) controversial, and (5) average	$N = 570$ children (age range 3.99 to 7.08 years); comparative analyses; cross-sectional design	Children who were rejected or neglected by their peers exhibited lower levels of oral communicative competence than average children; popular and controversial children did not differ from average children in their level of oral communicative competence.
Bierman and Furman (1984)/USA	To examine the effects of conversational skills training and peer involvement on the peer acceptance of disliked children	Observations of peer interactions and a written questionnaire measuring different aspects of communication Rating scale resulting in a measure of peer acceptance	$N = 56$ children (fifth- and sixth graders); comparative analyses; quasi-experimental, longitudinal design	Conversational skills training promoted social skill acquisition and increased skillful social interaction in both dyadic and small-group interactions; peer involvement increased peer acceptance
Black (1992)/USA	To examine the communication strategies that children use to negotiate episodes of social pretend play as a function of social status and sex	Observations of peer interactions in which one child enters the play of others Peer nomination procedure resulting in three groups: (1) liked, (2) disliked, and (3) low-impact	$N = 68$ children (age range 3.58 to 5.08 years); comparative analyses; cross-sectional design	Disliked children used higher proportions of suggestions and demands, were more likely to negotiate pretense in terms of their own activity, and were more likely to reject a theme or role; liked children provided explanations about ongoing play, requested

Table 1 (continued)

Study/country	Research aim	Operationalization	Research design	Main outcomes
				clarifications, and included the ideas of peers in their negotiations.
Black and Hazen (1990)/USA	To examine the relation between social communication skills and sociometric status	Observations of peer interactions in which one child enters the play session of two peers he or she did or did not know Peer nomination procedure resulting in three groups: (1) liked, (2) disliked, (3) low--impact	$N = 66$ children (age range 3.50 to 5.33 years); comparative analyses; cross-sectional design	With unacquainted peers, disliked children were less responsive to peers and more likely to make irrelevant comments; with acquainted peers, disliked children were also less likely to clearly direct their communication.
Black and Logan (1995)/USA	To examine links between specific aspects of communication in the family and peer system and children's sociometric status	Observations of peer interactions in which one child enters the play session of two peers Teachers provided peer nominations, resulting in four groups: (1) popular, (2) rejected, (3) neglected, and (4) controversial	$N = 43$ children (age range 2.00 to 5.00 years); comparative analyses; cross-sectional design	Rejected children demonstrated turn-taking styles that included irrelevant turns, interruptions, simultaneous talking, and non-contingent responding; popular children alternated turns, provided explanations to peers, and were more likely to display coherent discourse
Burleson et al. (1992)/USA	To examine four of children's socio-cognitive skills and three of their communication skills as potential predictors of peer acceptance	Coding of children's responses to hypothetical situations, resulting in a general communication skill index Peer nomination procedure: amount of received positive nominations minus amount of received negative nominations indicated social preference	$N = 51$ children (first- and third graders); multiple regression analyses; longitudinal design (year 1 and year 2)	During year 1, persuasive communication predicted social preference; during year 2, persuasive communication and listener-adapted communication predicted social preference
Galejs et al. (1983)/USA	To examine the relation between popularity and communication skills	Dickson's Notebook Communication Game, assessing listening and describing skills Teachers rank-ordered all children from most popular to least popular	$N = 60$ children (age range 3.20 to 6.60 years); correlation analyses; cross-sectional design	A significant and positive correlation was found between popularity and listening skills; a non-significant correlation was found between popularity and describing skills
Gottman et al. (1975) / USA	To examine the relations between social skills, social interaction, and popularity	Observations of peer interactions in the classroom Peer nomination procedure (nominating unlimited amount of friends) resulting in two categories: low-friends children and high-friends children	$N = 198$ children (third- and fourth graders); comparative analyses; cross-sectional design	High-friend children received more positive reinforcement compared to low-friend children

Table 1 (continued)

Study/country	Research aim	Operationalization	Research design	Main outcomes
Hazen and Black (1989)/USA	To examine the relation between social status and discourse skills	Observations of peer interactions in which one child enters the play session of two peers Peer nomination procedure resulting in three groups: (1) liked, (2) disliked, and (3) low-impact	$N = 48$ children (age range 3.58 to 5.50 years); comparative analyses; cross-sectional design	Liked children were more likely to direct their initiations clearly, speak to both interaction partners, respond contingently to others, acknowledge others, reinitiate when rejecting, and adapt to the differing social demands of different contexts than disliked children
Kemple et al. (Kemple et al. 1992)/USA	To examine relations between social status and communication behaviors contributing to cohesive discourse longitudinally	Observations of peer interactions in which one child enters the play session of others Peer nomination procedure; amount of received positive nominations indicated acceptance; amount of received negative nominations indicated rejection	$N = 25$ children (age range 3.50 to 4.50 years); correlation analyses; longitudinal design (two measurements: year 1 and year 2)	Acceptance of peers' initiations during play at year 1 predicted social status at year 2; social status at year 1 predicted use of non-directed initiations and non-contingent responding at year 2
Ladd (1981)/USA	To examine the effect of a social skills training on the behavior and acceptance of low-accepted children	Observations of children's peer interactions during 30-min free-play periods Rating scale resulting in a selection of low-accepted children	$N = 36$ low-accepted children (third graders); comparative analyses; quasi-experimental, longitudinal design	Trained children spent a significantly greater percentage of tune engagement in two of the three trained skills whereas control group children remained the same or declined; trained children also evidenced significant and lasting gains in classroom peer acceptance
Markell and Asher (1984)/USA	To examine whether popular and unpopular children differ in their interaction style in a problem-solving situation	Observations of peer interactions during a problem-solving situation Peer nomination procedure and peer rating scale	$N = 208$ children (third- and fourth graders); comparative analyses; cross-sectional design	Pairs of unpopular and average children showed greater asymmetry in influence and less cohesiveness and comfort than pairs of popular-average children
Masters and Furman (1981)/USA	To examine the role of specific peer interactions in children's sociometric status and friendship choices	Observations of peer interactions during free-play periods Peer nomination procedure; amount of received positive nominations indicates popularity and amount of received negative nominations indicates unpopularity	$N = 94$ children (age range 4.00 to 5.00 years); correlation analyses and comparative analyses; cross-sectional design	Popularity was associated with receiving and dispensing reinforcing and neutral acts; children's interactions with disliked peers did not differ from those with peers who were neither liked nor disliked
	To examine whether pairing unpopular children with a	Observations of peer interaction while children were playing a collaborative game	$N = 72$ children (age range 4.00 to 6.00 years); comparative	Collaboration between popular children and popular peers was more successful and less

Table 1 (continued)

Study/country	Research aim	Operationalization	Research design	Main outcomes
Murphy and Faulkner (2000)/UK	popular peer would promote more effective communication	Peer nomination procedure and peer rating scale	analyses; quasi-experimental design	disputational than collaboration between unpopular children and unpopular peers; unpopular children were more successful when collaborating with popular peers.
Murphy and Faulkner (2006)/UK	To examine gender differences in communication effectiveness between pairs of popular and unpopular children	Observations of peer interactions while children were playing a game Peer nomination procedure and peer rating scale	$N = 48$ children (age range 5.00 to 7.00 years); comparative analyses; quasi-experimental design	Popular girls used a greater incidence of speech forms associated with successful collaboration than unpopular girls; there was no difference between popular boys and unpopular boys.
Nærland (2011) /Norway	To examine the relation between social focus and pragmatic skills	Observations of peer interactions during free-play Observations of the amount of positive and neutral contacts children received from their peers	$N = 64$ children (age range 0.91 to 5.08 years); correlation analyses and regression analyses; cross-sectional design	Pragmatic skills had an independent contribution to social focus when the variance of age was removed.
Nærland and Martinsen (2011) /Norway	To examine the extent to which the social focus children receive from their peers can be explained by aspects of peer interaction	Observations of peer interactions during free-play resulting in a contact score (reflecting the content, manner and social function of the interactions) Observations of the amount of positive and neutral contacts children received from their peers	$N = 64$ children (age range 0.92 to 5.08 years); correlation analyses and regression analyses; cross-sectional design	Twelve out of 16 contact categories were significantly correlated with social focus; combined, they predicted children's social focus to a large extent
Nowicki and Oxenford (1989)/USA	To examine the relation between communication styles and popularity	Observations of peer interactions while children were planning a daytrip together Peer nomination procedure: the number of times a child was chosen as most preferred minus the number of times a child was chosen as least preferred indicated popularity	$N = 62$ children (fifth- and sixth graders); comparative analyses; cross-sectional design	Compared with popular children, unpopular children had communication styles characterized by non-verbal visual hostility; no differences were found in verbal communication styles between popular and unpopular children.
Place and Becker (1991)/USA	To examine the impact of pragmatic skills on likeability	Audiotapes of a girl using four different pragmatic skills either appropriately or inappropriately in a conversation with a school librarian	$N = 91$ girls (third- and fourth graders); comparative analyses; experimental design	Children saw the girl of the audiotape as more likeable when she displayed pragmatic competence than when she requested inappropriately, interrupted and failed to maintain the logic of the conversation.

Table 1 (continued)

Study/country	Research aim	Operationalization	Research design	Main outcomes
		Rating scale indicating how much children would like to play with the girl of the audiotape		
Putallaz (1983)/USA	To examine the relation between children's communicative behavior and their sociometric status	Observations of children's entry behavior in serval game situations Rating scale indicating how much children liked to play with a target child	$N = 22$ boys (first graders); multiple regression analyses; experimental design	The tendency of subjects to fit into the group they entered by contributing to relevant conversation was predictive of their sociometric status (after controlling for intelligence).
Putallaz and Gottman (1981)/USA	To examine differences between the dyadic interactions of popular versus unpopular children	Videotaped observations of children's peer interactions while they were playing a game Peer nomination procedure resulting in two groups: popular and unpopular children	$N = 60$ children (second- and third graders); comparative analyses; cross-sectional design	Unpopular children were more disagreeable and less likely to provide a general reason or rule for their disagreement or to suggest a constructive alternative when criticizing a peer.
Putallaz and Wasserman (1989)/USA	To examine the relation between children's entry behavior and sociometric status	Observations of children's naturalistic entry behavior over a 15-week period Combination of peer nomination procedure (only positive nominations) and rating scale resulting in three groups: high-status child, average-status child, low-status child	$N = 72$ children (first- third-, and fifth graders); comparative analyses; cross-sectional design	Low-status children engaged in more passive entry attempts and less sustained group interaction than high-status children
Rabiner and Gordon (1992)/USA	To examine differences between rejected and non-rejected boys in their social interaction strategies	Six short vignettes describing children in potentially conflictual interactions were used and children were asked to respond and tell what social interaction strategies they would use in the social dilemma Peer nomination procedure resulting in three groups: popular, average, and rejected	$N = 58$ boys (fourth- and fifth graders); comparative analyses; cross-sectional design	Aggressive rejected boys and residual rejected boys provided less integrated responses than non-rejected boys.

two exceptions to this research orientation (Murphy and Faulkner 2000, 2006). In particular, Murphy and Faulkner (Murphy and Faulkner 2000) focused on the reversed direction by questioning whether popularity might influence the extent to which 5–6-year-olds are able to communicate effectively. They expected that unpopular children would communicate in a less effective way as compared with their popular peers.

Considering the research aims of the selected studies, it can be concluded that there has been some debate regarding the direction of the relation between (concepts similar to) oral communicative competence and sociometric status. Kemple et al. (1992) explicitly addressed this issue of causality by asking whether rejected children are disliked because they lack the communication skills that are required to maintain satisfying interactions or whether their rejected status (attributable to other antecedent variables) limits their opportunities to engage in peer interactions that are known to contribute to the development of these skills. Unfortunately, due to the small number of participants (n = 19 children) in the study of Kemple et al., no firm conclusions could be drawn regarding this question. In fact, although each study included in the present review adopted a particular hypothesis on the direction of the relation of interest, the issue of causality was rarely taken into account in the actual research designs. This leaves us with the question of which direction is the right one: Does children's oral communicative competence affect their sociometric status or is it the other way around? Although there is still insufficient empirical evidence to answer this question, researchers have argued that the relations between the antecedents and consequents of problematic peer relationships are extremely complex (Parker et al. 2006). As a result, it is unlikely that the direction between children's position within the peer group and a certain factor that is related to it (e.g., the extent to which a child is able to communicate effectively and appropriately) merely goes one way. It is, instead, expected that they are linked in an interactional and transactional manner in which both components are mutually strengthening and continue to influence each other (Parker et al. 2006). Consequently, the correct answer to the question of which direction is the right one would be "neither." They are both a simplification of the complex reality of peer relations and the factors that are related to it. Future studies into the relation between oral communicative competence and sociometric status should aim to further unravel the complex reality of peer relations.

Operationalization

Oral Communicative Competence The vast majority of the studies (i.e., 18 out of 25 studies) included in the present review used observations of peer interactions in relatively natural settings in order to assess children's ability to communicate effectively (e.g., (Putallaz 1983; Putallaz and Gottman 1981; Putallaz and Wasserman 1989)). In most of these studies, the researchers used transcriptions of video or audio recordings of children's interactions that were then coded for or categorized into different communication or conversation skills (i.e., questioning, demanding, interrupting, turn taking, and being responsive; see Table 1 for more details). For example, in the study of Gottman et al. (1975), third- and fourth graders were observed for ten 6-s intervals in four situations: (1) lectures or demonstration situations, (2) seat work, (3) small-group work or classroom work which involved free access to other children, and (4) gym, recess, or play periods outside the classroom. Peer interactions were coded using thirteen codes such as "dispensing positive reinforce verbally" (i.e., giving approval or verbally complying with a request). The relative frequency of each code was tallied for each child, summing over all four situations. Examples of exceptions to the use of

observational measures are the studies of van der Wilt and colleagues (van der Wilt et al. 2016, 2018a, b). Instead of using natural observations of peer interactions, the standardized and validated Nijmegen Test for Pragmatics was used to measure young children's communication skills in a test situation. The Nijmegen Test for Pragmatics is a test that consists of a scale model of a house with associated pictures of the different rooms in the house. During the administration of this test, the test administer uses a protocol that encourages children to verbally respond to the story that is told about the inhabitants of the house. In van der Wilt et al.'s studies, children's communication skills were indicated by a total score that was computed by summing the number of correct responses. This total score represents several communicative functions and conversation skills, such as giving and asking for information, starting and ending a conversation, and giving an explanation.

Although there are some exceptions to the use of observational measures ((van der Wilt et al. 2016, 2018a, b; Burleson et al. 1992); Galejs et al. 1983; (Place and Becker 1991; Rabiner and Gordon 1992)), the use of standardized and validated tests has been less common in this area of research. Furthermore, none of the reviewed studies made use of a combination of observational measures and standardized tests (i.e., mixed-methods). The preference for observational measures could be explained by the suggestion that the ecological validity of standardized tests in controlled test situations might be problematic (Nærland 2011). It could, for example, be questioned whether a child's ability to communicate effectively in the context of an adult-child interaction can be generalized to child-child interactions outside of the test situation. In addition, researchers have raised concerns about the sensitivity and specificity of standardized tests and have argued that such tests are not able to capture the full complexity of the construct of oral communicative competence (Bishop 2017). Finally, standardized tests often present children with hypothetical dilemmas (e.g., (van der Wilt et al. 2016, 2018a, b; Rabiner and Gordon 1992)) and it has been argued that it is one thing to be able to produce an adequate response to a hypothetical dilemma, but it is something else to actually enact such a response in real-life settings ((Nærland 2011); see also (Roth and Spekman 1984)). However, compared with natural observations of peer interactions, an obvious advantage of standardized tests is the increased control over variables (due to similar test situations with similar procedures and items) and the possibility to elicit children's ability to communicate effectively. In addition, the use of standardized tests is far less time-consuming than the use of observational measures (Roth and Spekman 1984) and allows researchers to compare children's communication skills between classrooms and schools. Because classroom observations and standardized assessments both have strengths and weaknesses, a combination of observations in a naturalistic classroom setting and standardized tests that allow for comparison could advance the assessment of oral communicative competence and increase its validity (Bishop 2017; Roth and Spekman 1984).

Sociometric Status To indicate children's position within the peer group, 16 out of 25 reviewed studies used a sociometric method with peer nominations (e.g., (Putallaz and Gottman 1981; Putallaz and Wasserman 1989)). In the study of Burleson et al. (1992), for example, first- and third graders were asked to nominate three classmates for four roles: (1) most liked, (2) least liked, (3) "nicest and kindest," and (4) "meanest." A total positive nomination score was calculated by summing the nominations for the two positive roles whereas a total negative nomination score was calculated by summing the nominations for the two negative roles. Subsequently, a social preference index was calculated by subtracting the standardized negative nomination score from the standardized positive nomination score,

and a social impact index was created by summing the two standardized nomination scores. In addition to the use of peer nominations, Markell and Asher (1984), for example, used a rating-scale measure. This measure requires children to indicate how much they like to play with each classmate. Markell and Asher (1984) used a 1–5 rating scale and the rating-scale sociometric data were used to calculate the average play rating each child received. Based on these average ratings, children were divided into three groups: low-, average-, and high-rated children. Within the use of the peer nomination procedure and the rating scale, there are a few differences between studies that were reviewed. In particular, although most studies allowed same- and other-sex nominations, in the study of Bierman and Furman (1984), for example, sociometric scores were derived by averaging the ratings given to each child by same-sex classmates. These researchers argued that same-sex ratings tend to provide a more valid and reliable estimate of peer acceptance in childhood. A more recent study, however, has indicated that other-sex nominations provide unique information in measuring children's sociometric status (Poulin and Dishion 2008).

A rather remarkable deviation of the peer nomination approach and rating scale is the procedure used in the study of Galejs et al. (1983). In their study, the researchers asked the head teachers of the participating pre-schoolers to rank order them from most popular to least popular and instructed teachers to regard popularity as friendliness, outgoing behavior, and social participation. Another exception to the use of peer nominations or ratings is the study of Nærland (2011). Nærland argued that reporting on friendships requires verbal skills that younger preschool children often lack. Therefore, a procedure was developed using observations of peer interactions to indicate children's social focus, a concept constructed based on the mean number of times peers addressed themselves to a child in a positive or neutral manner. Although it might be valuable to explore other and possibly more sophisticated ways to assess children's sociometric status, research has shown that peer nominations form a reliable method, even among young children in the age range from 2 to 5 years (e.g., (Keane and Calkins 2004)). In addition, peer nominations are easy to administer, not time-consuming, and rely on the judgements of peers, who have been found to provide unique information on children's behavior (e.g., (Henry 2006)). Hence, in the studies that were reviewed, the peer nomination approach is clearly preferred over approaches that depend on the judgment of teachers (such as in the studies of (Black and Logan 1995; Galejs et al. 1983)). In addition, despite researchers arguing that the rating procedure is more appropriate than the peer nomination procedure (e.g., (Bukowski et al. 2000, 2012)), the use of a rating scale has not been found to be more reliable than the use of peer nominations (Jiang and Cilessen 2005). The fact that the peer nomination procedure is equally adequate as the rating scale and is more straightforward and less time-consuming explains why it is still highly popular nowadays and should be part of future studies as well.

Research Design

The studies included in the present review can largely be characterized as small-scale studies using a combination of sociometric measures and observations of classroom interaction. Although sample sizes ranged between 22 and 570 children, with a mean sample size of $N = 105$ children, 21 out of 25 studies included less than 100 participants. The small sample sizes can be explained by the fact that, as previously mentioned, most studies adopted observational methods in order to assess children's ability to communicate effectively.

Specifically, as observations of peer interactions are usually quite labor intensive and time-consuming, sample sizes are often relatively small. In addition, most studies used a cross-sectional design and included correlational (e.g., Pearson correlation) or comparative (e.g., ANOVA) analyses. For example, in the study of Masters and Furman (1981), several specific aspects of pre-schoolers' peer interactions and their degree of (un) popularity were measured simultaneously. Subsequently, the correlations between the observed aspects of peer interactions and the general measures of popularity and unpopularity were calculated in order to investigate their relations. An exception to this research design is, for example, the study of Place and Becker (1991). They adopted a quasi-experimental design in which 10-year-old girls listened to one of five prepared audiotaped scenarios in which a girl of the same age used four different pragmatic skills (i.e., requesting, turn taking, responding promptly when spoken to, and maintaining the logic of the conversation) either appropriately or inappropriately. Subsequently, the participating girls rated how much they would like to play with the girl on the audiotape. In addition, several studies investigated the effect of an intervention focused on improving children's communicative abilities on their social position within the group (e.g., (Bierman and Furman 1984; Ladd 1981)).

Because most studies included in this review contained relatively small samples, outcomes of these studies cannot be generalized to the whole population. In addition, as most of the studies primarily reported the outcomes of correlational or comparative analyses and studies that did adopt an experimental design were relatively small-scaled (e.g., (Bierman and Furman 1984; Ladd 1981; Place and Becker 1991; Putallaz 1983)), it remains largely unclear what the direction is of the relation between oral communicative competence and sociometric status. Unfortunately, the quasi-experimental studies of Place and Becker (1991), Bierman and Furman (1984), Ladd (1981), and Murphy and Faulkner (2000, 2006) did not address this issue sufficiently. Murphy and Faulkner (2000, 2006), for example, investigated the effect of their intervention on children's communication skills. During their study, children who were characterized as unpopular played a collaborative game with either a popular or an unpopular peer. Murphy and Faulkner hypothesized that pairing unpopular children with a more popular peer would promote more effective communication. Instead of examining the nature of the relation between effective communication and popularity, however, their main aim was to investigate the effect of pairing unpopular children with popular peers. Consequently, it remained unclear whether improvements in the interactions between unpopular children and their popular peers could have been attributed to an improvement of the communicative effectiveness of unpopular children or to the well-developed communication skills of their popular peers. In general, it has been argued that, in order to demonstrate causality, studies need to report on large samples, use experiments with a minimal duration of 12 weeks, adopt random assignment to experimental versus control group, and control for pre-test differences (e.g., (Slavin 2008)). None of the studies included in the present review were able to meet these criteria.

Research Findings

Main Outcomes Overall, the main outcomes of the studies that were included in the current narrative review pointed toward a significant relation between (the different operationalizations of) oral communicative competence and children's sociometric status. In investigating how children negotiate with each other during social pretend play, Black (1992), for example, found that preschool children's communication style was significantly related to their social status

(e.g., liked or disliked). Specifically, results indicated that, compared with other children, disliked children were more likely to demand and suggest themes and roles, to reject others' ideas and to spend a fairly substantial proportion of the conversation describing their own activity or contributions to play.

Given the complexity of measuring children's oral communicative competence, most studies included multiple elements of oral communication skills (for example, questioning, giving information) to calculate a total score or categorized children's utterances into multiple categories (for example, demands, requests, questions, irrelevant turns). Interestingly, in studies in which multiple components of communication were included in the analyses, results regarding the relation between those components and children's sociometric status were mixed. Nærland and Martinsen (2011), for example, included no less than 24 categories to indicate the content, manner, and social function of children's interactions. Outcomes demonstrated that only half of these categories were related to social focus (an indicator of popularity). For example, the extent to which children's utterances were intelligible and comprehensible was significantly associated with the amount of positive attention they received from their peers. In contrast, giving a direct response to other children's topic, introducing a topic of conversation, and attempting to attain the attention of others were not related to social focus. The finding that in these studies some aspects of communication were related to children's position within the peer group, whereas others were not, indicates that more theoretical and empirical work needs to be done on the relation between communicative sub-abilities and children's sociometric status. Interestingly, in the study by Nærland and Martinsen (2011), it is unclear how the 24 categories of children's communication are correlated with each other. It might be the case that some of these categories are highly correlated and not distinctive. This hypothesis might be supported by several models for oral communicative competence that have been developed in which the different communicative sub-abilities (such as turn taking, taking the perspective of the other into account) that constitute these models are inter-related and highly correlated (Celce-Murcia 2008; Roth and Spekman 1984).

As previously mentioned, most studies selected for this review can be characterized as small-scale studies. In addition, there is a large variety between these studies in measuring children's oral communicative competence. Therefore, given this state of the art, it is difficult to draw firm conclusions with regard to the specific *aspects* of oral communicative competence that may or may not be related to children's sociometric status. In general, we can conclude that effective communication, i.e., communication that contributes to coherent discourse, is persuasive, and anticipates on the conversational partner, is positively related to social acceptance.

Context and Interactional Partner Several studies included in this review took the interactional context into account. In the study of Hazen and Black (1989), for example, 4–5-year-olds were observed in two different contexts: (1) the entry context in which a child was required to enter an ongoing play session of two peers and (2) the host context in which a child played with another peer and was required to function as a host to a third peer who would join them later. Results indicated that disliked children's communicative behavior did not differ across interactional contexts, indicating that they were less able to adapt to the differing social demands of entry versus host contexts. In contrast, children who were liked by their peers were sensitive to the communicative demands of different contexts: They used a lower proportion of expressives and a higher proportion of informative statements when entering a group. The

outcome that disliked children did not adapt their communicative behavior to the specific interactional context indicates that the communicative difficulties of disliked children are present across contexts. Moreover, it shows that children who are disliked by peers do not only experience communicative difficulties in one single context but also find it hard to adapt their communication to the demands of a specific context. Hazen and Black (1989) concluded, therefore, that interventions should not only focus on improving the communicative abilities of socially rejected children but should also help them to adapt their communication to the demands of the particular social situation.

In addition to the comparison of interactional contexts, in the study of Black and Hazen (1990), the communication of children was observed when interacting with peers they did know versus peers they did not know. It was demonstrated that, compared with liked children, disliked children were less responsive to peers and more likely to make irrelevant comments when they entered the play of unacquainted peers. Furthermore, with acquainted peers, disliked children were not only less responsive and more likely to make irrelevant comments than others, but they were also less likely to clearly direct their communication to specific peers. Responsiveness and contributing to coherent discourse might, therefore, be important to both the establishment and maintenance of children's sociometric status, whereas failing to socially direct communications might only occur after children have developed a negative peer reputation. This finding indicates that whether children interact with acquainted or unacquainted peers plays a role in the degree to which they experience difficulties in communication: The difficulties disliked children experience in communicating with others are more pronounced when they interact with peers they already know compared with unacquainted peers. Children who are disliked by their peers might become aware of the fact that they are often being rejected. In order to avoid further rejection, disliked children might, in turn, become less inclined to clearly direct their communication to peers that have previously rejected them, which will probably add to their negative reputation. In other words, it seems to be the case that certain types of communication contribute to the establishment of a disliked status, after which this disliked status may further increase children's communicative difficulties as well.

Gender Three of the included studies specifically focused on the role of gender (van der Wilt et al. 2016, 2018a; Murphy and Faulkner 2006). Murphy and Faulkner, for example, paired unpopular girls with popular girls and unpopular boys with popular boys and observed their communication while playing a collaborative game. Their observations focused on the following three aspects: (1) the use of rule reminders (reminding someone of the rules of the game), (2) the use of directives (telling someone what to do), and (3) the use of elaborated disagreements (attempting to justify or explain a disagreement). Results revealed an interaction of popularity x gender and indicated that the aforementioned communicative descriptors were more often used by popular girls than by unpopular girls. By contrast, there was no difference between popular and unpopular boys on the three previously described aspects of communicative effectiveness. Murphy and Faulkner provided several explanations for their findings. They suggested, for example, that compared with popular boys, popular girls might have been more motivated to help their unpopular partners by communicating effectively. This explanation would be in line with the finding that girls generally have a greater interest in interpersonal matters (Fabes et al. 2004; Maccoby 2002). Be as it may, the findings of the study of Murphy and Faulkner indicate that there might be gender differences in the relation between oral communicative competence and sociometric status. Interestingly, research into gender differences in the relation between (concepts similar to) oral communicative competence and

sociometric status has revealed mixed results. In contrast to the study of Murphy and Faulkner (2006), van der Wilt et al. (2016) found a relation between children's level of oral communicative competence and peer acceptance only for boys. It was suggested that this gender difference in the examined relation could be explained by boys' higher tendency to engage in aggressive behavior: Adequate communication skills might help boys to inhibit aggressive behavior which, in turn, might help them in gaining acceptance from their peers. Theoretically, this is a plausible assumption considering the behavior-regulating function of language use ((Luria 1981); see also (Whitebread et al. 2015)). Although both the study of Murphy and Faulkner (2006) as well as that of van der Wilt et al. (2016) indicated that gender might play a role in the relation between oral communicative competence and sociometric status, their contrasting outcomes raise the question of how exactly. Besides, both studies suffered from a small sample size, i.e., 48 and 54 participants, respectively. In addition, studies in which gender differences were not a main focus, but in which gender was taken into account in analyzing the relation between (concepts similar to) oral communicative competence and sociometric status, indicated no gender differences in this relation (e.g., (van der Wilt et al. 2018a, b)). As gender differences are found in some studies but not in others, it is expected that gender differences that were found are due to variations between samples and may not be large or even non-existent in the whole population.

Age The age of the children that were included in the reviewed studies ranged between 11 months (Nærland and Martinsen 2011) and 12 years (i.e., sixth graders; (Bierman and Furman 1984)). In total, 14 studies focused on the period of early childhood whereas 11 studies were directed at middle childhood. As previously explained, due to small sample sizes, it is difficult to compare the outcomes of studies on a detailed level. On a more general level, however, there seems to be a difference between studies focusing on early childhood and studies focusing on middle childhood in the relation between (concepts similar to) oral communicative competence and sociometric status. In particular, one out of 14 studies (i.e., less than 10%) focusing on early childhood only found a significant relation between receptive aspects of children's oral communicative competence (i.e., listening skills) and sociometric status, but not between productive aspects of oral communicative competence (i.e., describing skills) and sociometric status (Galejs et al. 1983). In contrast, among the studies directed at middle childhood, almost 20% of the studies (e.g., two out of 11) did not find a significant relation between children's ability to communicate effectively and their social position within the peer group (Bierman and Furman 1984; Nowicki and Oxenford 1989). In addition, 20% of the studies (e.g., two out of 11) provided mixed results regarding this relation (Burleson et al. 1992; Rabiner and Gordon 1992). Specifically, Burleson et al. (1992), focusing on first- and third graders, demonstrated that only children's ability to use persuasive communication was concurrently related to their level of social preference. In addition, the study of Rabiner and Gordon (1992) only found differences in the verbal responses between aggressive rejected boys and their non-rejected peers, but not between submissive rejected boys and their non-rejected peers.

Although the small sample sizes of the majority of the included studies make it impossible to draw firm conclusion regarding the differences between early childhood and middle childhood in the relation between (concepts similar to) oral communicative competence and sociometric status, the finding that this relation seems to be more profound in studies focusing on early childhood is in line with the meta-analysis of Troesch et al. (2016). As previously mentioned, Troesch et al. found that the relation between language competence and social

preference is stronger for younger children compared with older children. The findings of the present review could indicate that, similar to the relation between language competence and social preference (Troesch et al. 2016), the relation between oral communicative competence and sociometric status might be stronger among children in the age of 1 to 6 than among children in the age of 6 to 12. A possible explanation might be that children in early childhood have limited oral communication skills (e.g., their communication skills increase rapidly throughout early childhood) and, as a consequence, experience more difficulties in social interaction compared with children in middle childhood. During middle childhood, most children have sufficient communication skills to engage in social interactions. With age, oral communicative competence might become less important for gaining social acceptance.

Discussion

Main Findings

The main purpose of the present narrative review was to provide an overview of previous studies into the relation between children's (aged 1 to 12 years) oral communicative competence and their position within the peer group. Specifically, the aim was to shed light on the type of studies that have previously been conducted, to find differences and similarities between these studies, and to find gaps in the literature and provide directions for future research. Despite a range of operationalizations and analyses, the studies that were included in this review generally concluded that children's ability to communicate effectively is significantly related to their sociometric status. In line with our expectations, the ability to communicate effectively seems important for children's position within their peer group and might, therefore, be important to include in interventions directed at improving children's sociometric status.

Perhaps the most remarkable finding of the current review, however, is the enormous variety between studies with regard to the conceptualization and operationalization of the main variables. This variety is partly due to the fact that, in searching the literature, multiple search terms were included in order to identify all relevant studies. As each study investigated the relation between oral communicative competence and sociometric status in a different manner, the comparison of these studies turned out to be complex. Moreover, although the diversity between studies contributes to the richness of this review, the fact that most studies were small-scale studies makes it difficult to draw firm conclusions. Consequently, this review should be primarily seen as an overview of the studies that have previously been conducted into the relation between (concepts similar to) oral communicative competence and sociometric status. At the same time, the narrative and in-depth approach adopted in this review allowed us to draw together the findings of the studies and support us to provide clear directions for future research.

Oral Communicative Competence and Sociometric Status

Specifically, the finding that prior researchers operationalized oral communicative competence in various manners reflects the complexity of this construct and indicates the importance of defining it carefully: What exactly is oral communicative competence? What does it encompass? And when is someone communicating effectively? Following Bakhtin (1981), we argue

that one of the most important features of effective communication is *anticipation*. According to Bakhtin, effective communicators are oriented toward future responses in the sense that they anticipate how the listener might respond to their utterances. In most of the studies we reviewed, aspects of this Bakhtinian notion of anticipation were taken into account. For example, Burleson et al. (Burleson et al. 1992) included a measure of persuasive communication (i.e., "the ability to frame requests that accommodate to the needs and interests of the target," p. 265) and in the study by Black and Hazen (1990), children's utterances were coded for responsiveness to the other. The studies we reviewed showed a clear pattern: there is a positive relation between a child's ability to anticipate (i.e., taking the conversational partner into account) and her/his social status. As the number of participants was small for most studies, we suggest that future studies should further research how this notion of anticipation relates to effective communication and, hence, to a child's social status.

Furthermore, it is important to think about the operationalization and new ways of measuring oral communicative competence. Specifically, the present review showed that prior research primarily used observations of children's interactions in natural settings that were subsequently transcribed and coded for or categorized into different communication skills. The advantages of standardized and validated tests to measure children's oral communicative competence (individually) have been largely overlooked. Because of the complexity of the construct of oral communicative competence, future studies are recommended to adopt a mixed-methods design to benefit from both observational methods in naturalistic classroom settings and standardized tests outside of classroom situations. Achieving a balance between the standardized assessment of children's communicative competence and the time-consuming, naturalistic observation of children's communication skills in real-life settings seems to be worth striving for (Adams 2002). Finally, using standardized tests next to classroom observations enables researchers to compare children's communicative competence beyond classroom situations.

The present review showed that previous research used a range of terms to indicate a child's position within the larger peer group (e.g., *peer rejection*, *social focus*, *popularity*; (Black and Hazen 1990; Masters and Furman 1981; Nærland 2011)). However, in contrast to the measurement of oral communicative competence, prior studies generally used the same method, namely the peer nomination procedure. As previously mentioned, during this procedure, children receive positive and negative nominations from their classmates. At the most basic level, the degree to which a child is liked, accepted, or considered popular is then defined as the number of received positive nominations whereas rejection (or unpopularity) is defined as the number of received negative nominations (Gifford-Smith and Brownell 2003). Although these are common ways to indicate children's position within their peer group, researchers have argued that children who are at risk for negative developmental outcomes are not the ones who merely receive many negative nominations, but are the ones who receive many negative nominations *and* few positive nominations (Gifford-Smith and Brownell 2003). To take this into account, positive and negative nomination scores are nowadays often combined into a score of social preference (e.g., (Troesch et al. 2016)). In the present review, four out of 25 studies took the construct of social preference into account (van der Wilt et al. 2018b; Black and Logan 1995; Burleson et al. 1992; Nowicki and Oxenford 1989). Social preference is measured by subtracting the number of received negative nominations from the number of received positive nominations and reflects the relative extent to which children are accepted by their peers (Gifford-Smith and Brownell 2003). The opposite of social preference can be used to index a child's level of relative peer rejection, measured as the number of negative nominations minus

the number of positive nominations. The construct of relative peer rejection was used in only one of the studies included in this review (van der Wilt et al. 2018a). Future studies into the relation between oral communicative competence and sociometric status might want to take both measures of social preference and relative peer rejection into account.

Future Directions

Where do we go from here? Importantly, the present narrative review has indicated that there is still quite something left to investigate with regard to the relation between oral communicative competence and sociometric status. The fact that research into this sub-field is scarce, especially compared with research into language skills that are relatively easy to measure (e.g., receptive vocabulary), seems therefore unjustified. Based on the present review, five recommendations are provided that can be used in the design of future studies. First, the aforementioned variety in the conceptualization and operationalization of oral communicative competence indicates that future research should adopt a more uniform approach by, for example, using similar terms and measures. Bakhtin's (1981) notion of anticipation might be helpful in adopting a uniform approach and in defining effective communication. Interestingly, most of the studies we reviewed used terms that are related to anticipation in communication, such as responsiveness, persuasive communication, and taking the listener into account. Future studies could adopt a mixed-methods design to capture the complexity of the concept of oral communicative competences. Second, the current review indicates that the majority of studies have been conducted in the USA (18 out of 25). In order to prevent cultural bias and to shed light on possible cross-cultural differences in the relation between oral communicative competence and sociometric status, we suggest that future studies should also been conducted in non-western countries. Third, as the majority of researches were small-scale studies (i.e., 21 out of 25 studies included less than 100 participants), future research should include larger samples in order to generalize the findings outside the sample. Fourth, the cross-sectional designs of the majority of studies included in this review did not allow for conclusions regarding the direction of the relation of interest. Longitudinal and experimental research with large samples and longer intervention periods are needed in order to investigate whether children's level of oral communicative competence affects their sociometric status or whether it is the other way around (or both). And finally, as previous research showed that the interactional context, gender, and age might influence the relation between oral communicative competence and sociometric status, future studies could take these factors into account. For example, based on the results of this review, it might be interesting to study the effects of oral communicative competence on sociometric status (and vice versa) from early childhood to middle childhood.

General Conclusion

To conclude, previous studies into the relation between (concepts similar to) oral communicative competence and sociometric status have generally revealed a significant link between the two variables. What follows from the studies we reviewed is a clear pattern indicating that rejected children have different communication styles compared with popular and average children. To be more specific, rejected children seem to be less competent in anticipating on their conversational partner, resulting in less-responsive and coherent communication. Although it is reassuring to find findings replicated, the existence and strength of the relation of

interest seem to depend on the operationalization of oral communicative competence and sociometric status. There appears to be a lot of variety between studies in this regard. Therefore, studies are needed in which these complex constructs are carefully conceptualized, multiple methods are used to measure them, and the relation between the two variables is investigated longitudinally. In that manner, future research can more convincingly demonstrate which aspects of oral communicative competence are related to sociometric status and can provide insight into the *direction* of the relation between children's ability to communicate effectively and their position within the larger peer group. If future research demonstrates a causal relation between children's oral communicative competence and their position within the peer group, interventions directed at the improvement of children's sociometric status should take the promotion of communicative development in school settings and beyond into account.

Compliance with Ethical Standards This research concerns a review of studies and did not involve human participants and/or animals.

Conflict of Interest The authors declare that they have no conflict of interest.

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