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## ABSTRACT

The current study examined peer nominated non-aggressive rejected children on their levels of social reasoning, anxiety, goals and perceptions of self-efficacy, and communication styles when collaborating with another peer. Sociometric measures were used to identify 15 average and 10 non-aggressive rejected 5th and 6th grade children. Pre- and post-test procedures consisted of asking each child to respond to questions about two different hypothetical social dilemmas. Intervention consisted of pairing children into 5 non-aggressive rejected/average dyads and 5 average/average dyads, and asking them to collaborate on solving the hypothetical social dilemmas. They were also individually given a social anxiety measure along with goals and self-efficacy questionnaires relating to the dilemmas. Results indicated some differences between the non-aggressive rejected children and the average child on the goals, self-efficacy, and social anxiety measures. When looked at within the dyads, there were no between groups differences for levels of social reasoning or communication styles. However, within groups differences occurred for level of social reasoning when the children worked with a partner. Findings from this study extend prior research by examining the non-aggressive rejected population and how they function when collaborating with a partner to solve a hypothetical social dilemma. (Contains 13 references.) (GCP)

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Running Head: SOCIAL REASONING, ANXIETY, AND COLLABORATION

Social Reasoning, Anxiety, and Collaboration with Rejected and Average Children

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### Abstract

The current study examined peer nominated non-aggressive rejected children on their levels of social reasoning, anxiety, goals and perceptions of self-efficacy, and communication styles when collaborating with another peer. Sociometric measures were used to identify 15 average and 10 non-aggressive rejected 5<sup>th</sup> and 6<sup>th</sup> grade children. Pre-and post-test procedures consisted of asking each child to respond to questions about two different hypothetical social dilemmas. Intervention consisted of pairing children into 5 non-aggressive rejected/average dyads and 5 average/average dyads, and asking them to collaborate on solving the hypothetical social dilemmas. They were also individually given a social anxiety measure along with goals and self-efficacy questionnaires relating to the dilemmas. Results indicated some differences between the non-aggressive rejected children and the average children on the goals, self-efficacy, and social anxiety measures. When looked at within the dyads, there were no between groups differences for levels of social reasoning or communication styles. However, within groups differences occurred for level of social reasoning when the children worked with a partner. Findings from this study extend prior research (Fireman, Fields, & Bell, 1995; Bell, 2001) by examining the non-aggressive rejected population and how they function when collaborating with a partner to solve a hypothetical social dilemma.

### Social Reasoning, Anxiety, and Collaboration with Rejected and Average Children

Peer social status in childhood has been implicated as a significant predictor of later adjustment including school dropout, juvenile delinquency, and psychopathology (Kupersmidt, Coie, & Dodge, 1990; Parker & Asher, 1987). Children identified by peer measures (Coie, Dodge, & Coppotelli, 1982) as rejected by peers, tend to fall into 2 groups: those who display aggression and those who do not. While much research has focused on the behaviors of aggressive rejected children, there is less understanding about the characteristics of non-aggressive rejected children. The current study aimed to enhance the understanding of these children in terms of their social reasoning in different contexts, goals and self-efficacy, and social anxiety. Furthermore, the present study examined the effects of collaboration and communication patterns among dyads of non-aggressive rejected children and average children.

The first hypothesis was that there would be improved differences in social reasoning levels after working with a partner. The second hypothesis predicted that the non-aggressive rejected children would have significantly different social goals and perceptions of self-efficacy from average children. A third hypothesis was that non-aggressive rejected children would report more social anxiety than average children. Finally, it was hypothesized that communication and language exchange would be different between dyad compositions, where dyads of average children paired with non-aggressive rejected children were expected to display less engaging discussion than dyads of average children paired with other average children.

## Method

### *Participants*

A total of 838 elementary students were identified through a peer nomination measure. Of these, 131 fifth and sixth grade students were identified as rejected and 94 fifth and sixth grade students were identified as average. Randomly selected for this study were 10 non-aggressive rejected and 15 average students. There were 14 males and 11 females, 12 of which were Caucasian, 6 were Hispanic, and 7 were African American.

### *Measures*

The Interpersonal Negotiation Strategies Interview (INS) developed by Yeates, Shcultz, and Selman (1991) was used to measure social reasoning level. The interview consisted of 2 hypothetical social conflict dilemmas: an instrumental dilemma involving a concrete problem and a relational dilemma involving a more ambiguous problem. This interview evaluates children's perspective-taking ability when defining a problem, generating strategies, selecting a solution, and evaluating the outcome.

The Peabody Picture Vocabulary Test-Revised (PPVT-R), which assesses receptive vocabulary, was used to exclude children who scored 1 standard deviation below the mean (Dunn, 1981).

The Social Anxiety Scale for Children-Revised (SASC-R) is a self-report measure that was used to determine perceived level of social anxiety (La Greca & Stone, 1993). This instrument consists of one overall Total Scale and three subscales: Fear of Negative Evaluation

(FNE), Social Avoidance and Distress in new situation or with unfamiliar peers (SAD-New), and Social Anxiety and Distress that is more generalized in nature (SAD-G).

Two questionnaires adapted from Erdley and Asher (1996) were used to examine specific goals associated with the children's responses to the INS dilemmas as well as their perceptions of how well they would perform if placed in the INS dilemma.

A measure of communication was coded with three levels of transactive statements and two levels of concordant and discordant statements, as adapted from previous studies (Dimant & Bearison, 1991); Kruger & Tomasello, 1986). Transactive reasoning was defined as a person's reasoning that functions on or operates on the reasoning of another. Concordant statements were coded when the speaker was in agreement with the idea of the other speaker, while discordant statements occurred when the speaker disagreed with the idea of the other speaker.

### *Procedure*

A pretest/posttest design was used with three sessions across a four-week period. Interviews were audiotaped for later coding. Children were seen individually during the first meeting (Time 1). If the child scored above criterion on the PPVT-R, they were given the INS interview, with goals and self-efficacy questionnaires following each dilemma. Each child was then given the SASC-R.

During the second sessions (Time 2), rejected children and average children were randomly paired with same-sex average partners and asked to work as a team, discuss answers, and then agree upon a final response. Following each dilemma, the children were given the goals and self-efficacy questionnaires to fill out individually. Two weeks later, all participants were individually given the INS interview for a third time (Time 3).

## Results

A multivariate approach was used to examine the differences between rejected and average children on levels of social reasoning, specific goals, feelings of self-efficacy, and degree of social anxiety. A mixed factorial between and within subjects design was used to look at collaboration performance on the instrumental and relational dilemma. Logit analysis was used to examine the transactive communication between partners and chi square analysis was used to look at concordant and discordant speech acts.

Hypothesis 1. For INS scores across all three sessions, there were no significant differences between rejected and average children; however, within group INS scores were significant ( $F = 3.81, p < .05$ ). Participants' scores improved significantly from Time 1 ( $M = 2.20, SD = .17$ ) to Time 2 ( $M = 2.40, SD = 2.14$ ),  $t(1,9) = 2.45, p < .05$ . This indicates that both groups performed better when working with a partner versus working alone (see Figure 1).

Hypothesis 2. For the measures of goals and self-efficacy, significant between groups differences were found; however, there were no within group changes over time. On the relational dilemma, the non-aggressive rejected children focused more often than average children on the goal of trying to work out the social problem peacefully ( $F = 4.69, p < .05$ ). On the instrumental dilemma, the non-aggressive rejected children endorsed the goal of trying to save the friendship more heavily than the average children ( $F = 4.50, p < .05$ ). With the measure of self-efficacy, non-aggressive rejected children reported more often than average children that they believed they would be good at letting other people know they could stand up for themselves ( $F = 5.34, p < .05$ ).

Hypothesis 3. On the SASC-R, results indicated that the non-aggressive rejected children reported significantly more social anxiety than did the average children ( $F = 5.419, p < .05$ ). The

non-aggressive rejected children also had higher scores on all three subscales (see Table 1); however the only subscale on which their scores were significantly higher was the Social Anxiety and Distress—General (SAD-G) subscale ( $F = 4.534, p < .05$ ).

Hypothesis 4. No differences were found between dyad groups in the amount of concordant and discordant speech acts given. In examining the best fit model, using logit analysis, level of social reasoning appeared to relate to transactive speech and dyad membership to transactive speech; however, there were no significant differences.

### Discussion

Non-aggressive rejected children reported higher levels of social anxiety than average children, which is consistent with previous research. This finding also lends support to the model of peer rejection proposed by Rubin, LeMare, and Lollis (1990), which suggests that non-aggressive rejected children may avoid social interactions due to their anxiety which prevents them from developing social skills at the same rate as other children.

The non-aggressive rejected children also indicated goals of maintaining peace in the relationship and saving a friendship during social conflict more than the average children. It is not surprising that a child who is socially isolated and rejected by his/her peers would place greater value in maintaining peace and saving friendships than would an average child who has several other supportive relationships. They also indicated feelings of confidence in being able to carry out their goals more so than average children. The non-aggressive rejected children may perceive that they are more competent when showing others that they can stand up for themselves; however, they may not choose the social reasoning strategies that would lead to close interpersonal relationships with their peers.



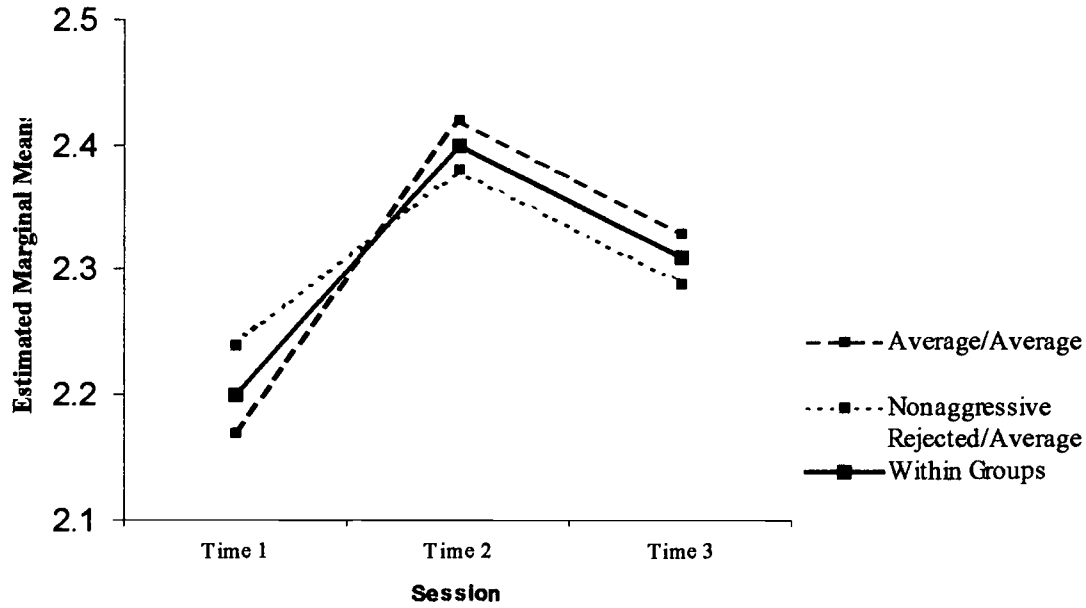
Despite these differences between non-aggressive rejected children and average children, both groups improved from social reasoning levels during the first session to social reasoning levels during the collaborative interaction. Both groups were able to collaborate effectively and socially reason at higher levels when working to solve a more concrete problem. This finding suggests support for prior research on the positive effect of peer collaboration. When the non-aggressive rejected children and average children were later measured at the posttest interview, their improved levels of social reasoning during the collaborative task were not maintained. However, examination of the means suggests that it may be useful to continue this research, given a larger sample size.

When examining communication between rejected and average children, there were no significant communication patterns that differed between the two groups. This suggests that the non-aggressive rejected children appear to function well with an average partner during a collaborative task. Although, it is important to note that an examiner was in the room at the time of collaboration, which may have affected the type of communication occurring between partners. Future research should also include these issues with sample size, as well as examine gender differences, age, and ethnicity.

## References

- Coie, J. & Dodge, K. (1983). Continuities and changes in children's social status: A five-year longitudinal study. Merrill-Palmer Quarterly, *29*, 261-282.
- Coie, J., Dodge, K., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. Developmental Psychology, *18*, 557-570.
- Crick, N. & Grotpeter, J. (1995). Relational aggression, gender, and social-psychological adjustment. Child Development, *66*, 710-722.
- Dimant, R. & Bearison, D. (1991). Development of formal reasoning during successive peer interactions. Development Psychology, *27*, 277-284.
- Dunn, L. & Dunn, L. (1991). Peabody Picture Vocabulary Test-Revised. Circle Pines, MN: American Guidance Service.
- Erdelyi, C. & Asher, S. (1996). Children's social goals and self-efficacy perceptions as influences on their responses to ambiguous provocation. Child Development, *67*, 1329-1344.
- Kruger, A. & Tomasello, M. (1986). Transactive discussions with peers and adults. Developmental Psychology, *22*, 681-685.
- Kupersmidt, J., Coie, J., & Dodge, K. (1990). Peer group behaviors and social status. In S.R. Asher and J.D. Coie (Eds.), Peer rejection in childhood (pp. 17-59). New York: Cambridge University Press.
- La Greca, A. & Stone, W. (1993). Social anxiety scale for children-revised: Factor structure and concurrent validity. Journal of Clinical Child Psychology, *22*, 17-27.
- Murphy, S. & Faulkner, D. (2000). Learning to collaborate: Can young children develop better communication strategies through collaboration with a more popular peer? European Journal of Psychology of Education, *25*, 389-404.
- Parker, J. & Asher, S. (1987). Peer relations and later personal adjustment: Are low-accepted children at risk? Psychological Bulletin, *102*, 357-389.
- Rubin, K., LeMare, L., & Lollis, S. (1990). Social withdrawal in childhood: Developmental pathways to peer rejection. In S.R. Asher & J.D. Coie (Eds.), Peer Rejection in Childhood (pp. 217-249). New York: Cambridge University Press.
- Yeates, K., Schultz, L., & Selman, R. (1991). The development of interpersonal negotiation strategies in thought and action: A social-cognitive link to behavioral adjustment and social status. Merrill-Palmer Quarterly, *37*, 369-406.

**Estimated Marginal Means of Overall INS Scores  
For the Instrumental Dilemma**



**Figure 1.** Within groups means of Overall INS scores for the Instrumental Dilemma across sessions (Time 1:  $M = 2.20$ ,  $SD = .17$ ; Time 2:  $M = 2.40$ ,  $SD = 2.14$ ; Time 3:  $M = 2.31$ ,  $SD = .18$ ).

**Table 1. Social Anxiety Scale for Children—Revised: Subtest Results**

		<b>N</b>	<b>Means</b>	<b>Std. Deviations</b>	<b>F</b>	<b>Sig.</b>
<b>SASC-R Total</b>	<b>Average</b>	14	41.64	9.74	5.419	.03
	<b>Rejected</b>	10	53.60	15.46		
<b>FNE</b>	<b>Average</b>	14	22.14	8.74	.747	.397
	<b>Rejected</b>	10	25.10	7.52		
<b>SAD-N</b>	<b>Average</b>	14	14.57	4.70	2.918	.102
	<b>Rejected</b>	10	18.20	5.69		
<b>SAD-G</b>	<b>Average</b>	14	7.07	2.81	4.534	.045
	<b>Rejected</b>	10	10.30	4.62		

FNE = Fear of Negative Evaluation

SAD-N = Social Anxiety and Distress in New Situations or Around Unfamiliar Peers

SAD-G = Social Anxiety and Distress of a Generalized Nature



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