

CONVERSATIONAL SKILLS FOR AUTISTIC ADOLESCENTS: AN AUTISTIC PEER AS PROMPTER

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In this study, an autistic youth served as peer prompter for three other autistic adolescents. The peer prompter encouraged the other boys to talk about sports, a topic frequently discussed by typical teenagers. A multiple-baseline design across participants was used to assess the effectiveness of the peer-prompting procedure. During baseline, the youth rarely talked about sports, although all three had previously completed a sports-appreciation class and had displayed large pre-to-post gains on a paper-and-pencil test. During intervention, when a peer prompted sports discussions, all three youth engaged in much more sports-related conversation. Generalization measures indicated that: (1) the youth engaged in sports discussions in groups, as well as in the dyads that characterized the training situation; (2) they talked about sports in a setting other than the training setting; (3) they discussed sports with their peers when an unfamiliar teacher was present; and (4) they continued to discuss sports when training tapes and behavioral contracts between the teacher and the peer prompter were withdrawn. Previously, it has been common to use nonhandicapped or less-handicapped peers as tutors; this study demonstrates that an autistic youth may also effectively serve as a prompter who assists his schoolmates in acquiring conversational skills that contribute to their normalization.

Although autistic youth may acquire complex expressive language skills, such as asking (Twardosz & Baer, 1973) and answering questions (Risley & Wolf, 1967), using simple and compound sentences (Charlop, Schreibman, & Thibodeau, 1985; Lutzker & Sherman, 1974; Stevens-Long & Rasmussen, 1974), using yes/no responses (Neef, Walters, & Egel, 1984), using prepositions (McGee, Krantz, & McClannahan, 1985), describing temporally-remote events (Krantz, Zalsenski, Hall, Fenske, & McClannahan, 1981), and using positive and negative assertions (McGee, Krantz, & McClannahan, 1984), many youngsters do not display these skills in conversation. Thus, helping autistic children acquire peer-interaction skills has remained a difficult problem. Although some children display their expressive language skills for significant adults in their environment, they often remain virtually nonsocial vis-à-vis one another. This is probably not surprising, since many social-skills development programs feature teacher-child or parent-child interactions, and children often fail to generalize from interactions with adults to interactions with other youngsters.

In the present investigation, it was hypothesized that this problem might be circumvented by using an autistic peer, rather than an adult teacher or therapist, to prompt peer conversations. Previous research has demonstrated the effectiveness of using peers as behavior-change agents for normal children (Elliot & Vasta, 1970; Hartup & Coates, 1967), for retarded children (Snyder, Apolloni & Cooke, 1977; Apolloni, Cooke & Cooke, 1976), and for autistic children (Ragland, Kerr & Strain, 1978; Strain, 1977; Strain, Kerr & Ragland, 1979; and Strain, Shores & Timm, 1977). Studies with autistic children as subjects have usually employed nonhandicapped or less-handicapped children to increase the social repertoires of their withdrawn peers (Odom & Strain, 1986; Ragland et al., 1978; Shafer, Egel, & Neef, 1984), but older autistic children and adolescents with severe behavior problems may not always have opportunities for interaction with typical children. Thus, the primary purposes of the present study were: (1) to evaluate the effectiveness of an autistic peer prompter in increasing the conversational language of other verbal autistic youth; (2) to determine whether any observed increases in conversation would persist in a different setting, with a different teacher, and without the continued intervention of the peer prompter; and (3) to examine whether such conversation would generalize from dyads to a small group.

METHOD

Participants

This research was conducted at the Princeton Child Development Institute, a private, non-profit education and treatment program for autistic children and youth. The three target students and the peer prompter were adolescent males who were enrolled in the Institute's day education program, where they attended classes from 9:00 to 2:30 PM, five days per week. All four youth had been diagnosed autistic by outside agencies, and all met the diagnostic criteria established by the National Society for Autistic Children (Ritvo & Freeman, 1977).

When first enrolled in the school program at age 9, Student 1 had no academic skills and his presenting problems included aggression toward others (e.g., hitting, kicking, and hair pulling), body rocking and twirling, posturing and facial grimacing, self-injurious head banging, destruction of instructional materials and furnishings, and noncontextual laughter. He had frequent toileting accidents and was unable to follow simple directions. His expressive language was almost entirely confined to delayed echolalia that was based on the content of selected television programs. Due to the severity of his behavioral deficits and excesses, he was placed at Family Focus, the Institute's Teaching-Family Model group home for autistic youth, at age 12.

At the time of this investigation, Student 1 was 15 years of age. On the Peabody Picture Vocabulary Test, administered within the preceding 12-month period, he achieved a Mental Age Score of 4.1. He was placed in a first-grade reading curriculum and was learning addition facts to five; he had mastered the manuscript alphabet and could write six cursive letters. Rocking, body twirling, and self injury had been effectively treated. Although aggression was seldom observed in the treatment setting, it continued to be exhibited in nontreatment environments. Problem behaviors that continued to be observed at this time included vocal noise, noncontextual laughter, bizarre posturing and facial grimacing, and destructive behaviors. Student 1 had acquired some functional expressive language, but also continued to display delayed echolalia and noncontextual speech.

When Student 2 entered the Institute's educational program at age 9, he frequently exhibited tantrums; vocal noise; noncon-

textual laughing and crying; finger play; and stereotyped, robot-like ambulation. He had primary-level reading, handwriting, and arithmetic skills; his placement in the Distar Language curriculum targeted acquisition of concepts such as “all,” “none,” and “some.” Although he entered the program with some appropriate expressive language, he often displayed noncontextual and perseverative speech.

Student 2 was 11 years of age at the time of the study, and had been in treatment at the Institute for four years. His Mental Age Score on the PPVT was 6.2. At the outset of this investigation, he was reading at grade-level 2.5 and learning to do double-digit multiplication; he had mastered all of the lower-case cursive letters and was continuing to work on upper-case letters. Tantrums and noncontextual laughing and crying were no longer observed in the treatment setting, but were ongoing issues in parent training and home programming. In the treatment setting, noncontextual speech and stereotyped motor behaviors continued to be observed.

Student 3 entered the school program at age 8, at which time he displayed very high levels of hitting and kicking other people. Prior to intervention, he spent a large portion of each day running from one area to another and engaging in stereotyped tapping or pounding on walls, tables, chairs, instructional materials, and similar objects. He also presented a variety of eating problems: he drank only with small, repetitive sips; he tantrumed if the amounts in some food containers fell above or below certain levels, or if he was not permitted to eat preferred foods in a specific order; and he refused many foods. He also engaged in ritualistic behaviors, such as arranging the items on a table in a particular order, and tantrumed if these arrangements were disturbed. At program entry, he did not have functional reading skills, although he perseveratively printed alphabet letters and numerals. He had acquired some arithmetic facts and had learned to spell some words; his parents reported that Sesame Street was a part of his ritualistic behavior at home, and that he became disruptive if not permitted to see this program. Although he had some functional speech, delayed echolalia accounted for most of his verbal productions, and he often perseverated on words or phrases.

At the time of the study, Student 3 was 13 years old; he had been enrolled in the school program for 6.5 years and had resided at Family Focus, the Institute’s family-style, community-based group home for one year. On the most recent administration of the PPVT, his Mental Age Score was 4.8. He was reading at grade-

level 2.5, had acquired cursive writing skills, and could do two- and three-digit addition and subtraction and add coins to one dollar. Although he had acquired more expressive language, he also continued to engage in noncontextual and perseverative speech. During the time of this study, observational data documented occurrences of vocal noise, noncontextual laughter, stereotyped motor behaviors, and aggression (hitting, kicking, and throwing objects at others).

At age 13, the peer prompter was accepted into the education program and the group home. When transferred to the Institute from a county mental hospital, he had no academic skills, and his prior institutionalization had been for anorexia. His presenting problems included food refusals, aggression (hitting, kicking, scratching, and biting), running away, and inappropriate laughing and screaming. He exhibited some contextual expressive speech, but also displayed noncontextual and repetitive verbalizations.

At 16 years of age, when this study began, the peer prompter was demonstrating reading skills at grade-level 2.5, he had learned to write 7 cursive letters, and he could add coins to one dollar. Food refusals had been successfully treated and his weight was within normal range for his height. On the most recent PPVT, his Mental Age Score was 6.2. His expressive language capabilities had increased, but noncontextual laughing and screaming continued to be observed episodically. Aggression was severe but infrequent and was never directed toward peers.

Setting

Baseline, peer prompting, and *same classroom* generalization conditions occurred in a 2.1 × 4.2 m classroom with free-standing bookcases. The three students and the peer prompter were seated at four desks, which were arranged in a circle. Materials included a portable Sony audiotape recorder, three audiotaped sports presentations, four primary-typed copies of each taped sports presentation, and three cue sheets listing questions that could be used by the peer prompter for each sports presentation (e.g., “Do you like baseball”? “What’s your favorite baseball team”?). The sports-related audiotapes reviewed previously taught content about baseball, basketball, and football (e.g., “Lots of people like the Princeton University basketball team. The team is called the Tigers. When the Tigers play home games, they play at Jadwin Gym.”).

Different classroom generalization sessions were conducted in a 3.5 × 4.3 m classroom on a different level, with a different color scheme, a single rectangular table, six chairs, and built-in shelves.

Preinvestigation Assessment

Prior to the study, all three students and the peer prompter were enrolled in a sports appreciation class. This session was designed to teach some facts about baseball, basketball, and football—common discussion topics among nonhandicapped adolescents. The information taught included names of local teams, names of some well-known athletes in each sport, basic rules, positions (e.g., quarterback), and scoring conventions relevant to each sport. On a paper-and-pencil pretest administered before the class began, all three participants and the peer prompter scored below 30%; on posttest, all four youths met or exceeded the criterion of 80% correct. This investigation began immediately after all four youths met the preassessment criterion.

Dependent Variable

Sports conversation was defined as expressive language about organized team sports including, but not limited to baseball, basketball, and football. Also included as sports conversation was any comment, question, or statement that related to a preceding sports comment made by another youth. For example, the peer prompter might say, “I like to play basketball,” and a youth might respond with “I do, too.” The latter response was scored as sports conversation even though it included no specific mention of sports or sports terminology. Not included as sports conversation was talk about exercises in gym class, discussion of individual recreational activities such as swimming, or discussion of nonteam sports.

Observation Procedures

A time-sampling procedure (occurrence–nonoccurrence in 10-sec intervals) was used to score the presence or absence of sports conversation in each of the thirty 10-sec intervals that constituted

the 5-min observation periods. During each session, each student-peer prompter dyad was observed for 5 min. The order in which dyads were observed was systematically rotated across sessions.

Independent observers were seated in adjacent corners of the classroom and each was approximately 2 m from the nearest student. At the end of each observation session, the percentage of intervals scored for sports conversation was calculated for each student, as well as for the peer prompter.

Experimental Design and Procedures

This study employed a multiple-baseline design across students. Following baseline, each of the three youths successively entered the peer-prompting condition. Prompting continued for each preceding student as the next youth was introduced to the peer-prompting condition.

Baseline

At the beginning of each session, the three participants and the peer prompter were seated in the classroom, given primary-typed copies of a sports presentation, and instructed to silently read along while listening to one of the three 3-min audiotapes about baseball, basketball, and football. Each audiotaped presentation followed a standard format, and the three sports tapes were presented in a preestablished order so that each tape was played every third session.

At the conclusion of the taped presentation, two of the youth were invited to go to another classroom to do independent seat work, and the remaining participant was seated opposite the peer prompter. The boys in this dyad were told that the teacher “had some work to do” and that they should “sit and talk for a few minutes.” A 5-min observation period followed; during this time, independent observers scored the occurrence–nonoccurrence of the dependent variable for the target youth and the peer prompter. Subsequently, identical procedures were followed for the two remaining student-peer prompter dyads. During baseline, no training or prompting was provided by either the teacher or the peer prompter.

Peer Prompting

Following baseline, three 15-min role play sessions were used to teach the peer prompter how to prompt participants to engage in sports conversations. In these sessions, the peer prompter was taught five questions that were applicable to all three sports, e.g., “Do you like (baseball/football/basketball)”?”; “How many players are on a (baseball/football/basketball) team”?”; “What’s your favorite (baseball/football/basketball) team”?”. The peer prompter also rehearsed several “all-purpose” words and phrases that could be used to prompt conversation (e.g., “Really”?” and “Tell me more”!). The peer prompter was instructed to talk about sports with the student(s) no longer in baseline and to encourage the student(s) to discuss sports during the sessions. He was also instructed *not* to talk to certain students (i.e., to students still in baseline) about sports until the teacher told him to do so. A behavioral contract between the peer prompter and the teacher delineated how the former could earn special rewards (preferred snacks and extra time to listen to favorite records) by reliably prompting specified youth and refraining from prompting others.

Procedures used during the peer-prompting condition were identical to those followed during baseline, with the single exception that the peer prompter was instructed to engage in sports conversation with each successive youth who left baseline. Although the peer prompter was trained and rewarded via his behavioral contract for talking about sports and for prompting his peers to talk about sports, the three target youths were unaware of the peer prompter’s training and rewards, and they received no special training or rewards throughout this investigation.

Group

During baseline data collection on all three student-peer prompter dyads, data were also obtained during five sessions (conducted at a different time of day) when all four youths were together in a group. In these sessions, the youths followed a primary-typed script while listening to one of the three taped sports presentations and then continued to sit together for 5 min, while independent observers scored the occurrence–nonoccurrence of sports conversation in 10-sec intervals, using the same response definition and measurement procedures described above. After all

youths had entered the peer-prompting condition (between Days 47 and 48), data were again collected in five group sessions attended by all four youths. This was done to assess whether sports conversation would generalize from dyads to a small-group situation. Group sessions were conducted in the same classroom used by dyads. No special training was provided to the three target youth, and the peer prompter received no special preparation for the group sessions and was not rewarded for soliciting sports conversation.

Different Classroom, Same Teacher

On Day 48, peer-prompting procedures were implemented as previously described, with the exception that the teacher, students, and peer prompter entered a difficult classroom, where the youths listened to a sports tape and then formed dyads as usual. Since the new classroom was equipped with a one-way mirror, data were collected by independent observers who remained outside the room.

Different Classroom, Different Teacher

On day 49, the new classroom was again used; in addition, a new teacher joined the youths for this session. The new teacher, like the familiar teacher, provided written copies of a sports presentation, played a sports tape, and then told the boys in each of the three dyads that he “had some work to do” and that they could “sit and talk for a few minutes.” As on Day 48, data were collected by independent observers who remained outside the classroom and observed through the one-way mirror. On Days 50 and 51, the youths returned to the standard peer-prompting situation in the familiar classroom with the familiar teacher.

New Dyads

On the next school day after Day 51, Students 1, 2, and 3 met in the familiar classroom with the familiar teacher and as usual received written sports presentations and listened to one of the sports tapes. On this day, however, the peer prompter was not

present and after listening to the tape of the youths were assigned to new dyads as follows: (a) Student 1 and Student 2, (b) Student 1 and Student 3, and (c) Student 2 and Student 3. As before, the teacher dismissed the youths not being observed and told the boys in the dyad that he “had some work to do” and that they could “sit and talk for a few minutes.” The standard response definition and measurement procedures were used to assess the youth’s sports conversation. The formation of these new dyads resulted in each student being observed for two 5-min observation periods.

Different Sport

Four weeks elapsed between Day 51 and Day 52; during this period, the teacher provided conventional classroom instruction on a new sport, soccer. All four youths made large pre- to posttest gains on a paper-and-pencil test of their soccer knowledge, achieving 80% correct or better on the posttest. Subsequently, the original student-peer prompter dyads were observed in the familiar classroom and in the presence of the familiar teacher. During these sessions (Days 52–54), however, the youths did not hear a sports audiotape and did not receive copies of sports presentations, and the teacher provided no special instruction to the peer prompter and had no behavioral contract with him.

Interobserver Agreement

Each 10-sec interval was scored as an agreement or disagreement and percentage interobserver agreement was calculated according to the formula: total number of agreements, divided by total number of agreements plus disagreements, multiplied by 100. Interobserver agreement on the peer prompter’s sports conversation was obtained on 30 occasions which were distributed across all dyads and across all conditions. Agreement on this independent variable ranged from 87 to 100% with a mean of 97%.

Reliability estimates of the three participants’ sports conversation during baseline and peer prompting were obtained on 28 occasions for Student 1, on 29 occasions for Student 2, and on 28 occasions for Student 3. Mean interobserver agreement was 97% for Student 1 (range = 87 to 100%), 98% for Student 2 (range = 87 to 100%), and 98% for Student 3 (range = 93 to 100%).

Interobserver agreement was also obtained on all five group sessions conducted during baseline and on two of the five group sessions that occurred between Days 47 and 48. Mean interobserver agreement on group sessions was 97%, with a range of 83 to 100%.

Reliability estimates for Day 48 (different classroom, same teacher) yielded 97, 93, and 100% agreement for Students 1, 2, and 3, respectively. Agreement for Day 49 (different classroom, different teacher) was 93, 97, and 97%, respectively.

When students were assigned to new dyads, interobserver agreement on Student 1's sports conversation was 97% when he interacted with Student 2 and 100% when he interacted with Student 3. For Student 2, agreement was 90% when he participated in a dyad with Student 1, and 93% when he was in a dyad with Student 3. As for Student 3, agreement was 93% on his sports conversation with Student 1 as well as with Student 2. Finally, interobserver agreement was obtained for all three youths on Days 52 to 54, following the training of a new sport (soccer). Mean agreement for Student 1 was 100%; for Student 2, 90%; and for Student 3, 91%.

RESULTS

Peer Prompter

Table I displays the range and mean percent of intervals scored for sports conversation on the part of the peer prompter when participating in dyads with each of the three students. The table indicates that in baseline, the peer prompter engaged in sports conversation during an average of 0 to 2% of data-collection intervals. In the peer-prompting condition, however, he was scored as engaging in sports conversation during an average of 64 to 74% of 10-sec intervals. Thus, during both baseline and prompting conditions, the peer prompter complied with the teacher's instructions to talk about sports only with the youth being trained at that time and to refrain from talking about sports with the youth still in baseline.

Students

Figure 1 shows that during baseline, the students rarely talked about sports; when peer prompting was available, however, all

Table I. Range and Mean Percentages of Intervals Scored for Sports Conversation by the Peer Prompter.

Condition	Percentage of Intervals	
	Range	Mean
Baseline		
Peer Prompter to:		
Student 1	0	0
Student 2	0-20	2
Student 3	0-17	1
Peer Prompting		
Peer Prompter to:		
Student 1	27-97	64
Student 2	33-90	74
Student 3	50-87	68

three youths engaged in much more sports conversation. Student 1 never talked about sports during baseline, but during peer prompting a mean of 63% of intervals was scored for sports conversation. During baseline, Student 2's percent of intervals scored for sports conversation ranged from 0 to 27%, with a mean of 4%. In the prompting condition, however, he immediately achieved more than 60% of intervals scored for sports conversation and, with the exception of Days 26 and 36, remained at or above that level throughout the peer-prompting condition. When Student 3 entered the peer-prompting condition he, too, rapidly increased his sports conversation from a baseline mean of less than 1% of intervals to a mean of 69% during the prompting condition.

Group Sports Conversation

Measures of group sports conversation were obtained during baseline as well as during the prompting condition (five sessions between Days 47 and 48). It may be recalled that during these sessions, the three participants and the peer prompter remained together after hearing the audiotaped sports presentations, rather than reconvening in dyads. Table II presents the ranges and mean percentages of intervals scored for sports conversation in the group during baseline (means = 0 to 3%) and after peer prompting (means = 36 to 55%).

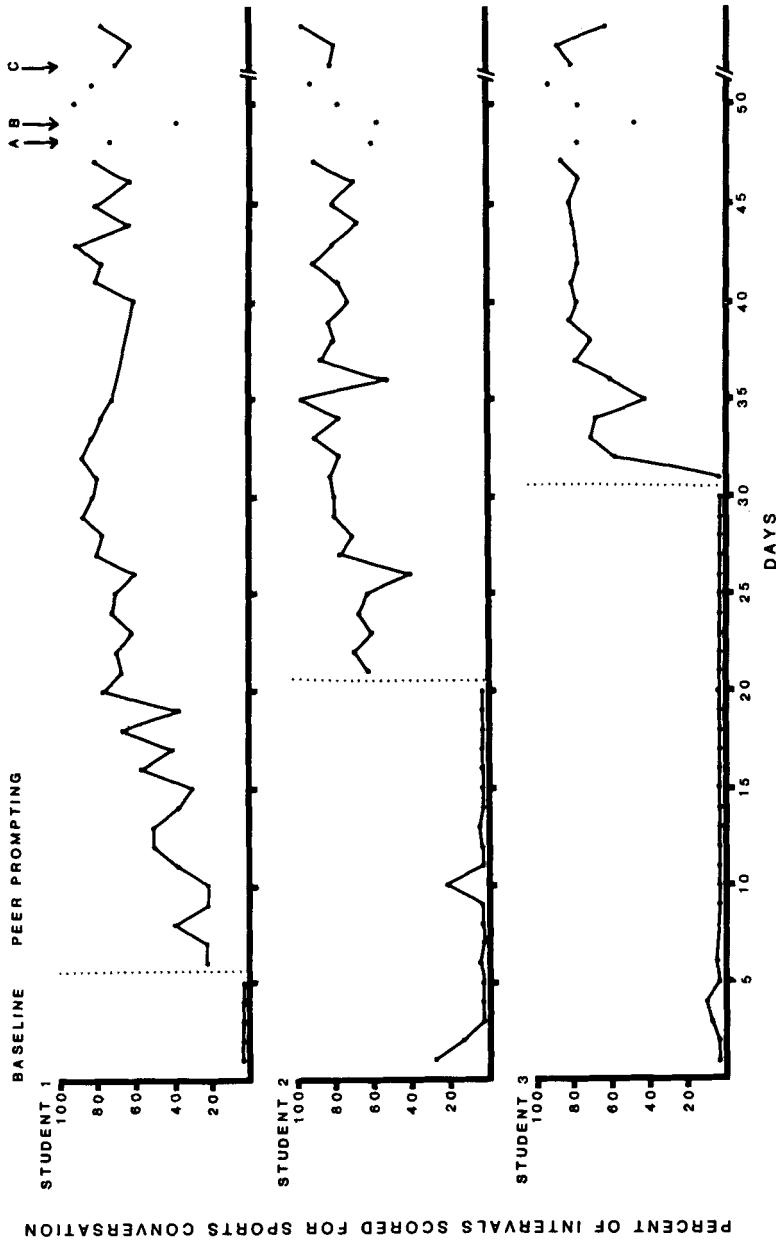


Fig. 1. Percentage of 10-sec intervals scored for sports conversation for Students 1, 2, and 3 during baseline, peer prompting, and generalization. A = different classroom, same teacher; B = different classroom, different teacher; and C = maintenance, with a different sport, no audiotape or written sports presentation, and no instruction or behavioral contract for the peer prompter.

Table II. Range and Mean Percentages of Intervals Scored for Sports Conversation by Students While They Participated in a Group.

Condition	Percentage of Intervals	
	Range	Mean
During Baseline (Five Group Sessions)		
Student 1	0-10	3
Student 2	0- 7	3
Student 3	0	0
After Peer Prompting (Five Group Sessions)		
Student 1	33-40	36
Student 2	33-77	55
Student 3	37-43	40

Different Classroom, Same Teacher

On Day 48, when the familiar teacher, the three participants, and the peer prompter occupied a different classroom, all three target youths continued to engage in sports conversation at levels well above baseline (see Fig. 1). Student 1 participated in sports conversation during 73% of data-collection intervals; Student 2 was scored as engaging in sports conversation in 60% of the 10-sec intervals; and Student 3 exhibited sports talk in 77% of intervals.

Different Classroom, Different Teacher

On Day 49, the four youths remained in the unfamiliar classroom and were joined by an unfamiliar teacher. During this session, 37, 57, and 47% of intervals were scored for sports conversation for Students 1, 2, and 3, respectively. Although the presence of a different teacher did appear to result in some decrements in sports conversation, all three youths continued to discuss sports at well-above-baseline levels (Fig. 1). When the students returned to the familiar classroom and teacher on Day 50, all three returned to the levels of sports conversation that had characterized the peer-prompting condition.

Table III. Percentage of Intervals Scored for Sports Conversation When Students Were Assigned to New Dyads.

New Dyads	Percentage of Intervals
Student 1 to:	
Student 2	93
Student 3	43
Student 2 to:	
Student 1	90
Student 3	70
Student 3 to:	
Student 1	17
Student 2	60

New Dyads

Table III displays the percentages of intervals scored for sports conversation when the peer prompter was absent and new dyads were created (between Days 51 and 52). It may be noted that Students 1 and 2 exhibited more sports conversation when interacting with one another than when interacting with Student 3.

Different Sport

One month later, after being trained on a new sport (soccer), the youths again entered dyads with the peer prompter (Days 52–54, Fig. 1). In these sessions, they did not receive sports presentations or hear a sports tape, and the peer prompter was given no special instructions, nor was he offered a behavioral contract for providing conversational prompts. Under these circumstances, Student 1 engaged in sports conversation during an average of 70% of intervals (range = 63 to 77%), Student 2 participated in sports discussions in a mean of 87% of intervals (range = 80 to 97%), and Student 3 was observed to exhibit sports talk in a mean of 75% of intervals (range = 63 to 83%).

DISCUSSION

This investigation demonstrated that: (1) autistic youths who had achieved paper-and-pencil mastery of subject matter could be

taught to include such information in their social interaction repertoires; (2) that the youths' conversational language increased when an autistic peer served as prompter; (3) that the students' newly acquired sports conversation skills, initially displayed in dyads, generalized to group conversations, to a different classroom and teacher, and to different dyads; and (4) that these skills maintained over one month.

Some time ago, Stokes and Baer (1977) observed that "the use of peers as the common stimulus has much to recommend it as a practical and natural technique" for programming generalization; the current study supports this proposal. Using an autistic peer as a conversation prompter produced immediate, lasting, and generalizable effects on the students' peer interactions, while bypassing the traditional teacher-student paradigm that often does not promote generalization of social skills from adults to other youth. In this regard, it is noteworthy that some of the students' lowest levels of sports conversation during peer prompting happened in the different-teacher probe, suggesting that even though the familiar teacher was merely present, but not a participant in the youth's conversation, he nevertheless represented an important stimulus control dimension.

Egel, Richman, and Button (1982), in their discussion of the integration of autistic and normal children, have noted the possibility that not all autistic youngsters can benefit from the modeling provided by normal peers. Anecdotally, it may be noted that the participants in the present study were viewed by treatment personnel as not yet ready to transition to normal settings. Student 1 and the peer prompter had regular contacts with nonhandicapped adolescents by virtue of their participation in a church youth group; when they attended they were accompanied by a group home teaching parent. Observation of these social encounters suggested that, in this community setting, they were confronted with a previously established and cohesive friendship network, that they ignored or punished many social approaches from their normal peers, and that they further withdrew or became disruptive when their unskillful attempts to participate did not meet with success (cf. Hendrickson, Strain, Tremblay, & Shores, 1982).

Student 2, who lived at home with his natural parents and siblings, had few opportunities to enter community settings for normal adolescents. It appeared unlikely that he could be successful in such contexts, since parent training and home intervention

programs continued to focus on noncontextual laughing, crying, and tantrums throughout the course of this investigation.

Student 3 was not perceived by treatment personnel as ready for even the supervised participation with nonhandicapped adolescents available to Student 1 and the peer prompter, due to the frequency of his disruptive behavior and aggression. It is interesting to note that the data on new dyads (Table III) showed that his dyads were characterized by less sports conversation than other dyads.

At the outset of this investigation, all three participants exhibited low-level but ongoing echolalic, perseverative, aggressive, or otherwise noncontextual speech. Informal data collected by the teacher during the course of the study indicated that inappropriate verbalizations on the part of Students 1 and 2 decreased as they acquired sports conversation skills; Student 3's levels of inappropriate speech remained unchanged.

The magnitude and rapidity of behavior change from baseline to peer prompting conditions reflects the fact that this intervention strategy constituted a response-facilitation program rather than a response-acquisition program. The youth's prebaseline paper-and-pencil test scores indicated that they had already acquired some sports knowledge, although such information did not appear in conversation until an effective prompt system was introduced. It is unlikely that comparable effects would have been achieved using the peer prompter for a content area not previously trained. In this investigation, the peer did not serve primarily as a model, but as an active prompter of social interaction.

It should be noted that most of the boys' interactions were characterized by phrases and sentences rather than paragraphic speech (e.g., "Do you like to watch football on TV"?, "Yes, I like to watch football," "I played basketball," and "How many people are on a soccer team"?), and much of the content of conversation was identical to the information presented in the sports appreciation classes and subsequently, on the sports audiotapes. However, peer prompting created opportunities for these language-delayed youths to practice social exchanges about socially acceptable topics.

Because some autistic adolescents' severe behavior problems may, at least temporarily, require residential placements and/or prevent their integration with nonhandicapped or less-handicapped peers, the use of an autistic youth as peer prompter represents

an important element in treatment programming. Use of an autistic peer as a conversation prompter can help youths develop social interaction repertoires that may facilitate their later social participation in less-restrictive settings.

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