

The Collective Outcomes of School-Based Social Skill Interventions for Children on the Autism Spectrum

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Social skill interventions are only minimally effective for children with autism spectrum disorders according to a recent study conducted by researchers at the IRCA (Bellini, Peters, Benner, & Hopf, 2007). The study was published in the journal *Remedial and Special Education*. The researchers conducted a meta-analysis of 55 published research studies investigating school based social skill interventions for children and adolescents on the autism spectrum. A meta-analysis involves synthesizing the collective outcomes of every study performed on a particular topic. The reviewed studies included a total of 147 students with an autism spectrum disorder ranging from preschool to secondary school. Specifically, social skill interventions produced low treatment effects and low generalization effects across persons, settings, and play stimuli. Moderate maintenance effects were observed suggesting that when gains were made via social skill interventions, the gains were maintained after the intervention is withdrawn. The low treatment effects observed in the present study are consistent with the results of previous social skill intervention meta-analyses on other populations of children (Gresham, Sugai, & Horner, 2001; Mathur, Kavale, Quinn, Forness & Rutherford, 1998; Quin, Kavale, Mathur, Rutherford & Forness, 1999).

In addition, similar intervention, maintenance, and generalization effects were observed between interventions targeting collateral skills (e.g., play skills, joint attention, and language skills) and interventions targeting specific social behaviors (e.g., social initiations, social responses, and duration of interaction). There were no significant differences between the outcomes of studies that implemented group interventions and studies that implemented individual interventions. An important finding of the study was that students receiving social skills programming in their typical classroom setting had substantially more favorable treatment outcomes than did students who received services in a pull-out setting

The results of the meta-analyses, though certainly hard to swallow, shed some light on factors that lead to more beneficial social outcomes for children with ASD and other populations of children. For instance, by synthesizing the results of this and other meta-analyses, we are better able to determine the ingredients of effective social skills instruction, and thus, make recommendations for programming. They are as follows:

1. Increase the dosage of social skill interventions;
2. Provide instruction within the child's natural setting;
3. Match the intervention strategy with the type of skill deficit; and
4. Ensure intervention fidelity.

Dosage. Gresham et al. (2001) recommended that social skill interventions should be implemented more intensely and frequently than the level presently delivered to children with social skill deficits. Though the researchers did not recommend a specific dosage, they stated that 30 hours of instruction, spread over 10-12 weeks is insufficient. The low intervention effects observed in the present meta-analysis may be attributed to the low level of instructional intensity provided in the reviewed studies, which was considerably lower than the 30+ hours recommended. Children with ASD exhibit significant social skill deficits that may potentially lead to academic, behavioral, and emotional difficulties. As such, the recommendation to increase instructional intensity is particularly salient for this population of children. School personnel should look for opportunities to teach and reinforce social skills as frequently as possible throughout the school day, and not just in pull-out settings.

Intervention setting. Gresham et al. (2001) noted that the weak outcomes of social skill interventions can be

attributed to the fact that these interventions often take place in “contrived, restricted, and decontextualized” (p. 340) settings, such as resource rooms or other “pull-out” settings. The results of the present meta-analysis support this assertion. That is, maintenance and generalization effects were significantly lower for interventions that were implemented in pull-out settings. In contrast, interventions that were implemented in the child’s typical classroom setting produced higher maintenance effects and higher generalization effects across persons, settings, and play stimuli. Furthermore, in addition to higher maintenance and generalization effects, the results of the present study also suggest that interventions implemented in the child’s typical classroom produce substantially higher intervention effects. This finding has important implications for school-based social skill interventions. Teachers and other school personnel should place a premium on selecting social skill interventions that can be reasonably implemented within multiple naturalistic settings. This is particularly important for children with ASD, who may have considerable difficulties transferring skills from one setting to another.

Matching strategy with type of skill deficit. Gresham et al. (2001) asserted that a key component of effective social skills programming is the ability of the interventionist to match the intervention strategy with the type of skill deficit: performance deficit or skill acquisition deficit. A performance deficit refers to a skill or behavior that is present, but not demonstrated or performed, whereas, a skill acquisition deficit refers to the absence of a particular skill or behavior. Of the 55 studies included in the present meta-analysis, only 1 considered the type of skill deficit exhibited by the participants, prior to implementing the intervention. School personnel should make an intensive effort to systematically match the intervention strategy to the type of skill deficits exhibited by the child, as this information guides the selection of effective strategies. For instance, if the child lacks the skills necessary to join in an interaction with peers, a strategy should be selected that promotes skill acquisition. In contrast, if the child has the skills to join in an activity but regularly fails to do so, a strategy should be selected that enhances performance of the existing skill.

Intervention fidelity. Only 14 of the studies in the present meta-analysis measured intervention fidelity (i.e., whether the intervention was implemented as intended). Gresham et al. (2001) concluded that the failure of studies to provide intervention fidelity data makes it extremely difficult to conclude whether a social skill intervention was ineffective because of an ineffectual intervention strategy, or because the strategy was implemented poorly. Poor intervention fidelity may significantly diminish the outcomes of the social skill intervention, and diminish our ability to make decisions regarding the effects of individual strategies. Poor intervention fidelity may also be the result of poorly trained personnel. Presently, few educators and therapists receive training in social skills interventions as part of their undergraduate and graduate school training. As such, this places the onus on school districts to provide professional development opportunities for school personnel responsible for implementing social skill interventions.

Results of this study indicate that now more than ever, our field and, more important, children with ASD, are in desperate need of effective social skill programming. Not just EASY to implement social skills programming, but EFFECTIVE social skills programming. The results of the meta-analyses, though certainly not positive, shed some light on factors that lead to more beneficial social outcomes for children with ASD and other populations of children. By synthesizing the results of meta-analyses, we are better able to determine the components of effective social skills instruction, and thus, develop more effective programming.

References

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