# Identifying and Assessing Community-based Social Behavior of Adolescents and Young Adults with EBD

MICHAEL BULLIS, BRUCE BULL, PATTIE JOHNSON,
AND BRIAN JOHNSON

I N AN EARLIER ARTICLE (BULLIS, Nishioka-Evans, Fredericks, & Davis, 1993), the authors described development and preliminary psychometric properties of two measures: a knowledge test of social skills and a performance rating scale, designed specifically to appraise the job-related social skills of adolescents and young adults with emotional and behavioral disorders (EBD). These measures were developed by following the behavioral analytic model of test development (Goldfried & D'Zurilla, 1969). Overall, they presented acceptable psychometric properties and discriminated between persons with and without EBD. This article describes a second research effort, in which a similar approach was used to identify social interactions and behaviors relevant to adolescents and young adults in *community-based living and social settings* (i.e., excluding the work place) and then to develop measures of those specific social skills (Bullis, 1989; Bullis, Bull, Johnson, & Johnson, 1994). These measures provide data on social skills knowledge, performance, and antisocial behaviors exhibited by adolescents and young adults (ages 15 to 25) with EBD in community living and social situations with peers and adults.

As a consequence of the "Transition Initiative" (Will, 1984), attention has been directed to adolescents with disabilities

Adolescents and young adults (ages 15 to 25) with emotional and behavioral disorders (EBD) experience difficulties living in society in large part because of social skill deficits in interacting with peers and adults. Our research first identified and described community-based social behaviors for persons with EBD by following the behavioral analytic model, then used this information to develop measures of these behaviors. Three measures were developed: male and female forms of the Test of Community-based Social Skill Knowledge (TCSK), the Scale of Community-based Social Skill Performance (CBSP), and Behaviors That Are Undesirable for Living and Leisure in Society (BULLIS). In the TCSK, the young person is presented with a number of social interactions between peers or adults and four alternative responses of varying effectiveness to each interaction. The young person then states which alternative is most like what he or she would do if involved in such a situation. The CBSP is a behavior-rating scale completed by a person knowledgeable about the individual's social skill performance in community placements. The BULLIS is a self-report measure of antisocial behaviors that is administered individually. The measures were field-tested, and psychometric analyses were conducted. These results generally were acceptable, demonstrating adequate reliabilities and discriminant power to differentiate between persons with and without EBD.

and the problems and issues surrounding their entry into adult life (e.g., Clark & Knowlton, 1987). This national initiative recognizes that transition programs must be established in order to prepare these students to enter society successfully. Recent research (Edgar, 1988; Halpern, 1985) recommends, and amendments to P.L. 94-142 and the Rehabilitation Act require, that instruction be provided in vocational and community living skills in order to foster the individual's integration into the community. At this point, most professional attention concerning adolescents and young adults with EBD has focused primarily on the vocational area. For example, several projects have exam-

ined the post-schoolwork experiences of persons with EBD (Edgar & Levine, 1987; Valdes, Williamson, & Wagner, 1990; Wagner & Shaver, 1989), and vocationally oriented model demonstration projects have been conducted specifically for this population (Bullis et al., in press; Cook, Solomon, & Mock, 1988; Fredericks, Bullis, Nishioka-Evans, & Lehman, 1993).

An aspect of the Transition Initiative that has received virtually no attention relates to the community integration and community-based social behaviors of adolescents and young adults with EBD (Bull, Bullis, & Johnson, 1991). It is well documented that persons with EBD expe-

rience difficulties living successfully in the community, such as marital difficulties, substance abuse, depression, violence, and arrests in excess of national norms and peers without histories of EBD (Huesmann, Eron, Lefkowitz, & Walder, 1984; Janes & Hesselbrock, 1978; Janes, Hesselbrock, Myers, & Penniman, 1979; Mitchell & Rosa, 1981; Parker & Asher, 1987; Quay, 1986; Robins, 1978, 1979, 1981). Although a variety of factors (e.g., parental support, socioeconomic status, school achievement) contribute to community adjustment success or failure, it is generally agreed that perhaps the most important variable for these persons' adjustment in society is their social skills. These young people often do not exhibit social skills related to the resolution of social interactions and problems they encounter, and they do demonstrate various antisocial behaviors (Goldstein & Glick, 1987; Goldstein, Glick, Irwin, Pask-McCartney, & Rubama, 1989; Kazdin, 1987a, 1987b). By definition, students with EBD display social behaviors that are neither on par with those of their peers without disabilities nor with the general rules and mores of society. Thus, it is not surprising that after moving from the school to the community, these persons often experience problems interacting and behaving appropriately, leading to actions that can have wide-ranging consequences for themselves and/or others (e.g., criminal activities).

Unfortunately, there is very little research specific to the community-based social skills of this population (Bull et al., 1991; Bullis & Gaylord-Ross, 1991; Bullis & Walker, in press; Quay & Werry, 1986). Notable exceptions include the careful development by McFall and his students of social skills assessment instruments for male adolescents (Freedman, Rosenthal, Donahoe, Schlundt, & McFall, 1978) and female adolescents (Gaffney & McFall, 1981) who had been adjudicated. These studies, however, were conducted in a specific locale in the U.S. Midwest and included relatively small numbers of participants. In the development of a widely used social skills training program for adolescents with learning and behavioral disorders (Hazel, Schumaker, Sherman, &

Sheldon-Wildgen, 1981), a variation of the behavioral analytic model (Goldfried & D'Zurilla, 1969) was followed to insure relevance of the program content to a broad audience. But clearly, more extensive efforts are necessary to define the social interactions and skills that persons with EBD need to succeed in community settings because this information carries critical implications for intervention efforts. Content specification is important, as social skills training must address priority skills in order to have maximum impact (Kazdin, 1985; Linehan, 1980; McFall, 1982, 1986). As Goldsmith and McFall (1975, pp. 51–52) noted:

> The content of a skill-training program is at least as critical to its ultimate success as the training methods it employs . . . if the response skills being taught do not offer valid solutions to the patient's life problems, then the program will fail regardless of the particular training methods used. Clearly, the efficacy of a training program's methods can never be assessed apart from an evaluation of the program's content; both of these, in turn, will depend upon the particular patients and target problems being treated.

Given the apparent need to identify and assess community-based social skills for persons with EBD, we have developed the *Community-based Social Behavior Assessment Battery* (CBSB). CBSB measures are designed specifically for adolescents and young adults ages 15 to 25 with EBD, and they address actual social behaviors experienced by these persons in community settings.

## DEVELOPMENT OF THE INSTRUMENTS

The behavioral analytic model (Goldfried & D'Zurilla, 1969) assumes that social behavior is defined by the context in which it occurs, and it focuses on interactions between individuals from a target population within a specific target setting(s). Because individuals may display varying patterns of social skills across different situations, it is necessary to identify specific interactions that may be problematic for the target population. As employed in this study, the behavioral

analytic model consisted of four developmental phases. In the first phase, Situational Analysis, we identified the specific social interactions that are experienced by and are problematic for members of the target population. In the next phase, Generation of Alternatives, possible solutions to the social interactions were generated by representatives of the target population. In Response Evaluation, expert judges evaluated response alternatives to each social interaction for effectiveness in resolving the interaction. The final phase was Development of the Measures, in which the content from the previous steps was used as the basis for the measures.

## Phase 1: Situational Analysis

The purpose of the Situational Analysis phase was to identify and describe the social interactions that were problematic for adolescents and young adults with EBD within social, community, and residential placements. Ultimately, these interactions composed the content pool from which items were selected for the measures. Social interactions that occurred in the workplace were *not* included because our earlier research addressed this area (Bullis et al., 1993). Although it was not the purpose of this project to examine social interactions within the school setting, as the project progressed it became clear that many social interactions that took place in community settings had their roots firmly within the school; therefore, some interactions that presented school-based components were included.

*Personal Interviews.* Because social interaction problems in community settings often are unseen and/or have a low frequency of occurrence, structured interviews were conducted to gather this information from three informant groups: adolescents and young adults with EBD, secondary/transition professionals, and current or past parents/guardians of persons with EBD. Because the goal was to identify social interactions that could be used for measures with broad applicability, the issue of social validity (Kazdin, 1977) was paramount. We wanted to know whether interactions identified

through interviews of persons in Oregon would be relevant to persons in other parts of the country. Thus, a national survey of transition programs for adolescents and young adults with EBD was conducted. These data were used, in conjunction with a content grouping process, which is described later in this section, to identify those interactions to be used in the subsequent research phases.

Interview protocols for the various groups consisted of social interaction areas identified through a review of the available research literature (Bull et al., 1991). These areas included social interactions with parents, siblings, roommates, police or store security, business people, authority figures, and peers. Interactions with peers included making friends, dating, resisting peer pressure, interacting in social situations, reacting to peers when an affront occurred or the individual was in a bad mood, conflicts over money, appearance, cars or transportation, drugs or alcohol, sexual relationships, lying, and stealing.

The structured interviews consisted of questions relating to each of these content areas. Specifically, each question was posed by a trained interviewer to an informant (young person with EBD, professional, or parent/guardian) in an individual, confidential interview. The interviewer asked informants to describe social problems that they either had experienced or saw others experience relative to that particular question. For example, in the protocol for persons with EBD, one question read, "What types of problems have you had getting along with your brother or sister (including step- or foster siblings)?" In the professional interview the parallel question was, "What types of problems do the students you have supervised have getting along with their brother or sister (including step- or foster siblings)?" These responses were recorded verbatim in the form of a short vignette. Informants were encouraged to describe multiple examples of social interactions relevant to each question. In no case were responses judged or comments made regarding the problems. If rephrasing of the response was necessary, the written form of the statement was read back to the individual, and affirmation

was sought that this statement accurately portrayed the interaction.

Three interviewers with experience in the interview process and EBD were hired and trained to administer the interview protocols. Two training sessions were held, one to critique and familiarize the staff with the interview forms, and a second to clarify and practice the interview process.

Four sites representing mainstream and residential school programs and rural and urban settings were used in this phase. Between 10 and 24 adolescents with EBD, three to four professionals at each site (e.g., teachers and residential service providers), and parent/guardians were recruited. Of the 59 adolescents with EBD, 43 were boys and 16 were girls. Fourteen professionals and three parents participated in the interviews. A fee was paid to all participants.

The protocols took 45 to 80 minutes to complete, and respondents typically provided one to five vignettes to each question. These vignettes were then edited by project staff to improve clarity, and a false name (of the same gender) was given to the main actor in each interaction. An example of the final form of these vignettes is presented in Figure 1.

From these interviews, lists of social interactions were compiled under each of the content areas comprising the interview questions. Additionally,

some vignettes from existing studies (e.g., Freedman et al., 1978; Gaffney & McFall, 1981) were included because they seemed appropriate and did not duplicate vignettes gathered in the interview process.

The first three authors of this article each individually reviewed the entire list of social interactions to identify nonsocial or otherwise inappropriate problems, as well as duplicates. To further reduce the number of social interactions in a manner that would assure accurate representation of the complete list, each vignette was classified according to Actors (those central persons involved in the interaction) and Content (the central issue of the interaction). For example, two social problems involving a person's use of money would be classified differently if one involved a parent and another involved a peer. In line with this decision, an Actor by Content matrix was created to code the vignettes. The interjudge agreement of the coding process was calculated for each of the two axes and for the two axes together; these results were Actor = .94, Content = .77, and Actor and Content = .74. This process resulted in the deletion of duplicate interactions and those interactions for which agreement could not be reached (in order to be retained, two of the three judges had to agree on the coding), leaving a pool of 247 vignettes.

---

When Sally moved into an apartment with her roommate, they reached an agreement that her roommate would smoke outside because Sally hated the smell. However, her roommate always had an excuse as to why she couldn't go outside. One day, Sally came home and found her roommate smoking inside again. In this situation, what should Sally say or do?

1. Ask the roommate again not to smoke inside and to please abide by their agreement.
2. Move out.
3. Tell the roommate in no uncertain terms that she will have to get a new roommate if this happens again.
4. Break the cigarettes up and throw them outside.
5. Agree to let the roommate smoke in the house.
6. Yell at her to get outside and smoke.
7. Call the roommate "lazy" and tell her to go outside.
8. Ignore the roommate and refuse to talk to her for a week, so she will get the idea that you are mad.

FIGURE 1. Example of situational analysis and generation of alternatives products.

*Survey.* To address the broad social validity (Kazdin, 1977) of these vignettes (i.e., to insure that they were germane to locales other than the area in which the interviews took place), we conducted a national survey of programs providing services to adolescents and young adults with EBD. In our earlier project (Bullis et al., 1993), a listing of 219 such programs representing 28 states and territories was established. Additionally, a listing of 32 secondary programs in Oregon was supplied by the state Department of Education, resulting in a total of 251 programs in the survey pool.

The 247 vignettes were divided into four questionnaires of roughly equivalent length. One form of the questionnaire was randomly assigned to be mailed to each of the programs. In each case, the individual in charge of instruction or training for adolescents and young adults with EBD at the particular program was requested to complete the questionnaire.

Each vignette was to be rated on two 4-point Likert scales. The first rating related to the *frequency* of occurrence of the vignette in community settings among adolescents or young adults with EBD with whom the respondent was familiar (1 = *Very infrequently, occurs less than once a year*, 4 = *Very frequently, occurs several times a week*). The second rating related to the perceived *importance* of the vignette to community adjustment success (1 = *Very unimportant, skill in handling the situation has little bearing on community adjustment success*, 4 = *Very important, skill in handling the situation has direct and central bearing on community adjustment success*).

A letter describing the study, a survey form, and a self-addressed, stamped return envelope was mailed to each potential respondent. If no response was received after 2 weeks, a replacement packet containing the same form of the questionnaire was sent to the same respondent. Response rates for the four questionnaires ranged from 40% to 49%, with an overall response rate of 45%.

In order to be retained in the content pool, the vignettes had to exhibit an average rating of 2.0 on the Frequency scale and 3.0 on the Importance scale. In other words, each vignette had to occur with some degree of regularity in the community and had to be judged to be important to this population's community adjustment. Additionally, all vignettes were reviewed to select those that might not have exhibited these statistics but that—in our opinion—were worthy of retention. Only two vignettes failed to meet these criteria and were removed from the content pool, leaving a total of 245 vignettes.

## Phase 2: Generation of Alternatives

The goal of the Generation of Alternatives phase was to establish a range of possible behavioral responses, representing effective to ineffective options, to the vignettes identified in the Situational Analysis. These responses reflected actual behaviors that adolescents and young adults with EBD could and might take in such situations.

In this segment of the research, persons with EBD were queried through a structured interview procedure to identify behavioral responses that they might perform in these situations. Peers without EBD also were interviewed through similar procedures to gain perspective on what persons of this age group without disabilities would do in these situations. By integrating the responses from both groups, we reasoned that it would be possible to increase the effectiveness range of alternatives to each vignette.

Four interviewers were trained in a half-day session to administer and record the structured interviews. Training included role play and recording of responses given in the interaction. Interviewer questions regarding the process were asked and resolved. The directions called for a vignette to be read to the respondent and the following question asked: "If you were in a situation like this, what are all the things you could say or do?" Three prompts ("What else could you say or do?") were given for each question, and each response was written down verbatim by the interviewers. Additional meetings of the interviewers were conducted prior to visiting each participating site, in order to review procedures and resolve any questions.

The 245 vignettes from the Situational Analysis phase were randomly divided into nine interview forms. Before beginning interviews, the interviewers were given individual packets of the interview forms, in randomly assigned order, and instructed to administer the forms to subjects as they appeared for the interview.

A total of 46 students were recruited from three sites to participate in this stage of the research. Those with EBD (n = 28) were all between 14 to 18 years of age (19 boys, 9 girls) and from either a residential facility or a special school program. The participants without EBD (n = 18) were also between 14 to 18 years of age (9 boys, 9 girls), were not certified for special education services, and were from an alternative high school program located at a community college. At least four students (including at least one without EBD) responded to each vignette.

Respondents generally gave between two and five responses per vignette. Upon completion of interviews, we compiled lists of responses for each vignette, edited the responses, and discarded or combined duplicates. In some cases, where conceptually appropriate, staff supplemented the responses with behaviors that, in our experience, were representative of other possible response options from this population. This process produced about 8 to 14 responses for each vignette. An example of the response alternatives to one vignette is presented in Figure 1.

## Phase 3: Response Evaluation

The purpose of Response Evaluation was to have expert judges assign ratings to each of the response alternatives identified in the Generation of Alternatives phase. These ratings allowed scores to be assigned empirically to each response in terms of its effectiveness in resolving the social interaction presented in each vignette.

We recruited and hired 20 judges—10 education or social service professionals with experience in service provision to adolescents or young adults with EBD and 10 college students who had outstanding academic and personal records and who were recommended to the project by faculty members or were known to project staff as being well adjusted and socially adept. Each judge independently rated all of the social responses to each of the vignettes in terms of its effectiveness in resolving a particular situation.

The ratings were conducted on a 5-point scale of effectiveness (5 = *Very effective*, 1 = *Very ineffective*).

The rating task was explained individually and practice ratings were provided in which judges were asked to complete the ratings independently, then discuss the task with project staff in order to resolve any questions and/or problems. After this was done, each judge was assigned a timeline by which to complete the task and was encouraged to contact project staff if questions arose. Several days prior to the deadline, we telephoned the rater to address any concerns and to prompt completion of the task.

The interjudge reliabilities of the completed ratings for each item (vignette) were computed through Ebel's intraclass correlation coefficient (Kerlinger, 1986). After weighing the importance of reliable ratings against the relatively low number of responses rated for each interaction (8 to 14 per interaction), it was decided that in order for an item to be retained it had to exhibit an interjudge reliability of .70. Also, in order to be as sensitive as possible to different levels of social skills, items had to possess responses grouped into three distinct categories: *effective responses* to the social problem (mean ratings of 5 to 3.5), *fairly effective responses* (mean ratings of 3.49 to 2.5), and *ineffective responses* (mean ratings below 2.49). Analysis of the 245 vignettes and their response alternatives revealed that 79 vignettes were rated in a reliable manner by the judges and possessed response alternatives that grouped into the three effectiveness categories.

## Phase 4: Preparation of the Measures

The information gathered in the preceding steps was integrated into draft forms of two measures: the Test of Community-based Social Skill Knowledge (TCSK) and the Scale of Community-based Social Skill Performance (CBSP), which address knowledge and performance components of social behavior in community settings. Upon further reflection, it became clear that a third measure to assess forms of antisocial behavior would be necessary, for two reasons. First, a fundamental assumption of this research was that persons who engage in antisocial behaviors

are less socially skilled than persons who do not exhibit such behaviors. Thus, it would be advantageous to contrast and compare the community-based *social skills* of the field-test participants with their *antisocial behaviors*. Second, many of the social behaviors of interest in this project are covert (e.g., sexual behavior) and may not be documented in formal arrest or social records or known by third-party raters (Henggler, 1989; Hindelang, Hirschi, & Weis, 1979). Accordingly, in order to assess the antisocial behavior of research participants based upon their self-report, we developed a third measure: Behaviors That Are Undesirable for Living and Leisure in Society (BULLIS).

***Test of Community-based Social Skill Knowledge (TCSK).*** The TCSK is designed to be administered individually by a test administrator using a verbal role-playing method (Freedman et al., 1978; Gaffney & McFall, 1981) with a multiple choice response format. In this assessment approach, the test administrator presents the test item stem and possible response alternatives of varying levels of effectiveness, and asks which response is most like what the respondent would do in such a situation. The response is recorded and subsequently scored according to the values established for the alternative in the Response Evaluation phase described previously. This technique has been used successfully with adolescents and young adults with mild mental retardation (Bullis & Foss, 1986), delinquent girls (Gaffney, 1984), and at-risk adolescents (Landman, Irvin, & Halpern, 1980).

From the pool of 79 vignettes, 68 were selected that, in our opinion, best represented the types of social interactions young persons with EBD were likely to encounter in community settings. Review of these vignettes revealed that some were clearly oriented to men, and others to women. Therefore, two forms of the TCSK were developed: one for men and a second for women. Vignettes relevant only to one gender were sorted, while vignettes generic across gender (e.g., problems with parents) were rewritten to be gender specific in both forms (e.g., changing the names of the actors to be gender appropriate).

For each vignette, four responses were chosen from the alternatives generated in Phase 2. One of the alternatives had been categorized as "effective" in the Response Evaluation phase, one as "fairly effective," and two as "ineffective." One of the ineffective alternatives was chosen to represent an aggressive or externalizing type of response to the situation; the second ineffective alternative was chosen to be more passive, covert, or internalizing. All of the alternatives were reviewed to insure that they were conceptually appropriate. Effective responses were given a score of 2, fairly effective responses a score of 1, and ineffective responses a score of 0. Each of the four alternatives was randomly assigned to a position (a, b, c, or d) to be read after the stem of the vignette. Each vignette was randomly assigned to a position within the test.

An interviewer read the stem of the vignette and its four response options to the individual, then asked, "Which of these four alternatives is most like what you would say or do if you were in a situation like this?" If necessary, the stem and alternatives were repeated. The response was then recorded on a separate answer sheet. The items were administered in sequence, with a short break halfway through the instrument. After completing the TCSK, the responses were assigned scores. Item scores for interactions with peers and interactions with adults were aggregated separately to yield scores for each group.

The preliminary draft of the TCSK was pilot tested by two project staff with three boys and three girls, each with EBD, learning disabilities, and histories of antisocial behavior. This experience was discussed and the instrument critiqued. It appeared that the verbal role-play, multiple choice response format was understood by the participants, but the instrument was too long, taking almost 1½ hours to complete. Further, several redundancies in the items became clear through questions raised in the interviews. Therefore, we deleted 13 redundant items from each form, to bring the total number of items to 55, with 29 peer interaction items and 26 adult interaction items. On average, each of the gender-specific forms took 1 hour to administer. Examples of test items are presented in Figure 2.

*Scale of Community-based Social Skill Performance (CBSP).* The CBSP is a rating scale completed by a judge who has had the opportunity to observe the person with EBD interacting with others in community settings. Although there is no firm rule as to how long a rater should know a person before completing the CBSP, we believe that at least 1 month of observation of the individual is necessary to make valid judgments. Appropriate raters may include psychologists, counselors, teachers, teacher aides, and residential staff.

The initial CBSP form was pilot tested by having three residential care providers complete and then critique the forms on four adolescents with EBD. Only minor wording changes were needed. Examples of items from the CBSP are provided in Figure 3. The CBSP consists of five sections: Peer/Social Skills (56 items), Peer/Antisocial Behaviors (21 items), Adult/Social Skills (44 items), Adult/

---

**2.** YOU AND YOUR FRIEND GO TO A STORE AND YOUR FRIEND SHOPLIFTS. ON THE WAY OUT, THE STORE MANAGER STOPS BOTH OF YOU. YOU HAVEN'T TAKEN ANYTHING, BUT YOU ARE ALSO CHARGED WITH SHOPLIFTING. YOU THINK YOU CAN CONVINCE THE MANAGER TO LET YOU GO, BUT KNOW THAT IF YOU DO YOU WILL BE LEAVING YOUR FRIEND TO TAKE ALL OF THE BLAME. WHICH RESPONSE IS MOST LIKE WHAT *YOU WOULD ACTUALLY* SAY OR DO IN THIS SITUATION?

    a. Cuss the manager out for assuming you are a thief.
    b. Tell the manager, "I didn't know my friend shoplifted."
    c. Stay and share the blame with your friend.
    d. Try to convince the manager that you didn't take anything.

---

**10.** YOU ARE SUPPOSED TO BE HOME AT 10 P.M., BUT YOU DECIDE NOT TO GO BACK UNTIL YOU ARE READY. WHEN YOU RETURN AT MIDNIGHT, YOUR PARENTS ARE VERY ANGRY. THEY YELL AT YOU AND THREATEN TO GROUND YOU FOR A MONTH. YOU KNOW YOU ARE WRONG, BUT YOU REALLY ENJOYED YOURSELF AND WANT TO KEEP GOING OUT AT NIGHT. WHICH RESPONSE IS MOST LIKE WHAT *YOU WOULD ACTUALLY* SAY OR DO IN THIS SITUATION?

    a. Ask your parents to wait until morning to deal with the problem and walk away.
    b. Accept the punishment and apologize for not thinking of their feelings.
    c. Leave the house because they are treating you that way.
    d. Lie; make up a story about why you couldn't get home on time.

---

**30.** YOU LIKE A GIRL AND WANT TO ASK HER OUT. ONE NIGHT YOU ARE AT A PARTY WITH A GROUP OF PEOPLE, INCLUDING THE GIRL YOU LIKE. YOU ARE FEELING VERY NERVOUS AND THINK THE OTHERS WILL MAKE FUN OF YOU IF YOU ASK HER OUT. WHICH RESPONSE IS MOST LIKE WHAT *YOU WOULD ACTUALLY* SAY OR DO IN THIS SITUATION?

    a. Forget about the girl.
    b. Talk to a friend about asking the girl out for you.
    c. Ask the girl out in front of the others.
    d. Call her on the phone when you get home.

---

**34.** YOU GO TO A STORE TO BUY SOME COOKIES. THE COOKIES ARE MARKED $1.99, BUT THE CLERK RANG UP $3.99. YOU TELL THE CLERK THAT THE PRICE YOU ARE BEING CHARGED IS WRONG, BUT THE CLERK SAYS THAT YOU AREN'T GOING TO GET AWAY WITH ANYTHING. WHICH RESPONSE IS MOST LIKELY WHAT *YOU WOULD ACTUALLY* SAY OR DO IN THIS SITUATION?

    a. Ask the clerk politely to get a price check on the cookies.
    b. Leave the cookies at the register and walk out without paying.
    c. Pound the cookies to bits with your fists, throw them at the clerk, and walk out without paying.
    d. Pay the higher price, whether it is fair or not.

**FIGURE 2.** TCSK example items.

Antisocial Behaviors (19 items), and General Antisocial Behaviors (18 items).

The two *social skills sections* include both "social skill mechanics" and global social skills. Any social or communicative interaction between two or more people is, in part, based on the way in which the individuals express their communicative intent or message; that is, the way the content of a social interaction is portrayed may be as important as what is said or conveyed (Curran, 1978, 1979). These *social skill mechanics* relate to facial expressions, bodily gestures, voice intonations, timing of responses, etc. Spence (1981a, 1981b), Moses (1983), and Walker and McConnell (1988) included social skill mechanics in their assessments of social behavior. Our review of these documents, in conjunction with the available literature on social training and assessment of adolescents and young adults with EBD (Bull et al., 1991; Bullis & Gaylord-Ross, 1991), and an earlier study (Bullis et al., 1993), led to the identification of these particular items in this measure.

*Global social skills* are larger encompassing behaviors that subsume social skill mechanics, such as skill in negotiation or responding to specific issues. These items were based on the content analysis conducted in the earlier Problem Specification phase. Also, the final items selected for the TCSK were reviewed to insure that the general theme of each item was included in the CBSP. For example, if a TCSK item depicted an interaction with two peers over dating, an item was included in the CBSP that reflected skill in dating. All social skill items employed a 5-point Likert-type rating scale of social skill competence: 5 = *proficient*, 4 = *somewhat proficient*, 3 = *fair*, 2 = *somewhat inept*, 1 = *inept*, and NA = *not applicable*.

Two *antisocial behavior* sections present items depicting antisocial behaviors specifically directed toward, respectively, peers or adults. The third antisocial behavior section is composed of general antisocial behaviors that, in all likelihood, are not directed at a particular individual or group. All antisocial items are rated on a 5-point scale for frequency of occurrence: 5 = *Never*,

**Peers** These items should be completed on the individual in relation to the way he or she typically interacts with his or her friends, boy or girl friend(s), or roommate(s).

| When given the opportunity to interact with peers, how well does the individual— | Proficient | Somewhat proficient | Fair | Somewhat Inept | Inept | Not applicable | Office Use |
|---|---|---|---|---|---|---|---|
| | CIRCLE APPROPRIATE RESPONSE | | | | | | |
| 1. Use arm or hand gestures to illustrate or emphasize a particular aspect(s) of social interactions?. | 5 | 4 | 3 | 2 | 1 | NA | |
| 2. Limit small hand movements that are unrelated to the conversation (e.g., twirling hair, scratching)? | 5 | 4 | 3 | 2 | 1 | NA | |
| 18. Handle teasing or provoking? | 5 | 4 | 3 | 2 | 1 | NA | |
| 20. Offer support? | 5 | 4 | 3 | 2 | 1 | NA | |
| 23. Respond when peer disapproves of his or her boy or girl friend? | 5 | 4 | 3 | 2 | 1 | NA | |

**Adults In Community Settings** These items should be completed based on the way the individual acts toward neighbors, community service providers, caseworkers, police, and security officers.

| Given the opportunity to interact with adults in community settings, how often does the individual-- | Never | Very rarely/yearly | Monthly | Weekly | Daily | Not applicable | Office Use |
|---|---|---|---|---|---|---|---|
| | CIRCLE APPROPRIATE RESPONSE | | | | | | |
| 122. Exhibit physically aggressive behavior? | 5 | 4 | 3 | 2 | 1 | NA | |
| 123. Exhibit verbally aggressive behavior? | 5 | 4 | 3 | 2 | 1 | NA | |
| 124. Pout or cry? | 5 | 4 | 3 | 2 | 1 | NA | |
| 125. Become anxious or withdrawn? | 5 | 4 | 3 | 2 | 1 | NA | |

**General Antisocial Behaviors.** This section should be completed on the individual based on how frequently he or she exhibits the following general antisocial behaviors.

| How often does the individual... | Never | Very rarely/yearly | Monthly | Weekly | Daily | Not applicable | Office Use |
|---|---|---|---|---|---|---|---|
| | CIRCLE APPROPRIATE RESPONSE | | | | | | |
| 141. Lie to purchase something (e.g., liquor) or gain entrance (e.g., adult movie)? | 5 | 4 | 3 | 2 | 1 | NA | |
| 142. Steal or try to steal a motor vehicle? | 5 | 4 | 3 | 2 | 1 | NA | |
| 143. Carry a weapon other than a pocket knife? | 5 | 4 | 3 | 2 | 1 | NA | |
| 144. Buy, sell, or hold stolen goods? | 5 | 4 | 3 | 2 | 1 | NA | |

**FIGURE 3.** CBSP example items.

4 = *Very rarely/yearly*, 3 = *Monthly*, 2 = *Weekly*, 1 = *Daily*, and NA = *Not applicable*. Note that both the social skill and antisocial behavior items are rated in the same direction, with higher scores on each section associated with higher levels of social functioning. (In some analyses, presented later in this article, the direction of scoring is reversed for theoretical reasons, in order to examine the relationships of social skills and antisocial behaviors as assessed by the three measures. Specifically, we examined the hypothesis that persons who score higher on social skills should score low on antisocial behaviors, and vice versa.)

The CBSP took 30 to 40 minutes to complete. Scores for each item in each section were totaled, yielding scores in each of the five sections.

**Behaviors That Are Undesirable for Living and Leisure in Society (BULLIS).** A fundamental premise of this project was that young persons identified as EBD, including those with antisocial behaviors, have lower levels of social skills than persons not so identified. At issue was how to gather data on antisocial behaviors. Official records provide only a gross indication because most antisocial behaviors go unnoticed by authorities (Henggler, 1989; Patterson, Reid, & Dishion, 1992). Hindelang et al. (1979) reviewed numerous studies that support the position that self-report of

antisocial behavior is both accurate and expedient.

Accordingly, following their recommendations for self-report instruments, we developed a measure entitled Behaviors That Are Undesirable for Living and Leisure in Society (BULLIS), which is based on a self-report measure of antisocial behavior by Elliott, Ageton, Huizinga, Knowles, and Canter (1983). The BULLIS consists of 31 items depicting specific types of antisocial behaviors. The instrument is designed to be individually administered in 10 to 15 minutes. Drawing from the Elliott et al. (1983) instrument, project staff revised, deleted, and added items. Several internal reviews of the form were conducted and the instrument was pilot tested in one site with four persons with EBD before being finalized. Examples of items included on the BULLIS are "How many times in the last year have you: Stolen or tried to steal a car, truck, motorcycle, etc.?"; "Stolen or tried to steal things worth $10 or more?"; "Been paid for having sexual relations with someone?"; and "Made obscene phone calls?"

Although the exact number of antisocial acts self-reported for each item was recorded, scoring for each item was based on a 3-point rating scale: 0 = *Did not perform the behavior*, 1 = *Performed the behavior 1 or 2 times*, 2 = *Performed the behavior more than 2 times*. The item ratings were aggregated to establish a total score for the BULLIS.

## FIELD TESTING

### Procedures

Table 1 presents a summary of the characteristics of the samples for each of the three instruments. Field testing was conducted at 15 sites, representing six states, mainstream and alternative schools, residential programs, and correctional facilities. At each site, a staff person was identified to complete demographic information on each participant and to coordinate the assessment process.

In some cases, due to geographical and/or resource constraints, agreements were made with programs to administer only the TCSK and the BULLIS, or for

### TABLE 1
### Characteristics of Subjects by Instrument

| Characteristic | TCSK | CBSP | BULLIS |
|---|---|---|---|
| n | 262 | 467 | 264 |
| Age; $\overline{X}$ (SD) | 17.46 (2.48) | 17.45 (2.16) | 17.46 (2.47) |
| Ethnicity—White[a] | 208 (82) | 375 (83) | 208 (82) |
| Placement[a] | | | |
|   Mainstream | 69 (20) | 262 (57) | 71 (27) |
|   Residential | 130 (50) | 149 (32) | 130 (49) |
| Category[a] | | | |
|   Comparison (well adjusted) | 63 (24) | 53 (11) | 63 (24) |
|   EBD | 96 (37) | 192 (47) | 97 (37) |
|   LD | 54 (21) | 147 (31) | 55 (21) |
|   EBD & LD | 40 (15) | 51 (11) | 40 (15) |
| Alcohol/Drug treatment[a] | 58 (24) | 91 (23) | 59 (24) |
| Mental health treatment[a] | 81 (39) | 126 (36) | 82 (39) |
| Adjudication[a] | 130 (50) | 198 (45) | 131 (52) |
| Family social status[b] | Mode = 3 | Mode = 2 | Mode = 3 |
| Economic status | Skilled labor | Semi-skilled labor | Skilled labor |

*Note.* TCSK = Test of Community-based Social Skill Knowledge; CBSP = Scale of Community-based Social Skill Performance; BULLIS = Behaviors That Are Undesirable for Living and Leisure in Society; EBD = with emotional and behavioral disorders; LD = with learning disabilities.
[a]Number of subjects, with percentages given in parentheses. [b]Based on the Hollingshead 4-Factor Index (Hollingshead, 1975), and its five occupational categories, 1 = *Low* to 5 = *High*.

staff to complete only the CBSP on identified individuals. At eight sites, the TCSK and BULLIS were administered by a team of four interviewers (two men and two women). These interviewers were trained in the administration and recording process in two half-day workshops featuring role playing. Interviewers were monitored during interviews, and regular meetings were held to resolve questions or problems. In four additional sites, interviewers were recommended by site staff, hired, trained in administration through a face-to-face meeting or an extensive phone conversation, and monitored through regular phone contact.

Upon completion of the entire TCSK and BULLIS, each respondent was asked, "How truthful were your answers to these questions?" The response options were scored as 1 = *Totally honest*, 2 = *Almost totally honest*, 3 = *Quite a bit was made up*, and 4 = *Almost everything was made up*. Additionally, the interviewer was asked to code (a) how well he/she knew the individual (1 = *Did not know at all*, 2 = *Recognized but did not know*, 3 = *Knew a little bit*, and 4 = *Knew quite a bit*), and (b) how truthfully the interviewer

thought the young person answered the questions (1 = *Totally honest*, 2 = *Almost totally honest*, 3 = *Quite a bit was made up*, and 4 = *Almost everything was made up*).

CBSPs were completed on individuals by a teacher, aide, or residential care provider who had primary responsibility for supervising the person. At one site, it was possible to recruit two raters who independently completed CBSPs on the same individual in order to establish interrater reliability. The identified adolescents and adults were paid for completing the TCSK and BULLIS, and staff members were paid for completing the CBSP.

A group of 63 well-adjusted, successful adolescents and young adults was established for comparative purposes. Freshmen or sophomores in college, they either were recommended to the project as "good students" by college professors of introductory psychology classes or answered an advertisement posted on a college campus asking for students with at least a B grade average to participate in a research study. Two of the group did present arrest histories, but these incidents were minor (e.g., breaking curfew),

and both were allowed to participate. This sample was assessed in groups of 15 to 25 at a time because these persons were focused, orderly, and able to read the TCSK and BULLIS with minimal direction. At the completion of the assessment session, all persons were asked to take a CBSP and to have "someone who knew them well" (e.g., a roommate, friend, or family member) complete the form on them. All of these participants were paid for their involvement in the study.

## Psychometric Properties of the Measures

Responses to the question, "How truthful were your answers to these questions?" by the 232 persons who were administered a TCSK or BULLIS gave a mean response value of 1.23, ($SD$ = .45), indicating that the vast majority of

respondents reported to have answered questions truthfully. Virtually all of the interviewers who administered these two measures ($n$ = 174) had no previous knowledge of the persons they interviewed ($\overline{X}$ = 1.05, $SD$ = .34), and they thought that respondents answered questions truthfully ($\overline{X}$ = 1.53, $SD$ = .60).

**TCSK.** Total scores for each participant were computed for the peer and adult sections of the gender forms of the TCSK. These scores were then aggregated to establish average scores and standard deviations for both raw scores and percentages of total scores. Item-total correlations (Pearson's $r$) and an internal consistency index (coefficient alpha) were computed for each section. For each section, test–retest reliability, the coefficient of stability, was established by assessing

subsets of the male and female samples twice, with 2 to 4 weeks intervening between the assessments, and then correlating these two sets of results. The top part of Table 2 presents these data for the boys; the bottom half presents them for the girls.

Strong intercorrelation between peer and adult sections were found on both male ($r$ = .85) and female ($r$ = .82) forms. These findings, with implications for further development of the measures, are discussed later. As a general rule, item-total correlations should be between .2 to .4, and there should be minimum internal consistency reliability of .75; coefficients of stability typically result in slightly lower indices (Bolton, 1987; Brown, 1976; Nunnally, 1978; Salvia & Ysseldyke, 1988; Silva, 1993). For the male version of the TCSK, the average

## TABLE 2
### Psychometric Characteristics of the TCSK

| | Raw Score | | | % of total | | | Avg. item-total correlations | Reliability | |
| | $\overline{X}$ | SD | Range | $\overline{X}$ | SD | Range | | Internal consistency | Test–retest[a] |
|---|---|---|---|---|---|---|---|---|---|
| **Male Form[b]** | | | | | | | | | |
| Peer | 36.76 | 9.78 | 13–52 | 63.49 | 16.77 | 22.41–81.66 | .34 | .82 | .84 |
| Adult | 35.05 | 9.72 | 8–50 | 67.55 | 18.51 | 15.38–96.15 | .37 | .68 | .93 |
| **Female Form[c]** | | | | | | | | | |
| Peer | 41.83 | 8.84 | 13–58 | 72.21 | 15.29 | 22.41–100 | .35 | .83 | .90 |
| Adult | 37.75 | 8.36 | 12–50 | 72.64 | 16.07 | 23.08–96.15 | .35 | .81 | .88 |

Note. TCSK = Test of Community-based Social Skill Knowledge.
[a]$n$ = 11 for this calculation. [b]$n$ = 159. [c]$n$ = 103.

## TABLE 3
### Psychometric Characteristics of the CBSP

| Section | Raw score[a] | | | % of total | | Avg. item-total correlations | Reliability | |
| | $\overline{X}$ | SD | Range | $\overline{X}$ | SD | | Internal | Interjudge[b] |
|---|---|---|---|---|---|---|---|---|
| Peer/social skills | 166.51 | 45.10 | 38–280 | 65.58 | 16.14 | .74 | .99 | −.24 |
| Peer/antisocial behavior | 67.44 | 22.55 | 3–105 | 72.55 | 15.88 | .61 | .94 | .66 |
| Adult/social skills | 133.54 | 34.44 | 50–220 | 65.80 | 16.62 | .77 | .99 | .84 |
| Adult/antisocial behavior | 66.56 | 20.22 | 10–95 | 76.13 | 16.15 | .63 | .93 | .65 |
| General antisocial behavior | 69.26 | 20.98 | 2–90 | 85.56 | 14.26 | .63 | .93 | .76 |

Note. CBSP = Scale of Community-based Social Skill Performance.
[a]$n$ = 467. [b]$n$ = 17 for this calculation.

item-total correlation was within the recommended range for both the peer and adult sections. Four of the 29 items on the peer section fell below the .2 level, but none of the items comprising the adult section exhibited item-total correlations below .2. The reliabilities for the male version are acceptable, with only the coefficient of stability for the peer section below .75.

The female version of the TCSK also exhibited acceptable item-total correlations. For the peer section, two items possessed item-total correlations below .2, and three items in the adult section were below this standard. All of the reliability indexes for the female version were above .75.

**CBSP.** Total scores for each participant on each of the five subsections of the CBSP were computed and used to establish average scores, standard deviations, and ranges for both the raw scores and percentages of total scores. Item-total correlations (Pearson's $r$), internal consistency reliability (coefficient alpha), and interjudge reliability indices (two judges independently completed a CBSP on the same individual at the same time, and these assessments were correlated) were calculated for each section. Interjudge reliability typically is lower than internal consistency indexes (Bolton, 1987; Brown, 1976; Nunnally, 1978; Salvia & Ysseldyke, 1988; Silva, 1993).

Table 3 presents these results. The item-total correlations for each of the five sections of the CBSP were high, as were the internal consistency reliability indices. The interjudge reliabilities for four sections of the CBSP were lower than the internal consistency indices. The negative

interjudge index for the Peer/Social Skills section, however, although not statistically different from a correlation of zero, is disappointing and will be discussed later.

Table 4 presents the intercorrelation of the five subsections. (Note that in this table, presentation of the sign of the correlation coefficient has been reversed to demonstrate the inverse relationship between social skills and antisocial behaviors. This procedure, of course, does not affect the magnitude of the correlation coefficient, only the direction of relationship.) The CBSP clearly demonstrates strong positive intercorrelation between the two social skill sections and strong positive intercorrelation among the three antisocial behavior sections, an indication of the convergent validity of the measure (Campbell & Fiske, 1959). Negative relationships are evident between social skills and antisocial behaviors, demonstrating discriminant validity (Campbell & Fiske, 1959). These relationships are in line with the suppositions of this project—persons who are less socially skilled will engage in more antisocial behavior than those who are more socially skilled—and they provide evidence for the construct valid-

ity of the measure (Campbell & Fiske, 1959; Kerlinger, 1986; Nunnally, 1978). The validity of all three measures is discussed in more detail in a later section.

**BULLIS.** Total scores for each participant were computed and used to establish means, standard deviations, and ranges for both total score and the number of antisocial items performed. Because the items on this measure reflect diverse, heterogeneous behaviors, it was not appropriate to consider reliability from the perspective of item homogeneity (Nunnally, 1978). A coefficient of stability reliability index was computed based on a subset of 16 persons who were administered the BULLIS twice, with 2 to 4 weeks between assessments. These two sets of scores were correlated in two different ways. First, as the scores assigned the measure approximated an interval scale, Pearson's $r$ was calculated between these scores at Time 1 and at Time 2. Second, based on the agreement of occurrence/nonoccurrence of the behavior by self-report at Time 1 and Time 2, which are nominal data, kappa (Cohen, 1960) was computed for each item and then aver-

### TABLE 4
### Intercorrelation of CBSP Scales

|  | (1) | (2) | (3) | (4) | (5) |
|---|---|---|---|---|---|
| (1) Peer/social skills | — | | | | |
| (2) Peer/antisocial behavior | −.72* | — | | | |
| (3) Adult/social skills | .96* | −.70* | — | | |
| (4) Adult/antisocial behavior | −.69* | .91* | −.67* | — | |
| (5) General antisocial behavior | −.51* | .77* | −.48* | .76* | — |

*Note.* CBSP = Scale of Community-based Social Skill Performance.
*$p$ = .01.

### TABLE 5
### Psychometric Characteristics of the BULLIS

|  | Raw score[a] | | | % of total | | | Test–retest reliability[b] | |
|---|---|---|---|---|---|---|---|---|
|  | $\overline{X}$ | SD | Range | $\overline{X}$ | SD | Range | Pearson | Kappa[c] |
| BULLIS | 33.68 | 22.41 | 0–87 | 10.43 | 6.94 | 0–31 | .62 | .54 |

*Note.* BULLIS = Behaviors That Are Undesirable for Living and Leisure in Society.
[a]$n$ = 264. [b]$n$ = 11 for this calculation. [c]Based on average of item kappas.

aged across the entire measure. As kappa corrects for chance agreements between raters (in this case between the two assessments), it presents a conservative and stringent (i.e., low) index of reliability. Fleiss (1981) stated that kappas in the .40 to .60 range should be considered as fair, whereas Johnson and Heal (1987) proposed that kappas in the .60 range should be regarded as acceptable for most research in the social sciences. Table 5 presents these results.

## Validity

The validity of the measures was examined in three different ways. First, it was hypothesized that (a) EBD, as a primary disability (almost by definition, persons with EBD demonstrate deficient social skill; Kauffman, 1988), or (b) arrest status (those who are arrested tend to be less socially skilled than persons who are not arrested; Freedman et al., 1978; Gaffney & McFall, 1981; Goldstein & Glick, 1987; Patterson et al., 1992) would be negatively correlated with the social skill sections and positively correlated with the antisocial behavior sections. To test this hypothesis, point biserial correlations were computed between these two variables and performance on each measure. Table 6 presents these results.

The null hypothesis (there is no relationship between the variables) for each correlation was tested, and family-wise alpha of .05 was adopted. To adjust for Type I error due to multiple comparisons, the Bonferroni inequality (Keppel, 1982) was employed to maintain a .05 alpha level within families of comparisons. Thus, on the peer and adult sections of the TCSK, the null hypothesis was tested at the .025 alpha level (.05/2 = .025). For the CBSP, the null hypothesis for the Peer/Social Skills, Peer/Antisocial Behaviors, Adult/Social Skills, Adult/ Antisocial Behaviors, and General Antisocial Behaviors were each tested at the .01 alpha level (.05/5 = .01). Additionally, given issues of power related to sample size (Cohen, 1988), the magnitude of each correlation was inspected. Weak correlations included coefficients around .1, moderate correlations included coefficients around .3, and strong correlations were .5 or greater (Cohen, 1988). For

### TABLE 6
### Correlation of Subject Characteristics with Measures

| Subject characteristics | EBD | Arrest |
|---|---|---|
| TCSK–male | | |
| Peer | −.38** | −.22* |
| Adult | −.39** | −.24* |
| | | |
| TCSK–female | | |
| Peer | −.44** | −.38** |
| Adult | −.34** | −.32** |
| | | |
| CBSP | | |
| Peer/social skills | −.20** | −.24** |
| Peer/antisocial behavior | .28** | .41** |
| Adult/social skills | −.21** | −.19** |
| Peer/antisocial behavior | .29** | .42** |
| General antisocial behavior | .31** | .44** |
| | | |
| BULLIS | .45** | .50** |

*Note.* EBD = with emotional and behavioral disorders; Arrest = arrest status; TCSK = Test of Community-based Social Skill Knowledge; CBSP = Scale of Community-based Social Skill Performance; BULLIS = Behaviors That Are Undesirable for Living and Leisure in Society.
$*p = .05.$ $**p = .01.$

### TABLE 7
### Intercorrelation of TCSK, CBSP, and BULLIS

| TCSK–male[a] | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| (1) TCSK–peer | — | | | | | | | |
| (2) TCSK–adult | .85** | — | | | | | | |
| (3) CBSP–SS/peer | .30** | .27** | — | | | | | |
| (4) CBSP–AS/peer | −.32** | −.37** | −.74** | — | | | | |
| (5) CBSP–SS/adult | .31** | .27** | .96** | −.71** | — | | | |
| (6) CBSP–AS/adult | −.36** | −.37** | −.73** | .91** | −.70** | — | | |
| (7) CBSP–GAS | −.31** | −.32** | −.53** | .76** | −.48** | .78** | — | |
| (8) BULLIS | −.42** | −.47** | −.20** | .42* | −.19** | .48** | .42** | — |

| TCSK–female[b] | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|---|---|---|---|---|---|---|---|---|
| (1) TCSK–peer | — | | | | | | | |
| (2) TCSK–adult | .82** | — | | | | | | |
| (3) CBSP–SS/peer | .20* | .17 | — | | | | | |
| (4) CBSP–AS/peer | −.30** | −.28** | −.69** | — | | | | |
| (5) CBSP–SS/adult | .20* | .18* | .96** | −.69** | — | | | |
| (6) CBSP–AS/adult | −.29** | −.32** | −.62** | .88** | −.62** | — | | |
| (7) CBSP–GAS | −.32** | −.32** | −.46** | .64** | −.43** | .64** | — | |
| (8) BULLIS | −.48** | −.44** | −.39** | .31** | −.33** | .38** | .53** | — |

*Note.* TCSK = Test of Community-based Social Skill Knowledge; CBSP = Scale of Community-based Social Skill Performance; BULLIS = Behaviors That Are Undesirable for Living and Leisure in Society; SS = Social skills section; AS = Antisocial behavior section; GAS = General antisocial behavior section.
[a]$n = 146.$ [b]$n = 90.$
$*p = .05.$ $**p = .01.$