

Social Behaviour, Social-Cognitive Scores and Peer Ratings in Australian Children

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INTRODUCTION

Peers play very important role in the development of social competence. When children interact with their peers, they are of equal status in their interpersonal interactions. They have to value each other's opinions, and negotiate and compromise for conflict resolution. They learn to give and take to achieve successful social interactions. The development of negotiation skills facilitates this learning process and fosters social competence (Kemple, 1991). Peers have significant pressure on children's behaviour because peers can change behaviour by their acceptance or rejection.

Children who lack the skills to sustain good peer relationships are "at risk" for later developmental problems (Parker and Asher, 1987). It has been found that rejected children are aggressive, disruptive, inconsiderate of other children, not knowing how to join a peer group and being dishonest (Coie et al., 1982; Wasik, 1987); also they are poor social problem solvers (Chen and Rubin, 1992).

Peer acceptance and rejection of children can be assessed using sociometric techniques. The sociometric peer rating scale developed by Asher et al. (1979) allows each child to assess each child in his/her classroom and has been found a reliable index of peer acceptance in young children.

The purpose of this study was to find correlates of peer acceptance and rejection in preschool-aged Australian children. The areas examined were social behaviour and social-cognitive interpersonal problem-solving.

In the present study children's social behaviour in the educational context was assessed by class teachers. Although the role of teachers is that of an outsider to children's peer relationships, however, they can provide a unique outlook on the behaviour of children. Their frequent contact with the children enables them to observe children's behaviour patterns. It was expected that positive relations would exist between socially competent behaviour and peer acceptance.

METHOD

Subjects: One hundred 4 to 6 year old children (45 girls and 55 boys) from Brisbane, Australia participated in the present study. A number of child care centres, kindergartens and preschools were approached for participation of the families involved with those centres. Consent forms and information sheets regarding the research project were sent to families whose children were 4 to 6 years. As Australia is a multicultural country having families from different origin places, parents were invited to participate if both parents were Australians of long-term residence. Parents of 127 children allowed their children to participate. Finally, for the present study 100 children were available for interviews and constituted the sample. Teachers were also requested to fill up the questionnaire regarding children's behaviour in the educational context. The mean age of target children was 59 months ($SD = 5.41$ months).

Procedure: The children were administered two measures: a sociometric peer rating scale and a social-problem-solving test. The children's social behaviour in child care context was assessed by the class teachers.

Peer Ratings: To assess the peer acceptance and rejection of children, the peer rating scale developed by Asher et al. (1979) was used. Each child was individually presented with colour polaroid photographs of target children. They were shown the photographs, one by one, and were requested to assign pictures of target children to one of the three boxes on which were drawn either a happy face ("children you like a lot"), a neutral face ("children you kind of like"), or a sad face ("children you don't like"). Children thus received a number of positive, neutral and negative ratings. The positive rating received by the child were given a score of 3, neutral a score of 2, and negative ratings a score of 1. Following the recommendations of Asher and Renshaw (1981), the same-sex sociometric scores were computed for each child.

Social Behaviour: A checklist containing 14

items rated on a 4-point Likert-type scales was used to assess the children's social behaviour within the child care setting. Teachers were requested to observe the children for a period of one week before filling in the checklist. Teachers were unaware of the sociometric status of children. The five items described the extent to which the child was successful in peer group entry, popularity in the peer group, outgoing social behaviour, involvement in conflicts with peers, and conflict initiation.

The checklist also included nine items that described the positive strategies (For example, Considers interests of others.) and negative strategies (For example, Becomes aggressive.) used by children for conflict resolution. Three positive items were standardized and summed ($\alpha = .78$) to get a composite 'positive strategies' score. The six negative strategies were standardized and summed ($\alpha = .82$) to get a composite 'negative strategies' score. Items in the present study were selected from the literature.

Social-cognitive Interpersonal Problem-Solving: The Social Problem Solving Test-Revised developed by Rubin (1988) was used to assess children's social-cognitive interpersonal problem-solving skills in hypothetical situations with their peers. Each child was presented individually with four problem situations in which a story character either wished to gain access to an object in another child's possession (two stories) or to become friendly with an unfamiliar child (two stories). The child being tested was then asked what the story character could do or say in each situation to achieve the desired goal. Two such responses were requested for each situation. Picture cards were used to depict the stories. The age and sex of the children in the stories were the same as that of the child being tested. In each story the characters were given different names to maintain interest and variety.

The children's responses were scored in terms of their quantitative features. The total number of different categories found in all four stories were computed. The children's responses were also scored for the number of relevant categories produced per story and were computed to get total relevancy score. An index of response

flexibility was also computed. Flexibility involved a comparison of the categories found in response 2 with those found in response 1 for any given story.

All 100 protocols for the children were scored by two raters (aside from the researcher who scored all the protocols, a lecturer from Early Childhood Education, Queensland University of Technology, Australia rated all the children's protocols). Inter-rater reliability, computed as the percentage of agreements was 100% for quantitative scores of Object Acquisition and Friendship Initiation tasks.

RESULTS AND DISCUSSION

Pearson's correlation coefficients were computed between sociometric peer rating scores and teacher assessed children's social behaviour. Correlation coefficients were also computed between peer rating scores and social-cognitive problem-solving scores. Highly similar patterns were evident when boys and girls were considered separately. Therefore results in tables show correlations for boys and girls combined. Magnitude of correlations ranged from low to moderate.

Correlations Between Peer Rating Scores and Teacher Assessed Social Behaviour: As presented in Table 1, the number of positive ratings received were positively correlated with successful peer group entry, popularity among class-mates, outgoing social behaviour, and positive conflict resolution strategies. Significant negative correlations were found between the number of positive ratings received and conflict initiation and the negative conflict resolution strategies.

The number of neutral ratings ("kind of like") were negatively correlated with popularity among class-mates, outgoing social behaviour, conflict initiation, and negative conflict resolution strategies.

Significant negative correlations were found between the number of negative ratings received and successful peer group entry, popularity among class-mates, and outgoing social behaviour. The number of negative ratings received were positively correlated with involvement in conflicts, conflict initiation, and negative conflict resolution strategies.

Table 1: Correlations between Peer Rating Scores and Teacher Assessed Behaviour

<i>Teacher Assessed Behaviours</i>	<i>Sociometric Scores</i>		
	<i>Positive Ratings</i>	<i>Neutral Ratings</i>	<i>Negative Ratings</i>
Successful peer group entry	.31**	ns	-.25*
Popularity among class-mates	.51**	-.22*	-.45**
Outgoing social behaviour	.47**	-.35**	-.39**
Involvement in conflicts	ns	ns	.24*
Conflict initiation	-.22*	-.32**	.41**
Positive conflict resolution strategies	.36**	ns	ns
Negative conflict resolution strategies	-.42**	-.23*	.46**

Note : n = 100; Significant at *p<.05, **p < .01.

These findings indicate that positively rated children were successful in peer group entry and popular among classmates, exhibited outgoing social behaviour, were less likely to initiate conflicts, and used more positive and less negative conflict resolution strategies. Children who received neutral ratings were not popular among classmates, were socially not outgoing, and rarely initiated conflicts. Also these children were less likely to use negative strategies to resolve conflicts. Children who received negative ratings were assessed by teachers as being unsuccessful in peer group entry and less liked by classmates. These children were also socially less outgoing and were more likely to get involved in and initiate conflicts, and more likely to use negative strategies in conflict resolution. These results get support from the previous research (e.g. Coie et al., 1982; Wasik, 1987) indicating that children rejected by their peers are behaviorally more deviant in comparison to accepted children.

Correlations Between Peer Rating Scores and Social-Cognitive Problem-Solving Scores: As presented in table 2, the number of positive ratings received were significantly positively correlated with total number of strategies suggested, total relevancy and flexibility scores. Significant positive correlations also existed for number of strategies, relevancy, and flexibility scores of object acquisition and friendship initiation tasks.

Negative correlations were obtained between neutral ratings received and the number of strategies suggested, relevancy and flexibility scores

Table 2 : Correlations between Peer Rating Scores and Social-Cognitive Problem-Solving Scores

<i>Social-Cognitive Problem-Solving Scores</i>	<i>Positive Ratings</i>	<i>Neutral Ratings</i>	<i>Negative Ratings</i>
Total scores			
Number of strategies	.32**	-.26*	-.34**
Relevancy score	.35**	-.27*	-.31**
Flexibility score	.40**	-.30*	-.32**
Object Acquisition Scores			
Number of strategies	.33**	-.31**	-.35**
Relevancy score	.36**	-.29*	-.34**
Flexibility score	.41**	-.30*	-.35**
Friendship Initiation Scores			
Number of strategies	.32**	-.25*	-.34**
Relevancy score	.35**	-.27*	-.30**
Flexibility score	.39**	-.32**	-.31*

Note : n = 100; Significant at *p<.05, **p < .01.

of object acquisition and friendship initiation tasks, as well as total scores. Negative correlations were also evidenced between negative ratings received and the number of strategies suggested, relevancy and flexibility scores of object acquisition and friendship initiation tasks, and total scores.

The results of the present study clearly predict relationship between peer acceptance or rejection and quantitative features of social-cognitive problem-solving. Positively rated children suggested more number of relevant and alternative strategies than those who received neutral or negative ratings.

In the present study, support was found for previous research in which association has been found between sociometric status and social problem-solving (Chen and Rubin, 1992; Rubin and Daniels-Beirness, 1983). Spivack and Shure (1974) also reported that the greater the number of different strategies a child suggests the more socially competent he or she is.

A few limitations in the research reported herein are apparent. First, the social-cognitive problem-solving of children were assessed in hypothetical situations. Second, because of correlational nature of the present data these findings need to be interpreted with caution.

In summary, this research has made a contribution to increased understanding of correlates of peer acceptance and rejection in Australia and across cultures. Children's social behaviour and social-cognitive interpersonal problem-solving

are the predictors of peer acceptance and rejection.

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KEY WORDS Social Behaviour. Education. Children. Problems.

ABSTRACT One hundred 4 to 6 year old Australian children (55 male and 45 female) were assessed for peer acceptance and rejection, and social-cognitive interpersonal problem-solving. Class teachers rated social behaviour of children within educational context. Peer acceptance was found to be positively correlated with teacher rated successful peer group entry, popularity among classmates, outgoing social behaviour; and negatively with conflict initiation. Peer accepted children were more likely to use positive and less likely to use negative strategies to resolve conflicts with peers. Whereas opposite was true for less accepted children. Results of this study clearly predict relationship between peer acceptance and rejection, and social-cognitive interpersonal problem-solving. Peer accepted children suggested more number of relevant and alternative strategies than their less accepted counter parts.

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