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Development and Validation of an Interview Measure of Social Cognitive Skills

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ABSTRACT

An interview measure of social-cognitive skills that have been found to discriminate aggressive and nonaggressive children was developed. The interview was administered to 25 second and third grade children identified by teachers as nonaggressive and 50 second and third grade children identified by teachers as aggressive and referred to an intervention for aggressive children. The interview measure was administered at pretreatment to all children. The interview has adequate inter-rater reliability and discriminates aggressive and nonaggressive children on the following scores: hostile attributions, number of hostile aggressive solutions and number of first solutions that are aggressive, and number of competent solutions in peer entry situations. Furthermore, the SCAP predicts behavioral improvement following a problem solving skills training intervention.
The purpose of the study was to develop and conduct preliminary validation analyses of an interview measure of children's social-cognitive skills relevant to childhood aggression.

Description of the Interview.

Each of the two forms of the Social-Cognitive Assessment Profile (SCAP) presents children with six vignettes depicting social problem situations found by other researchers to be problematic for aggressive children (Dodge, McClaskey, & Feldman, 1985; Gottman, Gonso, & Rasmussen, 1975). Children are presented with line drawings that illustrate each vignette and are asked a series of questions to assess the following social-cognitive skills: attributions of intent, generation of solutions, outcome expectancies for different solution types, and self-efficacy for different solution types. Each form consists of three situations involving peer provocation, two situations involving peer group entry, and one situation involving initiating a friendship. Separate boy and girl versions of each form available. Line drawings accompany each vignette in which a child of the same gender as the subject is dressed in a blue shirt, and children are asked to imagine that they are the child in the blue shirt. Appendix 1 includes a list of all vignettes, an example interview for vignette 6 on Form B and accompanying line drawings.

Attributions for a peer's provocation are assessed in the three provocation vignettes. After the vignette is read and the illustrations presented, the interviewer asks the child, "What happened?" If an intent is not spontaneously provided by the child, the interviewer asks the child, "Why do you think the boy (or girl) did (whatever the child did)?". For example, the child is asked, "Why do you think you got hit with the ball?". Interviewers record the child's answer verbatim. Intentions are coded as hostile or nonhostile.

Children are asked to name as many different solutions as they can for solving the problem presented in the vignette. For example, "You really do not want to get hit with the ball again. What could you do so you wouldn't get hit with the ball again?". Children are encouraged to give as many solutions as they can, up to six solutions. If a child persists with the same solution (e.g., tell the teacher and tell the principal), the interviewer asks the child, "What is a different thing you could do." Each solution is coded into one of five types: assertive, aggressive, passive/withdrawn, appeal to authority, and other ineffectual.

After children generate solutions to all six vignettes, each vignette is presented a second time, and children are asked to indicate their outcome expectancies for each of the following behavioral strategies in the depicted situation: assertive, aggressive, appeal to authority, and passive. For each vignette,
the child is presented with a solution representing each of the four solution types and is asked to imagine carrying out that solution. (e.g., "Now, think about asking the boy who threw the ball why he hit you and telling him to be more careful"). As a check on the categorization of the behavioral strategies, two doctoral students classified each strategy according to the type of strategy, with 100% agreement.

For each presented solution, the child is asked to indicate his or her expectancy that he or she would achieve the instrumental goal (instrumental outcome expectancy), that the other child would like him more or less (relational outcome expectancy), and that the other child in the story would feel bad (retaliatory outcome expectancy). For example, a boy's instrumental outcome expectancy for a assertive solution is assessed by asking him "If you ask the boy why he hit you and asked him to be more careful, which one is more likely to happen: Would you get hit with the ball again or not get hit with the ball again?". After the child indicates which outcome is more likely, he or she is asked "How sure are you that (the selected outcome would occur)?". For example, "How sure are you that you (would/would not) get hit with the ball again? A child receives an outcome expectancy score ranging from 1 to 6 (i.e., real sure I would get hit with the ball again to real sure I would not get hit with the ball again) for each of the three types of outcomes (instrumental, relational, and retaliatory) for each of the four solution types (assertive, aggressive, passive, and appeal to authority) for each vignette.

To assess self-efficacy for different types of solutions, the interviewer asks the child how hard it would be to carry out each of the four solution types for each vignette. For example, "How hard would it be for you to ask the boy who threw the ball why he hit you and ask him to be more careful?" Children are asked to point to one of four response options: VERY HARD, hard, easy, and VERY EASY.

Vignettes were randomly assigned to one of two forms with three peer provocation, two entry, and one friendship vignette per form. Within each form, vignettes were randomly assigned so that there were no two provocation vignettes presented one after the other. Within each vignette, the four possible solutions were counterbalanced so that each child is given an equal number of assertive, aggressive, appeal to authority, or passive responses in each ordinal position.

The following scores are computed: number of hostile attributions in provocation vignettes; number of solutions in provocation, entry, and friendship vignettes and across all vignettes; percentage of solutions that are aggressive in provocation and entry vignettes and across provocation and entry vignettes (no aggressive solutions were generated in the friendship vignette); instrumental, relationship, and retaliatory outcome expectancies for each type of solution by type of vignette and across all vignettes, and self-efficacy for each solution type.
across all vignettes.

Results of Validation Test

Preliminary pilot testing of the interview involved administration of the interview to 25 nonaggressive and 50 aggressive second and third grade children referred for an intervention for aggression. The aggressive children scored above the 84th percentile on the aggressive scale of the School Behavior Checklist (Miller, 1977), and nonaggressive children scored below the 50th percentile. Nonaggressive children were similar to the aggressive children in gender, ethnicity, and grade. Children were randomly assigned form A or form B. Inter-rater agreement (based on a randomly selected subset of 20 interviews) was 97% for classifying children's attributions and 94% for classifying children's solutions.

Test-retest across the two forms, over 1 week, based on 10 children not included in this study but of similar ages and gender was .50 for number of hostile attributions, .80 for number of solutions in provocation situations, and .93 for number of solutions in entry situations.

Group differences were investigated with analysis of covariance, using a measure of reading achievement as the covariate. Aggressive and non-aggressive children differed significantly on the percentage of solutions that were aggressive $F(1,72)=5.0$, $p<.05$; on the number of first solutions that were aggressive $F(1,72)=4.21$, $p<.05$; and on the total solutions that were aggressive $F(1,72)=5.0$, $p<.05$. When group differences in different types of vignettes were examined (entry, friendship, and provocation), the number of aggressive solutions differed only in entry situations $F(1,72)=5.04$, $p<.05$. In entry situations, aggressive children also generated fewer competent solutions $F(1,72)=7.36$, $p<.01$. Group differences were also found in the number of hostile attributions $F(1,72)=4.88$, $p<.05$. No group differences were found in outcome expectancies or self-efficacy for different types of solutions.

Additional evidence of validity is provided by the finding that, for those aggressive children provided a problem-solving intervention, improvement from pretreatment to posttreatment on the SCAP mediated behavioral improvement, based on teachers' ratings. The intervention study employed random assignment of 51 aggressive children to problem solving skills training or teacher consultation (Hughes, Grossman, & Hart, 1993). Multiple regression analyses found that improvement from pretreatment to posttreatment on the SCAP for the 23 children receiving problem solving skills training predicted improvement from pretreatment to posttreatment on teachers' ratings of aggression on the School Behavior Checklist (Miller, 1977), ($R = .62$, $p = .03$). Improvement on the SCAP did not predict behavioral improvement for children assigned to the teacher consultation condition. Thus, the SCAP is sensitive to social-cognitive improvements that are related to behavioral change.
subsequent to a problem-solving skills intervention.

Discussion

Based on these preliminary results, the SCAP was revised to eliminate vignettes with poor group discrimination, resulting in a single form with 8 vignettes. The outcome expectancy questions were simplified. Validation analyses are currently on-going and will be available in Fall, 1994.

References


