

Volume 2, Issue 2

Fall 2007

The
Journal
of
Developmental
Processes

Journal of Developmental Processes

Submission Guidelines

Description

The goal of the *Journal of Developmental Processes* is to provide a vehicle for research and clinical studies that advance knowledge of the complexity inherent in all developmental processes. The *JDP* encourages exchange of ideas across fields including, but not limited to, animal behavior, anthropology, biology, education, linguistics, neuroscience, occupational and speech and language therapy, primatology, psychiatry, psychology, public policy, sociology, and social work.

The *Journal* is interested in both experimental and descriptive studies, including basic research, detailed case reports, ethnographic analysis, and theoretical explorations. Particularly welcome are innovative conceptual frameworks and methods that capture the complexity of developmental processes as well as assessment procedures and interventions that enable children and families to overcome mental health, developmental, social, and learning challenges.

Submissions

Send queries and submissions on clinical aspects and applications to Associate Editor Ira Glovinsky at ira1834@sbcglobal.net; all other queries and submissions, and books for potential review, should go to Editor Barbara J. King at bjking@wm.edu or Department of Anthropology, College of William and Mary, Williamsburg, VA, USA, 23187-8795.

Please submit manuscripts electronically, preferably in Microsoft Word® format. Length is negotiable with the editor, but generally should not exceed 50 manuscript pages, including references. Submit your contact information, including phone, fax, and postal mailing address. Also enclose a cover letter indicating that the article has not been published, and is not under consideration elsewhere.

Tables, figures, and photographs should be used sparingly. Please include a high gloss black-and-white copy of the image as well as an electronic file in TIFF, EPS, or JPG format. Clearly indicate where the image should appear, as well as a title and explanatory note. Line art should have a resolution of 1200 dots per inch for good print quality.

References

References should be listed in alphabetical order. Each listed reference should be cited in the text, and each text citation should be listed in the References. We follow the APA style, e.g.,

- Greenspan, S. I., & Shanker, S. G. (2004). *The first idea: How symbols, language, and intelligence evolved from our primate ancestors to modern humans*. Cambridge, MA: Da Capo.
- Greenspan, S. I., & Shanker, S. G. (2005). Developmental Research. In E. S. Person, A. M. Cooper, & G. O. Gabbard, *American psychiatric publishing textbook of psychoanalysis* (pp. 335–360). Washington, DC: American Psychiatric Publishing.
- Greenspan, S. I., & Wieder, S. (1997). Developmental patterns and outcomes in infant and children with disorders in relating and communicating: A chart review of 200 cases of children with autistic spectrum diagnosis. *Journal of Developmental and Learning Disorders, 1*, 87–141.

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The Journal of Developmental Processes

Editor-in-Chief

Stanley I. Greenspan
Chairman, Interdisciplinary Council for Developmental and Learning Disorders
Departments of Psychiatry, Behavioral Sciences, and Pediatrics
George Washington University Medical School
Washington, DC, USA
StanleyGreenspanMD@comcast.net

Editor

Barbara J. King
Department of Anthropology
College of William and Mary
Williamsburg, Virginia, USA
bjking@wm.edu

Associate Editor-in-Chief

Serena Wieder
Interdisciplinary Council on Developmental
and Learning Disorders
Bethesda, Maryland, USA
swieder@erols.com

Associate Editor

Ira Glovinsky
The Interdisciplinary Center for the Family
West Bloomfield, Michigan, USA
ira1834@sbcglobal.net

Administrative Editor

Jane Mild LaRoque
Lexington, Massachusetts, USA
jmlaroque@rcn.com

Editorial Assistant

Meghan Habas Siudzinski
College of William and Mary
Williamsburg, Virginia, USA
jdpstaff@gmail.com

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The Spotlight Program: An Integrative Approach to Teaching Social Pragmatics Using Dramatic Principles and Techniques

Matthew D. Lerner

Spotlight Program, North Shore Arc
Danvers, MA
Department of Psychology
University of Virginia
mlerner@virginia.edu

Karen Levine

Harvard Medical School
Autism & Developmental Disabilities Program
Center for Child and Adolescent Development (CCAD)
Cambridge Health Alliance
klevine@challiance.org

Abstract: *Effective techniques for social pragmatic development for adolescents with Asperger syndrome have been elusive in the existing body of research literature. Attempts to structure interventions that lead to effective generalization of skills beyond the clinical setting have been particularly inconclusive. This paper outlines the development of a novel theoretically-based, affectively-driven intervention: the Drama-based Social Pragmatic Intervention approach designed to address the concerns present in existing research. Theoretical principles as well as specific activities and basic curriculum structure are presented. Additionally, triumphs and challenges of a program that has successfully used this approach for several years are presented.*

Asperger syndrome is a form of autism in which individuals have average to above average intelligence, but display atypical social development. This disorder, along with autism in general, has shown a marked increase in incidence in recent years (Yeargin-Allsop et al., 2003), with the most recent incidence rates estimated to be one in 150 children (Centers for Disease Control and Prevention, 2007). Children with Asperger syndrome lack typical abilities in several social domains including social pragmatics, reciprocal interaction, theory of mind, and non-verbal cue use and recognition (*Diagnostic and Statistical Manual of Mental Disorders* [4th ed.]). These deficits are associated with impairment in social-emotional functioning that can have substantially detrimental effects on social functioning, social development, and hence quality of life.

Similarly, children and adolescents with Asperger syndrome have an abnormally high incidence of development of co-occurring conditions, including severe social anxiety, depression, and bipolar disorder (Klin & Volkmar, 1997). These concerns are acutely felt in Massachusetts, where the large organized cohort of families with children on the autism spectrum has become increasingly vocal about the need for such services. This activity is further evinced by the parent-initiated passage in the Commonwealth of Massachusetts of An Act to Address the Special Educational Needs of Children with Autism Spectrum Disorders within the educational programs of children with an autism spectrum diagnosis. (Mass. Gen. Laws ch. 71B, § 3, 2006). This law includes stipulations that social-communication goals be addressed in the Individualized Education Plans (IEPs) of every student in Massachusetts with a diagnosis on the autism spectrum. As such, effective interventions to address these needs—often called “social skills” or “social pragmatics” interventions—for high-functioning adolescents with Asperger syndrome and high functioning autism are clearly needed.

There have been a variety of studies assessing the effectiveness of traditional models of social pragmatics programs for children and adolescents with Asperger syndrome and high functioning autism, with presently inconclusive aggregate results (Barry et al., 2003; Blacher, Kraemer, & Schalow, 2003; Solomon, Goodlin-Jones, & Anders, 2004; Tsatsanis, Foley, & Donehower, 2004). These studies have generally focused on non-verbal cue reading and comprehension, decreased presentation of co-occurring symptomatology, and social communication (Barnhill, Cook, Tebbenkamp, & Myles, 2002; Solomon et al., 2004; Blacher et al., 2003). Although statistically significant gains have been reported via direct observation during therapeutic sessions, these studies have shown disappointing results as far as generalized use of learned skills outside of the therapeutic context (Barry et al., 2003; Blacher et al., 2003). Additionally, given the prevalence of secondary diagnoses such as depression in the population (Klin & Volkmar, 1997; Blacher, et al., 2003), it is imperative that programs at the very least consider such factors in their design.

In response to these needs and concerns, we developed a theoretically informed, developmentally based, affectively driven, social pragmatics intervention program model designed specifically to respond to the concerns present in the literature as well as those expressed by families. This program is called Spotlight. Created in 2004, The Spotlight Program is a social pragmatics program offered by the North Shore Arc, a community-based agency offering programs for children and adults with developmental disabilities and their families, under the clinical guidance of one of us. Spotlight students range in age from 9 to 20 years old, and primarily carry diagnoses of high functioning autism, Asperger syndrome, and related disorders. Spotlight offers an integrative approach to teaching social pragmatic skills to such students. The program integrates three core elements in the implementation of its curriculum: 1) a unique social pragmatics teaching method involving use of affectively motivating acting games and dramatic training adapted for this age/population, 2) fostering of positive social reinforcement through strong relationships built between the students and the staff, as well as between the students themselves, and 3) use of strong age-appropriate motivators such as video games and noncompetitive physical activity. Spotlight uniquely integrates these elements to facilitate growth in social pragmatic skills. Participants learn

and use their ever-increasing social pragmatic skills within this setting and gain motivation to begin to generalize them across other settings, including home and school.

There exist several intervention models currently available that operate on a similar understanding of the needs of children with Asperger syndrome. For instance, McAfee (2002) and Winner (2000) espouse the value of understanding and regulation of emotional processes in social contexts, in conjunction with modeling and training of specific instrumental social skills (e.g., conversation initiation and maintenance), as valuable components of social skills intervention. Further, Coucouvanis (2005) has recently developed an intervention model entitled Super Skills. This model involves discrete assessment of specific areas of social skill deficit in individual students, coupled with a customizable activity set designed to target the identified areas of difficulty. These intervention models hold some promise for producing studies that may surmount the limited evidence of effectiveness present in the current literature on social skills intervention. However, they remain largely embedded in the principles that have driven traditional models of social skills intervention: that children with social-emotional deficits require the ability to *consciously* identify and deconstruct *specific* social situations (and their instrumental component parts) in order to be able to develop functionally generalized social skills; consequently the curriculum of social skills intervention should be based in overt teaching of these social algorithms.

Conversely, Spotlight is based on the principle that children with Asperger syndrome can most effectively develop increased social pragmatic skills through high motivation, affect-based, developmentally appropriate, and individually tailored interactions. There are two primary individual treatment approaches for children on the autism spectrum also based in this fundamental principle, from which much of the theoretical and some of the practical foundations of the program are derived. Greenspan and Wieder (1998, 2006) have developed an intervention, Floortime, within a comprehensive model, the DIR (Developmental, Individual Differences, Relationship-based) model, with strong support for effectiveness in terms of long-term developmental outcomes (e.g., Greenspan & Wieder, 1997; Greenspan, 2000). Floortime is based on intensive periods of adult-child engagement wherein the adult works with the child one-to-one, fostering emotional connection through following the child's lead and interests, and then gradually expands and playfully pushes the child through a series of well described techniques. We developed Spotlight, in part, through capitalizing on the effectiveness of helping children on the autism spectrum to develop through building strong relationships. These relationships are developed both between staff and children, as well as between peers, and are based on intensive affectively-based, high motivation interactions. Further, the incorporation of videogames and the structured incorporation of favorite topics and passionate areas of interest into many of the games is much like Floortime in terms of maximizing the children's motivation by following their interests. Where Spotlight is most different from Floortime is that many of the activities are pre-determined by the staff, and, while they leave a great deal of room for individual differences, they have discrete rules and parameters designed to foster the development of specific skills.

Spotlight also incorporates several of the related principals of Relationship Development Intervention (RDI), developed by S. Gutstein and R. Sheely (2002; Gutstein,

2000). RDI, like Floortime, builds social pragmatic skills in children with autism spectrum disorders through warm, emotionally connected, developmentally tailored adult-child interactions, and has had some initial evidence of effectiveness in terms of social-emotional outcomes (Gutstein, 2005; Gutstein, in press; Gutstein, Burgess, & Montfort, in submission). Like Spotlight, and unlike Floortime, these interactions are adult-led and developed within a structured framework designed to promote naturalistic use of fluid reciprocal nonverbal social pragmatic skills (e.g., eye contact, gesture, timing, body orientation) (Gutstein & Whitney, 2002). The activities used in the RDI model are designed for an adult and a child, or, in the more advanced activities, for an adult and two children. While these activities build reciprocity, the activities in the first two levels are adult-led, and the adult serves as the Master while the child is the Apprentice. In the third level, the adult serves as more of a Coach to pairs of children. Many of these activities are similar to those used in drama games as well as in Spotlight. It is no coincidence that many of the activities of RDI, Spotlight, and acting training are similar, as the core goals involved in training novice actors to become more fluent in their presentation are consistent with the goals involved in fostering the development of social pragmatic skills in children for whom such skill learning does not come naturally. A large body of theatre/acting games in the public domain is designed to hone the skills of actors in reading each others' subtle, unspoken nonverbal cues. Many of these games have been "translated" into several books of drama games for children (e.g., Bany-Winters, 1997; Spolin, 1999). For example, Pass the Clap, described below, is a traditional drama warm-up game, described in several drama books including those mentioned above, and is consistent with several of the activities involved in building nonverbal coordinated actions between child and adult in Gutstein and Sheely's RDI model (e.g., Buddy Walkers, Word Crash).

The Spotlight activities differ from RDI most particularly in that they are designed to be played in small groups of children, specifically, with the children becoming the leaders and the adults being facilitators, rather than master/apprentice, adult-child roles highlighted throughout many of the RDI activities. Further, many activities that are more language-based are used in Spotlight than in RDI, incorporating teaching of higher level conversational skills through more advanced language-based acting games. These differences in emphasis may be primarily because RDI, while including some more advanced and small group activities, is currently focused largely on the earlier phases of pragmatic development, with a particular emphasis on work between parent and child, while Spotlight was developed at the outset as an approach for groups of teens with Asperger syndrome.

Specific Examples of Activities

Drama games are uniquely designed as semi-structured activities that help actors develop skills in specific areas of interaction (e.g., timing, reciprocity). At the same time, these activities structurally eliminate the need for, and cognitive load involved in, use of other areas (e.g., content development, complex non-verbal cue reading). In Spotlight, this approach provides a wealth of useful and high motivation activities

that, when appropriately adapted, can not only be readily accessed by people with compromised social processing and communication systems, but that are also especially effective in helping individuals with social difficulties to practice specific social functions in semi-structured contexts. For example, the game *Pass the Clap* is played with members in a circle. One member starts, turns to the person next to him, and establishes eye contact. While doing so, the two must attempt to clap simultaneously, with the initial member being the “sender” and the other participant being the “receiver.” The receiver then immediately becomes the sender, turning to the following person in the circle and “sending the clap,” which should be coordinated with eye contact, around the circle in this way. In this game, a valuable social pragmatic skill is repeatedly targeted, namely coordinated reciprocal social interaction through mutual timing of an action with another person, concurrent with use of eye contact. While coordination of eye contact is a stated goal, participants also tend to seek out eye contact spontaneously, as close attention to the partner’s face/eyes is key to anticipating the partner’s beginning to clap and thereby achieving simultaneous clapping. Hence the use of eye contact within this activity becomes immediately functional. Importantly, practice of this coordination, and success in this game, is achieved without requiring participants to simultaneously engage in other aspects of interaction. These components include generating or processing language, figuring out where to stand, topic initiation and maintenance, focusing on voice tone, or any of the many other pragmatic elements of communication that, as a combined whole, are difficult for this population to process.

This game, like all the games included in *Spotlight*, can be tailored to the level of individuals within a group. They can be utilized by children at a variety of skill levels, and can also be made increasingly challenging as participants’ skill levels develop. For example, additional challenges include modeling and encouraging the clap to be sent back and forth in either direction, adding rhythmic clapping, sending it across the circle randomly, etc. These various augmentations require more advanced coordinated timing using eye contact, and encourage longer sustained social vigilance to other group members due to the unpredictability of when one might receive the clap. This game, while accessible to children who are nonverbal and significantly impacted by autism, is challenging in its more advanced forms for even the most socially skilled, and virtually always ends up in a tangled up clapping series with all participants laughing. The shared group effort and mutual enjoyable affect adds to the otherwise limited library of positive social experiences of participants, and engenders motivation to try again. Dozens of games that isolate coordinated use of various social functions can be found in drama and theatre books (e.g., Spolin, 1999; Bany-Winters, 1997).

Another such activity that targets more complex elements of social interaction is *Freeze*. In this activity, adapted for therapeutic use from an existing improvisation game, two group members are chosen to go onto a designated stage area. The group determines a setting in which they are to begin an improvised scene (e.g., jungle, grocery store, classroom). When a staff member calls out “action,” the pair must begin acting out the scene. The scene continues until a staff person calls out “freeze,” at which point the pair freezes in whatever position they are in at the time. Another group member is chosen who must then go to the stage area and “tag out” one of the

pair. The “tagged out” person leaves the scene and joins the audience. The new scene partner assumes, or inherits, the physical position and location of the tagged out person. A staff member calls out “action,” at which point the two group members commence a new and different scene. This new scene is started by the new scene partner, who bases the scene choice on his/her physical position (e.g., raised arms could be catching an object falling from the sky, pleading with the scene partner, carrying a large object, etc.). The scene partner who has remained in the scene must follow the lead of the new scene partner. As such, they must follow the “no saying no” principle of improvisation (e.g., if the new scene partner says, “what are we doing in this jungle?” the other partner cannot say “no” by denying that they are in the jungle or by claiming they are elsewhere).

This activity clearly addresses a more complex set of social pragmatic skills and understanding. For instance, tone of voice, social timing, receptive non-verbal cue use, and creative social expression are targeted by all participants in the activity. Moreover, social initiation and flexibility are required of the person who tags in and starts the scene, while set shifting and Theory of Mind are distilled in the person who remains in the scene. All this is accomplished while at the same time mitigating the social demands of sustained topic maintenance, extended social flexibility, aversive social consequence, and conversational completion (i.e., how to appropriately terminate an interaction), which are known difficulties for those with Asperger syndrome. The complementarity of focusing on one set of difficult components of interaction while mitigating or eliminating others allows participants to achieve success in social interaction, as the interaction is not at the usual level of multi-channel complexity, which often eludes them.

Activities such as Freeze isolate these elements of social interaction in a way that is engaging and more comprehensible than typical, naturally occurring social interactions to the child involved. As such, primary and secondary challenges that are apparent in typical social settings often appear mitigated as the activities foster successful participation and opportunities emerge to focus on specific areas of social-emotional need. Co-occurring depression and anxiety, for instance, are extremely common among the Asperger syndrome population, particularly during adolescence (Blacher et al., 2003), as are affective and sensory dysregulation. During activities such as Freeze, many participants who present with substantial aversion to interaction or who experience severe social anxiety are able to surmount these difficulties for discrete periods of time. It is hypothesized that the highly rule-based nature of the game, the limited channels of social pragmatics required, as well as the understanding that the activity is time-limited and has fixed parameters, allows students to experience a systematic desensitization to social aversion as they engage in successful participation. Similarly, students are able to use participation in such activities to try managing difficult social situations, such as bullying. Though sometimes facilitated, we have often observed that this exploration is frequently child-initiated, and has led to notable progress by students in development of strategies to manage these experiences. Most encouraging is the fact that parents, teachers, and students themselves frequently report spontaneous use of these new strategies in live social situations such as school and other social environments.

Clinical & Programmatic Model

Program semesters run for 10 weeks during the school year and six weeks during the summer program, employing weekly and daily sessions respectively, and costing an average of \$20–\$25 per hour, depending on each student’s frequency of enrollment. After school, weekend, and summer sessions are 2, 3 and 5 hours each (with a minimum of 20 and a maximum of 145 hours spent in session over the course of a semester), providing for ample semi-structured free time within the overall structure of the various activities. In the context of the program, the staff addresses both the generalized needs of the population as well as the specific needs of individual students. Group goals include attention to tone of voice, perspective-taking, working together, expressive and receptive body language, “thinking on your feet,” and focus. These goals are addressed through the curriculum in a series of ways. First, the group is introduced to the goal of the day through a meeting in which everyone is encouraged to contribute his or her understanding of the goal’s meaning. Then, a group consensus is reached on a broader meaning of the goal, at which point the activities commence. All activities of each session are specifically crafted to address the day’s goal in a variety of ways, which encourages the students to discover and refine their capacity to achieve them (e.g., a focus day would entail activities that involve focusing on internal thoughts, other people’s actions, different parts of one’s body, and staying focused more generally). However, the students are not asked to verbally process these achievements at the time, as the intention throughout the session is primarily active participation. Only at the end of the session—once the goal has been worked on through various activities and summarily achieved—are students required to note times in which they have successfully used the goal of the day. They do this through filling out a simple daily Self-Evaluation Form where they rate themselves across various measures on a scale of 1–5, and through an end-of-session wrap-up meeting in which students are encouraged to articulate instances of use of the goal throughout the day.

Individual student goals are addressed in two ways. First, they are addressed through the various activities; for example, a student who has difficulty with social referencing and turn-taking may be encouraged to participate in an activity in which these elements are crucial. The student is then socially reinforced for making a positive contribution through the specified activity (e.g., social praise, “high fiving,” or other methods appropriate to the individual student’s preference). Second, individual goals are addressed through social scaffolding by the staff. This process is achieved through a high counselor-to-student ratio (ours is 1:3) and involves closely attending to the interactions of individuals in the group. When a conflict or social misinterpretation arises during this time, the counselor immediately intervenes, usually through a process of social translation, wherein the students are led to discover what was missed in the interaction (and what was realized). Therefore, students are provided *in vivo* social learning instead of simply being taught decontextualized skills, leading to greater generalization from the session. In processing emotionally complex situations, staff are trained to employ the affirmative (i.e., no power struggles) approach, consistent with current strategies for children with complex social and regulatory challenges,

such as the Collaborative Problem-Solving model (Greene, 2005). Sometimes peer interactions are too emotionally charged to be effectively addressed in this way, so more directive cognitive and behavioral strategies consistent with current practice for this population (Attwood, 2003) are used to address specific concerns.

Progress in terms of these various goals is assessed collaboratively with parents, program staff, and, when appropriate, with other providers such as schools and therapists. Staff make daily observations regarding the student's behaviors and progress and include them in a 2–3 page typed Communication Sheet. This sheet is placed in the student's Communication Binder, which goes home after each session. Parents and other involved providers are then strongly encouraged to read through this binder to both spur conversation about the program with their children and to provide their own observations and comments in the Notes from Home section. Through this mechanism, parents and staff can be equal partners in the assessment of progress and development of goals.

Support for Progress

We began the program in the summer of 2004 with four staff serving nine students, ages 11–15 and with a diagnosis of Asperger syndrome, in an intensive summer program setting. Due to overwhelmingly positive response from these original nine families and the many therapeutic and educational professionals who came to observe throughout the summer, the North Shore Arc opted to continue the program as a year-round after school, weekend, and vacation service. Through these iterations, Spotlight has served more than 200 students from more than three dozen school districts over the past two and a half years. At the time of this writing, Spotlight is currently employing a dozen staff annually and two dozen during the summer months, and is serving roughly 100 students, making it one of the largest social pragmatics programs in Massachusetts. Below are our triumphs and challenges thus far.

Children's progress. The number of families reporting progress has been substantial, with aggregate estimates of satisfaction at 93% based upon parent-completed satisfaction surveys ($n = 82$) and overall annualized within-semester attrition rates between 2%–3%. Beginning with the first nine students, whose initial survey results placed satisfaction near 100% and whose attrition rate was 0%, reports from families, schools, clinicians, individuals, and social settings have been promising. Most parents have reported substantial gains in their children in the area of independent social-seeking behavior, as well as marked increases in independent use of non-verbal skills such as eye contact, body language, and tone of voice without the need for adult verbal prompting. Many schools have reported substantial gains in student success in collaborative activities, adaptability to change, and overall social achievement. Several students have joined various socially-engaging school activities such as chess club, debate team, and track. Students themselves have consistently reported lower incidence of depression and greater social confidence; indeed, several students who have come to the program during or immediately following hospitalization due to acute and suicidal depression have not experienced relapse to this state in their years of atten-

dance. Most notable have been the independent social successes and friendships developed by the students, many of which have sustained outside of the program.

School funding. Due to the degree of reported social-emotional development achieved through participation in the program, an increasing number of students are funded by their school districts to participate in Spotlight as a program to address social and communication goals in their IEPs. While two of the original nine students were school-funded, this past summer (2006) more than half of the nearly 60 students were fully funded by their respective school districts for summer placement, and current response indicates a similar rate for upcoming semesters. After-school funding has grown more slowly, but has nonetheless done so steadily.

Family support. Parents' satisfaction and investment in the program has been extremely high. The substantial degree of communication between the program and individual families (via the aforementioned Communication Sheets as well as through direct family contact when appropriate) has facilitated a community atmosphere for families in which they develop connections to both the program and each other. To foster this, we have created a Parent Advisory Committee (PAC). This PAC meets monthly to review developments in the program, advise program staff on direction and need, plan various social activities (called Spotlight Events) for students in the program, and to participate in an ad hoc support group.

Enrollment. Based upon the positive responses that the program received with the initial population of students, Spotlight has expanded the range of children served. First, Spotlight has expanded the age group. Currently, the program serves students between the ages of 9 and 20 years old. We have found that these seem to be the ages within which the program is optimally effective, with accessibility of curriculum and appropriateness of instruction being concerns for older and younger students respectively. Second, Spotlight has expanded in terms of the range of disorders served. Through pilot groups within the program, we have been able to explore whether the intervention approach is appropriate for a variety of clinical populations. We have been very pleased to find that the intervention is enjoyable and anecdotally effective for a much wider range of populations than we had initially suspected. Such populations have included children with non-verbal learning disability, Attention Deficit Hyperactivity Disorder (ADHD), bipolar disorder, social anxiety disorder, generalized anxiety disorder, Pervasive Developmental Disorder (PDD), PDD-Not Otherwise Specified, autism, Williams syndrome, mental retardation, and subclinical social withdrawal. Finally, we have been able to serve a wide population as far as geographic region. Originally limited to the North Shore of the Boston area, Spotlight has now served students from across eastern Massachusetts and into southern New Hampshire. We have expanded to several satellite sites in the region as well to expand accessibility to the program.

Training and consultation. A recent development has been the call from school, medical, and community-based agencies for training and consultation in the program model. Thanks to the success of the program and the tireless advocacy of the parents involved, a number of organizations have sought input on how to integrate the unique model employed at Spotlight into their own programming. We have recently begun to offer a range of new auxiliary services to address this need, and to make the program

more widely available, including in-house training, called Spotlight Backstage, for clinicians, families, and educators.

Research. Due to these developments, Spotlight has been approached by a number of research organizations seeking collaboration. Organizations have included Massachusetts Institute of Technology, Massachusetts General Hospital, and Boston University. Spotlight is currently involved in a number of research projects with collaborators investigating intervention effectiveness, and, in conjunction with the Cambridge Health Alliance/Harvard Medical School, has recently been awarded an \$80,000 grant from Bank of America's Noonan Fund for a project to examine the specific effectiveness of the Spotlight Program, as well as the degree of generalization of targeted skills to non-program settings, for target populations. This particular project, run through Cambridge Health Alliance, will provide quantitative data using established measures to compare outcomes on relevant dimensions (e.g., depression rates, non-verbal cue use and reading, social responsiveness) to a group of treatment-naïve Spotlight participants to a group of population-matched controls.

Challenges

Tracking children to monitor maintenance and generalized use of learned skills. Though Spotlight employs an extensive qualitative documentation process for each student in each session of the program, we have had difficulty adequately implementing a quantitative system for tracking individual progress. However, the current research initiatives mentioned above are designed to target this challenge, and we expect them to facilitate greater clarity and standardization in this area.

Training teachers. Overall, Spotlight has been remarkably fortunate to find dedicated, passionate, and talented staff people to work in the programs. However, as the program grows, it is increasingly clear that a more formalized training procedure and module should be developed for more rapid dissemination and hiring. Development of this training has been challenging, as the multifarious nature of student needs has ensured ongoing difficulty in a directive and prescriptive training protocol. Nonetheless, such a protocol is currently under development, with hopes for in-house implementation in coming months.

Parent training. Though parent involvement in Spotlight has been high, opportunities for effective parent training have been difficult. The level of parent interest in such training has been variable but consistent, with a particular focus on the need for home-based carry-over for more effective generalization of skills. Though reports of skill generalization have been encouraging, it is clear that more parent training is needed. Therefore, we are working on site-based and individualized parent training modules that will be made available as soon as possible.

Managing growth. Growing interest in Spotlight has been substantial. The program has grown more than 10 times in size over only two and a half years, a result which has established clinical and community credibility and has garnered a remarkable level of support. However, the resulting issue is the need for quality control, which has become increasingly difficult to maintain with rapidly increasing enroll-

ment numbers, population diversity, and geographic availability. We have thus far been able to keep pace with growth via adequate and appropriate staffing, but it is evident that structurally the program is in a very different form than it was at the outset. We hope the program is similarly effective as it develops through its current and upcoming incarnations.

The chance to provide effective social skills programming to students who need it greatly, but might otherwise be resistant, is extremely exciting. The continued interest of so many families, the progress and enjoyment of individual students, and the ongoing and ever-increasing support of community and school collaborators have been most exciting. We are facing new and emerging challenges almost daily, but these promising initial findings and public support are strongly encouraging in terms of continued growth and interest.

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