This study conducted a descriptive analysis of the research literature on teaching social skills to youth with behavioral disorders. Analysis focused on studies which used a single-subject research design. The 22 articles, representing 38 separate studies, were analyzed in terms of: (1) nature of independent variables; (2) distribution of independent variables across studies; (3) dependent variables; (4) measures used to evaluate the dependent variables; (5) location of studies; (6) inclusion of a generalization program; and (7) authors' conclusions and reviewers' responses. The following findings are discussed: multiple treatments were used in 95 percent of the studies; a large number of discrete behaviors were defined as social skills; all the studies used direct observation to measure the dependent variables; the largest percentage of studies were conducted in a school setting; and there was little evidence that behavior changes effected by the interventions generalized to other settings. (Contains 33 references.) (DB)
Social Skills Training for Youth with Behavior Disorders

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It is well documented that youth with behavior disorders (BD) often do not exhibit appropriate social behavior. Moreover, youth with BD are defined by leading experts as children who chronically respond to their environment in socially unacceptable ways (Kauffman, 1977). Not only does the lack of appropriate social responses define BD, it also leads to an endless array of problems. For example, lack of appropriate social responses in youth has been associated with juvenile delinquency (Pilivan & Briar, 1964; Roff, 1961; Sarason, 1968; Ullmann, 1957), low social status among peers that leads to problems in personal adjustment in adult life (Parker & Asher, 1987), and adult maladjustment and psychiatric problems (Michelson & Mannarino, 1986). Given these bleak outcomes for children whose social skills appear to be lacking, a large number of studies have begun to emerge in research journals that have focused on social skills training. This literature base has become so large that synthesis of the research has become necessary.

Again, with the large number of studies that focus on social skills interventions for children with BD (ERIC listed 82 studies using the descriptors "behavior disorders and social skills") it would appear warranted to conduct a quantitative synthesis of the literature on this topic. Several recent reviews have focus on the topic of teaching social skills to youth with behavior problems (Cunliffe, 1992; Singh, Deitz, Epstein, & Singh, 1991; Zaragoza, Vaughn, & Maclntosh, 1991), however, the descriptive analyses that have been published have not focused exclusively on single-subject research designs. Therefore, the purpose of this study was to conduct a descriptive analysis of the research literature on teaching social skills to youth with BD that used a single-subject research design.
The analysis addressed the following questions: (a) What were the independent variables used in the studies? (b) How were the independent variables distributed across studies? (c) What were the dependent variables measured in the studies? (d) What were the dependent measure used in the studies? (e) Where did the studies take place? (f) If, any what type of generalization program was employed? and (f) What were the author's conclusions and the reviewers response to those conclusions?

Results

A search for single-subject studies of youth with BD yielded 22 articles that represented 38 separate studies (see appendix A). The results of the analysis are presented below.

Independent Variables

Analysis of the independent variables are presented in Figure 1. Figure 1 indicates that most of the studies analyzed in this review used multiple interventions (2 or more independent variables). Over 20% of the studies (8) used 5 or more independent variables in their interventions. And, as Figure 1 indicates, multiple interventions were used in 36 of the 38 studies in this review.

Figure 1 also indicates how often each independent variable listed was used in the studies: Performance feedback was used in 68% of the studies (n=26); behavior rehearsal was used in 58% of the studies (n=22); modeling was used in 47% of the studies; discussion was used in 34% of the studies; coaching/prompting was used in 31% of the studies; rules were used in 29% of the studies; peers were involved in the training in 18% of the studies; and self-management was used in 16% of the studies.

Dependent Variables

Analysis of the dependent variables indicate that a large number of discrete behaviors are defined as social skills. Most of the studies examined different behaviors. Only a few behaviors were examined in more than one study. For example, eye contact was a dependent variable in 3 of the 22 studies (Bornsstein, Bellack, & Hersen, 1980; Combs, & Ldhey,
and social interaction was a dependent variable in 3 of the 22 studies (Franca, Kerr, Rietz, & Lambert, 1990; Nietupski, Stainback, Gleissner, Stainback, & Hamre-Nietupski, 1983; Wahler, & Fox, 1980). However, dependent variable found in more than one study was the exception rather than the rule.

**Dependent Measures**

Dependent measures are presented in Figure 2. 100% of the studies used direct observation to measure their dependent variables (n=22). Rating scales were used in 36% of the studies (n=8), followed by interviews (n=1), sociometrics (n=1), electromyograph (n=1), and photoplethysmograph (n=1).

**Settings**

Figure 3 presents an analysis of the settings. 41% of the studies were conducted in a school setting (n=9); 27% of the studies were conducted in a residential setting (n=6); 18% of the studies were conducted in a clinical setting (n=4); 9% were conducted in a vocational setting (n=2); and 4% of the studies were conducted in a home setting (n=1).

**Generalization**

Analysis of the generalization programming is presented in Figure 4 (the definitions of the generalization strategies are presented in White et al, 1988). These results indicate that 60% of the studies (n=23) used either a train and hope or no strategy; 29% of the studies (n=11) used a train in the natural setting strategy; 13% of the studies (n=5) used a train to generalize strategy; 8% of the studies (n=3) used an introduce to natural maintaining contingencies strategy; 5% of the studies (n=2) used either homework or indiscriminate contingencies strategies; and 3% of the studies (n=1) used either a sufficient exemplars, mediate generalization, sequential modification, or program common stimulus strategies.
Author's and Reviewer's Conclusions

The author's and review's conclusions are presented in Figure 5. 29% (n=11) of the authors concluded that their subjects were successful in acquiring the skills they had trained; and 10% (n=4) of the authors concluded that their subjects were partially successful in acquiring the skills they had trained. 29% (n=11) of the reviewers agreed with the authors conclusion on acquisition; and 10% (n=4) partially agreed with the authors conclusions on acquisition.

Forty-two percent (n=16) of the authors concluded that their subjects were successful in...
increasing the fluency of the skills they had trained; 16% (n=6) of the authors concluded that their subjects were partially successful in increasing the fluency of the skills they had trained; and 5% (n=2) authors concluded that their subjects were unsuccessful in increasing the fluency of the skills they had trained. 60% (n=23) of the reviewers agreed with the authors conclusions on fluency; and 3% (n=1) of the reviewers partially agreed with the authors conclusions on fluency.

Twenty-one percent (n=16) of the authors concluded that their subjects were successful in maintaining the effects of training; and 16% (n=6) of the authors concluded that their subjects were partially successful in maintaining the effects of training. 26% (n=10) of the reviewers agreed with the authors on maintenance; 3% (n=1) of the reviewers partially agreed with the authors on maintenance; and 3% (n=1) of the reviewers disagreed with the authors conclusions on maintenance.

Eighteen percent (n=11) of the authors concluded that their subjects were successful in generalizing the trained behavior across settings; and 3% (n=1) of the reviewers disagreed with the authors on generalization across settings. 3% (n=1) of the authors concluded that their subjects were successful in generalizing the trained behavior across people; and 3% (n=1) of the reviewers agreed with the authors on generalization across people. 3% of the authors concluded that their subjects were successful in achieving response generalization; and 3% (n=1) of the reviewers disagreed with the authors conclusion that their subjects had achieved response generalization.

Additional Variables
Finally, the following variables were included in the analysis. 86% (n=19) of the articles followed a behavioral perspective; and 14% (n=3) of the articles followed a cognitive/
behavioral perspective. 4% (n=1) of the articles measured procedural reliability that the reviewer scored as moderate; 4% (n=1) of the articles measured procedural reliability that the reviewer scored as strong; and 91% (n=20) did not measure procedural reliability. 14% (n=3) of the articles reported a source of social validity; 9% (n=2) of the articles reported a target of social validity; and 86% (n=19) did not report social validity. 50% (n=11) reported maintenance checks. 86% (n=19) of the subjects/students were in special education classes; 14% (n=3) were in regular education classes; and 4% (n=1) were in mixed classes.

Conclusion

In summary, several findings stand out. Multiple treatments were used in 93% of the studies. Analysis of the dependent variables indicated that a large number of discrete behaviors are defined as social skills. This large number of discrete behaviors defined as social skills suggests that the construct of social skills is not clearly defined in the literature. All of the studies used direct observation to measure the dependent variables. The largest percent of studies were conducted in a school setting. Although a large percentage of the authors suggested that their subjects had either acquired, or become more fluent, in the behaviors that were taught, a smaller percent suggested that the behaviors maintained, and an even smaller percent suggested that the behaviors generalized to other settings, people, or responses. Further, even when the authors did conclude that the behaviors had generalized, the reviewers in this study did not always agree.

The results of this study indicate that (a) more studies need to be conducted on the maintenance and generalization of social skills and (b) what constitutes social skills needs to be clarified if we are to move forward with this line of research.

References


An empirical case study. Behavior Therapy, 14, 568-575.


