



Young Children's cliques: a study on processes of peer acceptance and cliques aggregation

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A considerable amount of research has examined the link between children's peer acceptance, which refers to the degree of likability within the peer group, social functioning and emotional wellbeing, at a same age and in a long term perspective, pointing out to the contribution of peer acceptance for mental wellbeing. Our study proposes a sociometric methodology that, differently from many studies focused on individual classifications of social status, moves to the analysis of affiliative social networks within the class group. This study describes how individual factors such as socio-emotional competence, temperament, and linguistic skills are related to positive reciprocated nominations (=RNs) and examines the cliques generated by reciprocal nominations according to similarities (socio-emotional competence, temperament and linguistic skills) among cliques' members. Eighty-four preschool children (M age = 62.5 months) were recruited. The Sociometric Interview to assess RNs and the Peabody Picture Vocabulary Test - Revised (PPVT-R; Dunn & Dunn, 1981) to assess receptive language were administered; the Social Competence and Behaviour Evaluation Short Form questionnaire (SCBE-30; LaFreniere & Dumas, 1996) and the Quit Temperament Scale (Axia, 2002) were filled in by the teachers. Results showed that children with higher RNs presented higher scores in social orientation, positive emotionality, motor activity, linguistic skills and social competence (trend), and exhibited lower anxiety-withdrawal. The analysis of cliques revealed that children preferred playmates with similar features: social competence, anger-aggression (trend), social orientation, positive emotionality, inhibition to novelty, attention, motor activity (trend) and linguistic skills. These findings provide insights about processes of peer affiliation, highlighting the role of socio-emotional functioning and linguistic skills.

Keywords: peer acceptance, preschoolers, socio-emotional competence, temperament, language skills

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Introduction

A considerable amount of research has examined the links between children's peer acceptance, which refers to the degree of likability within the peer group, social functioning (Nelson, Robinson, Hart, Albano & Marshall, 2010) and emotional wellbeing, at a same age and in a long-term perspective. A positive relationship between children's social competence and friendship at preschool age has been reported as well (Engle, McElwain & Lasky, 2011). The 'dark side' of peer relationships has been described as well. The emotional tenor of the environment that aggregates children, in fact, can influence both adjustment and congregation into prosocial and deviant peer groups.

However, relatively little attention has been paid to reciprocated ties among peers, and to the links between this type of peer relationship and children's competences. A reciprocated tie refers to children who mutually like to play with each other, and can be considered as an intermediate stage between peer acceptance and friendship. Some research point out the similarity – homophily tendency among preschool children groupings providing support for the hypothesis that similarity underlies attraction and is a key component of friendship. Beginning in the preschool years, children appear to be attracted to peers whose behavioral tendencies are similar to their own (Salmivalli, Huttunen & Lagerspetz, 1997). For example, Snyder's et al. work (Snyder, Horsch & Childs, 1997) identified early peer relationships as instrumental in the development of aggressive behaviors in early childhood, observing that aggressive children tend to select similarly aggressive others as interaction partners.

Beside structural and contextual factors, group dynamics are the result also of individuals' contribution to the group. Every time children move in a social context, such as a class or a group of playmates, they display individual characteristics like gender, leadership, social status, temperament and social competence that affect the outcomes of the interaction as well as the assimilation to a group. Research points out to the role played by social and emotional competence (Blandon, Calkins, Grimm, Keane & O'Brien, 2010), temperamental traits (Szewczyk-Sokolowski, Bost & Wainwright, 2005), and linguistic skills (Carson, Klee, Lee, Williams & Perry, 1998) in the development of children's positive interactions with peers. However, very few studies have addressed this topic at preschool-age linking it to reciprocated ties (Farver, 1996; Gleason, Gower, Hohmann & Gleason, 2005; Hanish, Martin, Fabes, Leonard, Herzog, 2005; Martin, Fabes, Hanish & Holleinstein, 2005).

Investigating these topics at preschool age raise many methodological problems: a limited range of linguistic skills, little time of focused attention, individual behavioral tendencies (i.e. shyness with unfamiliar adults), contribute to make this area of research challenging *per se*. Moreover, when we try to expand the focus beyond the individual and we try to consider his/her peer network (peer clique) and the meaning that it may have for his/her mental health and well-being, things may get very complex. The innovation of this study relies on a methodology that tries to overcome the limits of sociometric methodology which generally takes to individual measures of social status (popular, rejected, neglected, controversial children), in favor of the analysis of affiliative social networks (peer cliques) in the class group. For this purpose, our study adopts a new multilayered approach to peer group functioning: at a first level, it examines individual contributions to peer acceptance; at a further level, it will explore the processes of affiliation in cliques, focusing on the

cliques made of reciprocated nominated peers and exploring the degree of similarity among the clique members.

From social acceptance to reciprocated nominations and friendship

To date, several sociometric methods, such as peer ratings (Asher, Singleton, Tinsley & Hymel, 1979), and positive and negative nominations have been used in studies on peer relations with preschool children (Cillessen, 2009). On the basis of the above methodologies, researchers are able to observe children's various social dimensions, such as social acceptance versus social rejection, social impact, social preference, social status (popular, rejected, neglected, controversial), reciprocated choices, friendship ties, cliques and social networks (Gifford-Smith & Brownell, 2003). In particular, social acceptance refers to the child's degree of being liked by the peer group, on the basis of 'most liked' nominations received by each child, while social rejection refers to the child's degree of being disliked by the peer group (on the basis of 'least liked' nominations received). Since our study will focus on social acceptance, we will limit the discussion to this construct only. To date, social acceptance was used in several studies among preschool children (Kutnick et al., 2007; Van Lier & Koot, 2010).

The study of the positive nominations received by children and reciprocated by their peers has provided new insights on the types of peer relationships and many authors consider the reciprocated choice between two peers as an index of friendship (Bombi, Di Norcia & Gangemi, 2008). The relationship between social competence and friendship at preschool age was examined by relatively few authors (Engle et al., 2011; Van Lier et al., 2010), showing that preschool children with friends were rated as more socially competent than children without friends. Moreover, friends seemed to exhibit different emotional competence in comparison with children without friends (Denham, 2007). The research on preschool friendships has also investigated some temperamental traits: soothability, impulsivity and activity level (Gleason et al., 2005).

Peer acceptance and social functioning, temperament, and linguistic skills

Considerable research has shown that early peer acceptance is a protective factor for the development of children's social functioning, such as social competence (Vaughn et al., 2009); on the contrary, peer rejection is a risk factor for concurrent and later serious problems in children's social functioning (Ladd, 2006). Denham and Holt (1993) have also found positive correlations between preschool children behaviors and likability expressed by their peers': more cooperative and less aggressive children were liked by their peers.

Positive associations between peer acceptance and adaptive behaviors were found both in mixed-age preschool groups and in 5-year-old groups while peer exclusion was positively associated with children's behavior problems such as anxiety, reticent behavior, and aggression (Ciucci & Tomada, 1999). However, as observed by Hawley (2007) aggressive children were sometimes described as dominant leaders within peer groups, and for this reason their peers considered them more attractive.

Temperament has been studied in relation with social competence, as well as in relation with peer acceptance. Children who express more positive emotionality, instead of anger, were more likely to be rated

higher in peer acceptance; preschool children who smiled frequently received more nominations (Schultz, Ambike, Buckingham-Howes & Cheah, 2008). Moreover, the peer acceptance was negatively associated with 'temperamentally difficult' children, who exhibit difficult behavior or negative emotionality (Szewczyk-Sokolowski et al., 2005). Dougherty's (2006) meta-analytic review confirmed the relationship between negative emotionality and low degree of peer likability.

Another core theme of temperament dimension is attention, which encompasses different aspects, such as control attention, focusing, or effortful control. Schultz and colleagues (2009) provided evidence of the relationship between attention, emotionality and peer acceptance.

Positive concurrent and longitudinal relationships between peer acceptance, documented by a high number of nominations, and linguistic skills, such as receptive vocabulary, were found in 4-5 year-old children (Tallandini & Morsan, 2006). Conversely, the line of research on children with poorer receptive language skills established that such children are at greater risk of peer rejection (Menting, Van Lier & Koot, 2011).

Children's cliques, the similarity-homophily hypothesis and social functioning

Even though a clique is considered as a social configuration typical of late childhood and adolescence (Gifford-Smith et al., 2003), some studies identified patterns of children's affiliation, such as social clique memberships within the peer group since early childhood (Barbu, 2003; Farver, 1996). This social structure moves beyond the characteristics of dyadic friendships, and, similarly to a social network, it presents specific structural characteristics, such as size (Gifford-Smith et al., 2003). Some characteristics of preschool social affiliations have been reported in terms of size, stability and children's features.

Children are selective in their peer affiliations, and one of the chief factors, which is the basis for children's social clustering, is similarity. According to the similarity – homophily hypothesis, children choose playmates who resemble them in features and attitudes (Hallinan, 1980). On the other hand, similarity can be due to the socialization process: once the group is formed, members could influence each other's behaviors, as suggested by the literature on contagion processes for externalizing behavior (Dishion & Dodge, 2005).

In the literature, the similarity-homophily tendency was examined mainly between pairs of friends, and only few studies have tested the similarity – homophily hypothesis within preschool social networks and social cliques (Farver, 1996; Hanish et al., 2005; Martin et al., 2005; Van den Oord, Rispen, Goudena & Vermande, 2000). Interestingly, the results from Farver's study (1996) documented that members of children's same social cliques exhibited the same frequency of aggressive behaviors. Furthermore, Van den Oord and colleagues (2000) revealed that children who were similar (for gender, age, physical attractiveness, appearance, and popularity) were more likely to be friends, whereas children who were dissimilar more frequently expressed negative choices with each other.

Taken together such findings suggest that the similarity-homophily tendency within social affiliations is crucial since preschool age. Moreover, because the similarity-homophily tendency can encompass several aspects, such as socio-emotional competences, temperamental traits and language performances, such aspects should be taken into account in further research.

Aims of the study

The first aim was to examine whether children's socio-emotional functioning and linguistic skills were related to their mutual nominations (RNs) as an index of preferential connections among some peers in the group. We chose to employ the RNs, rather than the received nominations because they provided an index of mutual likability and larger relationships among peers. We expected that children with higher levels of RNs would exhibit higher scores in social competence, temperamental traits (social orientation, positive emotionality, attention, and motor activity), and linguistic skills. Conversely, we expected that children with higher levels of RNs would exhibit lower scores in other temperamental traits, such as anger-aggression, anxiety-withdrawal and inhibition to novelty.

A second aim was to investigate the similarity-homophily tendency among members of peer cliques: children who reciprocated each other displayed similar levels of socio-emotional competence, temperamental traits and linguistic skills. We expected children to prefer playmates with similar levels of socio-emotional competence, temperamental traits, and linguistic skills.

Method

Participants

Data were collected in 4 preschool settings, which were selected among different municipal schools, located in the metropolitan area of Bologna, Italy. The final sample was composed of 84 children (41 males and 43 females) and their 4 teachers. The mean number of pupils per class was 21.5, with a range of 19-25 pupils for each class ($SD = 2.6$). The mean age of children in the final sample was 62.5 months ($SD = 5.9$). An Independent T-test showed that the group of children enrolled at the second year and the group of children enrolled at the third year of Italian preschool differed significantly for age, $t(84)=-13.18, p < .0001$. The children were mostly Italian (91%), with a few being Eastern-European (5%), Asiatic (3%), and South-American (1%).

Measures

The Sociometric Interview

The Sociometric Interview was administered individually by a trained experimenter, asking the child: "Who do you like to play with?". The child could provide unlimited nominations (Terry, 2000). Because of the participants' age, pictures were used as a support during the interview to aid in gathering reliable peer report data (Keane & Calkins, 2004). Before the administration of the Sociometric Interview, a visual recognition task was conducted to make sure that the child knew the names of each classmate (Asher et al., 1979).

The received nominations and the number of reciprocal nominations (RNs) for each child were computed. The RN was scored when child A identified child B as a liked one and child B reciprocated that nomination.

In order to test the similarity-homophily tendency, children's social cliques were investigated. On the basis of the RNs, a new dataset for cliques' analysis was created. For each child his/her social clique in

function of the RNs was identified. Whether the child A had RNs with the child B and the child C, his/her social clique consists of the children B and C. A total of 68 social cliques were obtained. The cliques ranged from 2 to 9 members ($M=3.2$, $SD=1.9$). According to Salmivalli and colleagues' procedure (Salmivalli et al., 1997) this procedure allows to compare for each variable of the present study the target child and the means among the social clique members' raw scores.

The Social Competence and Behaviour Evaluation – SCBE-30

The Social Competence and Behaviour Evaluation Short Form questionnaire with 30 items (SCBE-30, LaFreniere & Dumas, 1996; Italian version translated by D'Odorico and Foglia, see D'Odorico & Cassiba, 2001) was filled in by teachers. The 6-point scale includes 3 subscales: social competence (e.g., he/she cooperates with others), anxiety-withdrawal (e.g., he/she avoids new situations, he/she spends his/her time isolated from a peer group) and anger-aggression (e.g., disobedient when reprimanded). It is a well-validated measure, which is used in most studies on preschool's social competence (Yoleri, 2014). The z-scores were computed on the basis of the normative sample within each group, according to age and gender. Results revealed that z scores were comprised between 0 and ± 1.5 , showing that our sample had scores within the normal range.

The Italian Questionnaires of Temperament - QUIT

The Italian Questionnaires of Temperament (Questionari Italiani del Temperamento – QUIT) (Axia, 2002; Cerniglia, Cimino & Ballarotto, 2014) was designed to measure the temperament in children from 1 month to 11 years. The QUIT is a 6-point scale filled by teacher and consists of 6 subscales: *social orientation*, *positive emotionality* and *negative emotionality*, *inhibition to novelty*, *attention* and *motor activity*. The z-scores were calculated for the subscales according to the normative data within each age group. The mean z-scores of children were comprised in a normal range (from 0 to ± 1.5), even if the teachers revealed lower inhibition to novelty in the present sample ($z=-1.97$) in comparison to the Italian normative sample.

The Peabody Picture Vocabulary Test - Revised PPVT-R

The Peabody Picture Vocabulary Test - Revised (PPVT-R; Dunn et al., 1981) in the standardized Italian version (Stella, Pizzoli & Tressoldi, 2000) for children 3.9-11.6 aged, was administered to each child by the examiner in order to measure his/her receptive vocabulary. Based on the correct answer, a raw score was performed, which was converted into a standard equivalent score. The mean of the raw scores for 4-years-old children was 58 ($SD =22.7$), ranging from 14 to 114, and for 5-years-old children was 76.8 ($SD =26.2$), ranging from 9 to 120. The standard equivalent score was not available for 9 children (11 % of the sample), because they were not-Italian mother tongue and as a consequence they showed difficulties using the receptive Italian vocabulary. The mean of the Standard Equivalent scores was 91.9 ($SD=15.6$, range: 62-127). The mean of the Z-scores was comprised in a normal range (from 0 to ± 1.5). The raw scores were employed in the statistical analysis.

Data collection and procedure

Before starting the data collection, the teachers introduced the researcher to the children, and they spent time together in the classroom in order to get familiar with her. After this period, the experimenter administered the Sociometric Interview and the PPVT-R to each child.

Teachers filled in the SCBE-30 and the QUIT questionnaires. Teachers were not aware of the study hypotheses.

Results

Relationships between RNs and socio-emotional competence, temperament, linguistic skills

Concerning the received nominations, the mean was 6.2 ($SD=3.4$, range: 1-22) and all children received at least one nomination by peers. With regard to RNs, children established two reciprocated ties on average ($M = 2.6$, $SD=2.1$, range: 0-8). Several children ($N = 68$; 81%) showed at least one reciprocated tie, even if there were also children without RNs ($N = 16$; 19%).

To examine the relationships among the numbers of RNs and socio-emotional competence, temperamental traits and linguistic skills, Spearman rank order correlations were performed, since several variables were not normally distributed (see Table I). Positive correlations were found among the RNs and social orientation, positive emotionality, motor activity and linguistic skills. A positive trend was found between the RNs and social competence. A negative correlation was found between the RNs and anxiety-withdrawal. No relationships were found for anger-aggression, negative emotionality, inhibition to novelty and attention.

The inspection of effect size, according to Cohen (1988), was analysed in order to describe the strength of the relation ($r = .1$ small; $.3 =$ medium; $.5 =$ strong). Results revealed small effects for positive emotionality and motor activity whereas medium effect sizes were reported for social orientation, anxiety-withdrawal and linguistic skills.

Socio-emotional competence, temperamental traits, and linguistic skills: similarities among cliques members

To assess whether children preferred playmates similar to them as far as socio-emotional competences, temperamental traits and linguistic skills were concerned, according to the similarity – homophily tendency, several Spearman correlations were performed (see Table II). The results revealed that the target child's competence scores were significantly and positively related to the social competence of the members of the social network, as well as to social orientation, positive emotionality, inhibition to novelty, attention, and linguistic skills. Positive correlation trends were found for anger-aggression and motor activity. No other significant relationships were found. The inspection of the effect size reveals small effect for inhibition to novelty, medium effects for social orientation, positive emotionality, attention and linguistic skills, and strong effect size for social competence.

Table I. Correlations between children's competences and their RNs (N= 84 children)

Reciprocated Nominations (= RNs)				
		<i>Spearman r</i>	<i>P</i>	<i>Effect Size</i>
SCBE-30	Social competence	.21	.052	
	Anger-aggression	.09	.43	
	Anxiety-withdrawal	-.39	.0001	Medium
QUIT	Social Orientation	.30	.006	Medium
	Positive Emotionality	.22	.043	Small
	Negative Emotionality	-.01	.96	
	Inhibition to Novelty	-.03	.80	
	Attention	-.01	.95	
	Motor activity	.27	.012	Small
PPVT-R	Linguistic Skills	.33	.002	Medium

Table II. Spearman's rank-order correlations between individual child's scores and corresponding peer clique scores for study variables (N=68 cliques)

Peer clique scores				
		<i>Spearman r</i>	<i>p</i>	<i>Effect Size</i>
SCBE-30	Social competence	.54	.0001	Strong
	Anger-aggression	.22	.068	
	Anxiety-withdrawal	-.02	.87	
QUIT	Social Orientation	.37	.002	Medium
	Positive Emotionality	.30	.013	Medium
	Negative Emotionality	.15	.22	
	Inhibition to Novelty	.28	.022	Small
	Attention	.30	.012	Medium
	Motor activity	.21	.090	
PPVT-R	Linguistic Skills	.30	.012	Medium

Discussion

The methodology adopted in our study, based on the Sociometric Interview but leading to the analysis of cliques made by reciprocated positive choices, provided a means to measure group cohesiveness and interactions within a social network of preschoolers, examining also the contribution of several variables (temperament, social competence, linguistic skills) to the establishment of these networks.

Social acceptance, reciprocated nominations and socio-emotional competence, temperament and linguistic skills of peers

Regarding peer social acceptance, a positive result emerged, since all children received at least one nomination. This indicated that there was a positive level of social inclusion within the classes, confirmed also by the RNs: most children had an average of two or three reciprocated ties. Importantly, RNs ranged from zero to eight, showing cliques of different size at preschool age, such as small and medium groups and suggesting different affective and social experiences among children. This is consistent with evidence reported by Barbu's (2003) observational study, which employed direct measure and where small and medium size groups were reported.

The hypothesis concerning a positive relationship among the number of RNs and children's socio-emotional functioning and linguistic skills was confirmed: children's socio-emotional functioning and linguistic skills were linked to the number of reciprocal choices established by children. Our results largely overlap those reported in studies among these variables and mutual friendships, extending the available knowledge also to reciprocated ties. This suggests that this kind of mutual preference among peers can be considered as an index of friendship for preschoolers. More specifically, the results from correlational analyses indicated that children with higher RNs showed higher social competence (trend), social orientation, positive emotionality, motor activity and linguistic skills. These relationships may be hypothesized as bidirectional: children's social skills may contribute to establish several RNs; on the other hand, several reciprocated ties may promote children's competences.

One comment should be made on the trend toward significance for social competence. Children who were more cooperative and helping with others, and more skilled at resolving conflict with peers, were also able to build more reciprocated relationships. Conversely, a negative relationship with a medium effect size was found between the RNs and anxiety-withdrawal: shy and anxious children, who tended to be socially avoidant and exhibited social fear and sadness, were more likely to play alone and to be isolated by peers. This is consistent with the results on the linkage between children's anxiety and peer rejection (Rydell, Diamantopoulou, Thorell & Bohlin, 2009).

The current findings, reporting a medium effect size for the positive correlation between reciprocated nominations and the temperamental trait concerning social orientation confirm that being positively oriented towards other peers may 'pay back' in terms of building positive relationship, achieving more opportunities to establish and maintaining mutual interactions with peers. This finding is consistent with Skarpness and Carson's study (1986), which indicated that children who were more temperamentally sociable exhibited also more mutual friendships. In addition, the positive emotionality also turned out to be a relevant variable for the

RNs, although with a small effect size: children who had high positive emotionality (i.e. smiling and laughing), could have been more attractive for other children, and established more friendships, as suggested by the experimental Schultz and colleagues' study (2008).

The current study revealed a positive relationship, although with a small effect size, between the motor activity and RNs. This trait may 'highlight' these children in the peer group, and can be linked to behaviors of dominance in the peer group. Gleason et al. (2005) have reported that children who tended to express a high level of physical engagement (i.e. run a lot in motor plays) could achieve a positive peer reputation, in particular among males, who typically prefer to engage in physical and gross motor plays (Goble, Martin, Hanish & Fabes, 2012). Our study did not find any relationships for anger-aggression, negative emotionality, inhibition to novelty, attention and RNs. Although the literature has reported aggression to be risk factor for peer rejection (Ladd, 2006; Nelson et al., 2010), the findings from the present study, which was based on positive unlimited nominations and looked at reciprocated nominations, failed to show differences in friendships between aggressive children and non-aggressive children, as reported also by Engle and colleagues (2011). This seems to suggest that the 'traditional' analysis of the Sociometric Interview may be limitative because it generally leads to an interpretation of positive and negative nominations as individual indexes of social adjustment, hindering in this way a more complex picture of the interactional context and its dynamic. Concerning the significant correlation between linguistic skills and RNs, supported by a medium effect size, two hypotheses may be considered: children's linguistic skills may influence the number of RNs, given their capacity to understand others' communication; on the other hand, the number of RNs may promote children's linguistic skills, providing a social context linguistically stimulating. In the current study the receptive vocabulary ability has been taken into consideration, which is one basic facet of the language skills and is considered a predictive index of later typically or impaired language development (Rescorla, 2011). Future research should be conducted also on expressive language, particularly on lexicon, grammar and pragmatic skills of typically developing preschool children.

Socio-emotional competence, temperamental traits and linguistic skills similarities among clique members

Consistent with expectations, children who belonged to the same peer cliques displayed similarity in social competence, anger aggression (trend), social orientation, positive emotionality, inhibition to novelty, attention, motor activity (trend) and linguistic skills. In particular, a strong effect size was reported for social competence. As previously highlighted, the similarity – homophily tendency may be due to a selection process (peer tended to seek interaction with similar peers) or to a socialization process (children spending a lot of time interacting with their peers, reciprocally develop turn-taking abilities, strategies to solve conflicts and become more socially competent).

Affiliation among similarly aggressive children has been already investigated across studies on preschool-age (Farver, 1996; Hanish et al., 2005; Martin et al., 2005; Van den Oord et al., 2000). Following the similarity-socialization hypothesis, those children may be excluded by different children because they were being too aggressive, and they could select reciprocated ties only among groups of aggressive children.

With regard to temperamental traits such as social orientation, positive emotionality, inhibition to novelty, attention and motor activity, ours is one of the few studies on homophily in preschoolers' social networks to investigate similarity along these variables among preschools peer networks.

Our study has provided empirical support to the similarity hypothesis for positive emotionality: children who smiled and laughed quite often preferred to join with mates who share their interaction style. For example, Fabes and colleagues (Fabes, Hanish, Martin, Moss & Reesing, 2012) have found that prosocial children affiliation increased later their level of positive emotionality, so maybe an effect of peer contagion could be also taken into account.

Children who exhibited inhibition to novelty were more attractive for children with a similar degree of inhibition. Inhibited children might find extroversive children too intrusive and may prefer to establish reciprocated ties among themselves and thus to exclude dissimilarly inhibited children.

Evidence for 'attention similarity' was also found. As found by Acar, Rudasill, Molfese, Torquati and Prokasky (2015) children with high attention focusing showed more sociability, communication, and assertiveness in peer interactions. In a preschool setting, there may be lot of opportunities to engage in attention-demanding plays, and children who share a similar degree of attention for tasks could more frequently get engaged in similar tasks, establishing preferential relationships among them.

Moreover, children also tended to choose peers who resembled them in motor activity degree. For example, Hanish and colleagues (2005) has found that girls 'hyperactive' and aggressive spent their time with girl friends equally hyperactive and aggressive.

Our findings suggested that a similarity-homophily hypothesis could also encompass linguistic skills. Maybe, a similar level of linguistic skills is essential in order to choose and continue a social game without having misunderstanding. The homophily hypothesis for linguistic skills, and more in general for academic achievement should be more investigated since preschool age, and not only in childhood and adolescence.

At the end, we failed to find similarity along anxiety-withdrawal and negative emotionality dimensions among clique members, even if similarity for internalizing problems was found by Stone and colleagues (2013) in friendship dyads. This result can be explained taking into consideration the negative correlation between these two dimensions and reciprocated nominations; so, it is quite possible that children with these characteristics were less likely to be included into cliques.

Limitations

The sample of this study displayed a percentage of children with weak linguistic skills, mainly because children not Italian mother tongue were present in the classes. Yet, caution is needed in the interpretation of the results, since other variables not considered in this study may contribute to explain these results; future research should be conducted in order to replicate these findings.

Moreover, influences of age or gender were not taken into consideration and further research with larger samples could investigate the role of these variables.

Conclusion and policy implications

The results of the current study advance the existing knowledge for the similarity – homophily hypothesis in peers cliques at preschool age (Hallinan, 1980). Having adopted a Sociometric Interview with positive unlimited nominations and considered the number of reciprocated ties, has allowed us to go further the individual classification of the sociometric status, gaining a framework of the complex web of relations among subgroups embedded into the class group. This methodology may take researchers to deepen the understanding of the socio-emotional niche wherein each child develops his/her competences. Despite it might be challenging to interview children as young as three-four years of age, adopting some easy strategies like to point at classmate pictures when asked about a familiar experience, it may overcome linguistic barriers and to allow researchers to obtain reliable indications.

Our findings point out to the crucial role that teachers may play in facilitating and improving children's relationships, enhancing the degree of reciprocity among peers (Buysse, Goldman & Skinner, 2003; Hollingsworth & Buysse, 2009) and preventing negative affiliations among similar peers in 'negative' cliques. The role of adults -teachers, researchers, parents- is thus to create the conditions to allow each child to benefit from the company of his/her friends, fostering nourishing social interactions and, thus, promoting mental health.

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