Social Anxiety, Negative Emotion, and Social Cognition in Children:
Results of Social Skills Groups

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Background

The Shyness Institute is a non-profit organization dedicated to research and public education in the area of shyness and social anxiety. Founded in 1994 by Lynne Henderson, and co-directed with Philip Zimbardo, the Institute was established to carry on the research originated by Philip Zimbardo in the early 1970’s and continued by Lynne Henderson at the Shyness Clinic since 1982. The Shyness Clinic provides group and individual therapy to children, adolescents, and adults who struggle with shyness and social anxiety.

Fall of 1998 The Shyness Institute, in collaboration with the Sunnyvale School District and Robin Banerjee from the University of Sussex, began a study whose primary purpose was to explore the relationship between children’s emotional states and their social cognition. The question was how does social anxiety relate to social cognition? How do other negative emotions such as embarrassment and shame contribute to social cognitive difficulties? In addition to assessing these connections, we were interested in obtaining pre and post data from the children involved in the social skills groups in the Sunnyvale School District to measure the effectiveness of these groups.

Method

Subjects

Our sample included 63 children: 33 (ages 8-9) from an English urban primary school and 30 (ages 7-11) from the Sunnyvale school district. Children from the
Sunnyvale district exhibited varying degrees of social difficulty, and had been selected to participate in a social skills group.

**Measures and Social Cognition Tasks**

Several measures were used in this study. These included questionnaires, teacher ratings for the Sunnyvale sample, and questions about stories, which were presented to the children. A social anxiety questionnaire assessed social phobia and social anxiety in children. Social anxiety is defined as a high motivation to make a desired impression and a doubt in one’s ability to make that impression.

We also administered a questionnaire to assess negative affect. For example, the child would be asked, “How often do you feel sad?” The possible answers were never, sometimes, and always. Examples of other questions were: “How often do you feel embarrassed?” “How often do you get your feelings hurt?”

We used questionnaires for teacher ratings of children in the Sunnyvale group only. Teachers were asked to rate the child’s behavior, including questions designed to assess interactive sociability and active sociability. Interactive sociability is social behavior thought to require an appreciation of others’ mental states and active sociability is social behavior that does not require such an appreciation.

Other measures we used were stories with dolls or pictures to illustrate specific situations, which required certain levels of social cognition to be understood. For example: The children were shown small dolls and told a story where a social faux pas had occurred. A doll approached another doll who had previously been identified as playing the violin, and the doll would naively say something very negative about people who played the violin. The children were then asked certain questions about the story to ascertain if they understood that a faux pas had been made and why. The child’s ability to answer and justify the answer correctly was assessed. This measure evaluated the child’s ability to understand beliefs, emotions, and intentions in interpersonal situations that involved a faux.
In another task, the children were told eight stories: four prosocial and four self-presentational. For example, in one of the prosocial stories, a character had a bite of the birthday cake that his grandmother had made especially for him, but the cake tasted awful. However, when the grandmother asked him if he liked the cake, he smiled and said that the cake was delicious. The children were then asked why the character had responded in this way. In a self-presentational story, a character was asked to play soccer with the “big kids” but during the game, she was kicked in the stomach with the ball and it really hurt. However, when the “big kids” asked the character if she was hurt she just smiled and said that it did not hurt at all. Again, the children were asked about the response of the character. Both the prosocial and self-presentational stories were used to examine the children’s ability to recognize the motives behind the emotional displays of story characters.

To answer our second question regarding the effect of the social skills groups, the tasks involving the dolls were not repeated. Post-testing was done with the children from Sunnyvale, which decreased the sample size to 30. At post-test children and teachers were asked to fill out the same questionnaires given at pre-test.

Results

Overview

Our first question concerned the relationship between social anxiety and social cognition. When the children responded to the social cognition tasks, we found that social anxiety was related to greater difficulty understanding how self-presentational motives can give rise to effective social behavior. Social anxiety was also associated with a poorer understanding of motives, beliefs, and behavior in faux pas situations.

Teachers’ ratings of children’s behavior were consistent with the findings from the social cognition tasks. Teachers rated socially anxious children as poorer only on social behaviors thought to require an appreciation of others’ mental states.

Our second question addressed the issue of the effectiveness of the social skills groups. Teachers reported that the children who participated in the social skills groups
exhibited better attention in class, less inappropriate behavior, and more interactive sociability (an improvement in social behavior thought to require an understanding of others’ mental states). However, the children did not report reduced social anxiety or reduced negative emotion!

Related Findings

We divided the children into a the low negative affect group and a high negative affect group using a median split, the score at which half the children’s scores were above and half were below the median score. In the low negative affect group the correlations between social anxiety and difficulty understanding self-presentational motives and faux pas situations were small, but became significant in the high negative affect group.

We also compared children within the Sunnyvale sample. Fifty percent had been recommended for the social skills group because they were acting out or exhibiting defiant behavior, twenty percent were defined as being anti-social or shy, and the other 30 percent were referred for other reasons. Interestingly we found no statistically significant differences between the scores of these sub-groups.

Discussion

These findings reveal the associations between social anxiety, negative affect, and difficulty understanding self-presentational motives and faux pas situations. Furthermore, they demonstrate the effectiveness of the social skills groups in helping children develop social cognitive skills. The curriculum of the social skills group seems to increase the children’s ability to understand another person’s perspective. Group therapy may naturally help group members learn that people have different perspectives and mental states.

Our results yield more questions. Why do the findings reach significance only in the high negative affect group? Why do teachers report improvements when the children themselves do not? We know that ideas about the self are very difficult to change in adults because they are strongly ingrained and practiced. Therefore, there may be a time lag between behavior change and a change in the view of the self. We encounter this lag in a
sub-group of our shyness clinic population whose social skills improve (the people in the group notice, the family members of the individual notice) but the individual has not changed his or her self-concept. At the clinic, we have designed methods for helping our clients challenge negative beliefs about themselves.

In conclusion, we are encouraged by the findings of this study. However, the results cause us to pause and wonder how best to facilitate a change in children’s beliefs about themselves and their negative emotional states. More research and more practical applications of existing research are needed. We recommended that the counselors at the Sunnyvale School District continue their 12-week social skills groups and incorporate more exercises designed to change negative emotions and negative self-concepts into their curriculum. In response to our recommendation, the counselors have devised games with puppets to help them articulate negative emotional states and negative beliefs about the self. We are presently collecting data on those groups