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# Princeton Child Development Institute

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## **Princeton Child Development Institute (PCDI)**

PCDI was founded in 1970 by the mother and grandmother of a young boy with autism who were committed to creating a program that provided instruction based on the science of applied behavior analysis (McClannahan & Krantz, 1997). This early vision remains a hallmark of the program, inspiring professionals to use the most current evidence-based, behavior analytic procedures to maximize learning for individuals with autism across the life span.

In 1975, Patricia Krantz and Lynn McClannahan were hired as Executive Directors. They described this initial experience as one full of opportunity (Krantz & McClannahan, 2004, p. 3, as cited in Williams & Williams, 2010):

When we came to PCDI in 1975, we found three children with autism, a broken-down van, no staff, and no building. It was an ideal situation—no institutional environment to build down, no poorly trained staff members to dismiss, no bureaucracy, and on the downside, no money. But there was a committed and enthusiastic governing board that was determined to create a science-based intervention program for children with autism.

This heavy emphasis on creating a science-based program inspired all areas of the program. Applied behavior analysis is not only used to teach students, but also incorporated in the training of staff and parents, and in the development of systems that promote effective intervention.

While PCDI's impact can be seen across the globe, by design, it remains a small program. The Education Program typically accommodates 30 students. The Adult Program also accommodates 30 students. Neither program is expected to grow beyond 35 students. Maintaining a small census permits program directors to be familiar with all students,

families, and staff within the program, providing more oversight in key areas that maintain the quality of the program. This also permits the same administrators to be familiar with both programs. Education program directors witness the successes and challenges of adults in the adult program—they become familiar with the skillsets that produce the most success in employment settings, home settings, and the community. The Adult Program directors are also familiar with the students in the Education program—they recognize the needs of those students, who may ultimately enter the Adult Program. In this manner the Adult Program informs the Education Program, and the Education Program informs the Adult Program.

Communication between programs produces a heavy emphasis on teaching skills that will benefit students across the life span. Teaching students to engage in alternatives to stereotypy and problem behavior, make choices, follow activity schedules, initiate social interactions, respond to others, and engage in a wide variety of leisure and recreational activities are key areas to create more opportunities regarding home living, employment, and community participation.

The Adult Program and Education Program share an online database that consists of hundreds of programs that have been designed by PCDDI personnel to target a wide array of instructional areas, such as listener skills, speech and language repertoires, leisure activities, peer interactions, and key academic areas. Each of these programs includes an operational definition of the target response, a description of the measurement procedure, a description of the teaching procedure, and a description of methods used to obtain interobserver agreement and promote generalization and maintenance. These programs are individualized upon selection for a particular student. Adult Program and Education Program staff have access to the same instructional programs to further facilitate continuity between programs.

This database includes a wide array of instructional goals and teaching strategies. The deficits attributed with autism are broad, therefore the intervention must be broad. Krantz (2000, p. 413) discusses the need for this breadth of programming:

The PCDDI curriculum does not feature one or a few intervention procedures; rather, it includes a plethora of empirically based procedures that are represented in the research literature of behavior analysis. Young people with autism, like all of us, must learn to learn in a variety of ways; from discrete trial teaching and incidental teaching; from stimulus shaping and fading procedures; from pictorial, auditory, and textual cues; from television, videos, and computers; and from parents, teachers, peers, and employers.

## **PCDI Programs: Education Program**

PCDI's programs are designed to provide lifelong services to individuals across the autism spectrum. Programs are separated into modules. Each module consists of a group of students within the same age group, a group of instructors assigned to those students, and a trainer who is responsible for training the instructors within the module. Trainers also assist in the development of goals and objectives, conduct assessments, and review progress. Over the past 5 years, the instructor-to-trainer ratio has been approximately 5:1.

### ***Early Intervention***

The Early Intervention program was developed in 1997. Enrollment is privately funded, with costs offset by fundraising efforts. The program is designed for students under the age of 36 months and includes a combination of center-based and in-home services. Parents and siblings become part of the treatment team through in-home training. Students receive approximately 20 hours per week of center-based services at PCDI; parent training occurs for 5 of those hours. Home programming services are used to design and develop instructional strategies in the home setting. With PCDI's support, parents are then expected to provide an additional 20 hours per week of intervention in the home or community. There is a heavy emphasis on teaching play, social interactions, language, family participation, and home-living skills, such as feeding and sleeping.

### ***Preschool and Education Program***

PCDI is an approved private school for students with disabilities. Students between the ages of 3 and 21 are enrolled in the Education Program and are referred to PCDI by their local school districts. PCDI serves as an out-of-district placement for those students. This program includes 30 hours per week of direct intervention. Parents are expected to supplement this instruction with an additional 10 hours per week of intervention in the home. Instructional goals are highly individualized and are identified based upon direct observation, the use of assessments, and frequent and ongoing discussions and collaboration with families.

The school day consists of one-to-one instruction, zone supervision (LeLaurin & Risley, 1972), and for students who demonstrate readiness skills, small group instruction. As students age through the program and acquire critical skills such as waiting, appropriately garnering attention, and independently manipulating instructional materials, there is less of a need for 1:1 instruction. Thus, the student-to-teacher ratio is often 1:1 for younger

students in the program and reduced in the middle school and high school age groups.

The daily schedule of activities varies per student and is dynamic, based upon each child's present needs. When appropriate, students participate in instructional activities in community settings during the school day. Students may attend a gymnastics class, shop at a local store to purchase groceries that will later be used for meal preparation, or go to the mall to learn to successfully ride in the elevator. As students approach adolescence, vocational tasks are introduced and a heavy emphasis is placed on home- and community-living and self-care skills to prepare for employment opportunities and independent living in adulthood.

### **Home Programming**

A critical component of the Education Program is the heavy emphasis placed on home programming. Parent participation in a child's treatment can contribute significantly to the rate of child progress (McClannahan et al., 1982). Home programming services are used to identify appropriate goals for the home settings, provide training to parents and other caregivers, and collaborate to proactively prepare the child for success in the home throughout their lifetime.

McClannahan et al. (1982) outlined the early parent-training model that remains the basis for PCIDI's home programming services. Each student at PCIDI is assigned a home programmer. This person is typically the primary instructor who works with the student at school for a portion of the school day and is responsible for graphing data collected at school and at home. It is critical that this staff member establish a positive working relationship with the family.

Staff receive hands-on training in the home to develop their skills in providing parent training. Additional training is provided to staff to focus on skills such as modeling, providing feedback, being empathetic, and helping families to identify skills to be targeted in the home. Parents are expected to work with PCIDI staff in the development of goals, respond to parent training, and implement teaching strategies in the absence of PCIDI staff. They are also asked to collect data minimally once per week to assess behavior change. Staff then graph those data and work with families to adjust teaching procedures and identify new goals when needed.

For students first entering the program, parent training begins within the first several weeks with the parent observing the child in the school setting, and then by rehearsing the use of relevant teaching procedures at school. Training then begins in the home setting. PCIDI staff bring instructional materials into the home and assist the family in designing the environment to maximize learning.

A diagnosis of autism impacts all areas of a child's life. Treatment must be broad to address this impact. Across a child's time at PCDI, it is common for programming to be in place to address areas such as self-help, home-living, academics, interactions with friends/siblings, feeding, sleep, community visits, and participation in extracurricular activities. PCDI staff have accompanied students to religious ceremonies, dental appointments, doctor visits, beaches, picnics, graduations, amusement parks, and restaurants. Students learn skills such as playing with a sibling, responding to an alarm clock, shaving, showering, and independently completing homework. Any area in which the family must learn to effectively teach their child is an area in which home programming is essential.

Over time, many families require less support. A parent whose child begins in our Early Intervention Program may initially participate in three home visits per week. This same parent may only require two home visits per month when his/her child reaches adolescence. The parent training previously employed with this family has resulted in the parent acquiring the skills needed to effectively teach the child.

PCDI's accomplishments in parent training can be seen with parents who independently design a teaching strategy while on vacation to help a child play games with his or her cousins, or create their own curricula and materials to keep a child engaged during a long flight, or design a motivational system to help a child remain calm during an urgent doctor's visit. Parents spend far more time with their children than any professional will. Parent training empowers families and maximizes the success of students across settings.

Building a relationship with families in this manner also improves upon student performance in the school setting. The continuity between school and home is critical in maintaining the student's success across settings. Observations of parents' implementation of procedures during home visits guide intervention in school—if parents are unable to implement teaching procedures at home, the design of those procedures must be modified, or training must be increased. Thus, home programmers learn to become advocates for the family, not just for the child with autism.

### ***Transition Services***

Upon demonstration of key criteria, students from the Education or Early Intervention program may begin to transition to less restrictive educational settings. A study conducted by Fenske et al. (1985) indicated that 67% of students who entered the program under the age of 60 months transitioned to less restrictive settings, as opposed to 11% of the students who entered over the age of 60 months. In 1999, Krantz

and McClannahan (pp. 228–229) provided an update of those data and indicated:

Because of the small N, the percentage of children who enter treatment before age 5 and achieve successful transitions to public school classrooms varies considerably from year to year—from 42% to 67%. These calculations do not include children who were withdrawn from the program before an outcome was achieved, nor do they include children who are presently enrolled in the preschool or early intervention programs.

More recent data, compiled in 2020, indicate that of the students who have remained enrolled at PCDI, 46% have transitioned to less restrictive settings. Of those who have made transitions, 28% have entered settings in which they continue to receive some special education supports; the remaining 72% are in general education settings with minimal additional supports.

PCDI begins to actively prepare students for transition from its program into general education settings or less restrictive special education settings after students demonstrate prerequisite skills in key areas that appear to be predictors of later success in public school classrooms. Readiness skills include sustained engagement, following adults' instructions, responding to temporally delayed consequences, exhibiting generative language, generalization of skills across settings, and displaying low rates of inappropriate behavior (Krantz & McClannahan, 1999).

There are several critical phases of the transition process. When a student has been identified to begin the process of a transition, PCDI staff and the student's parents meet to determine an appropriate placement to begin the transition process. Because PCDI serves as an out-of-district placement for students, the Child Study Team from the sending school district is often involved in this discussion.

#### *Pre-Transition Instruction*

This phase requires close cooperative relationships with the sending and receiving settings. PCDI staff observe the transition setting and begin to introduce similar materials and curricula within the student's program at PCDI. This often includes increasing group instruction and introducing more complex classroom routines that will be in place in the new instructional setting.

#### *Gradual Transitions*

When the student demonstrates success with the materials and curricula from the transition setting, he or she begins attending the new classroom

for a few hours each school day, or for a few school days each week. A PCDI staff member accompanies the student and collects data that are later used to structure teaching activities. Educators in the new classroom are invited to identify skill deficits and behavior problems that may interfere with the child's successful transition. The amount of time spent in the transition setting is gradually increased as the student continues to demonstrate success in key readiness areas.

#### *Gradual Fading of Special Supports*

When the student is attending the transition setting full-time and data suggest that the student's performance across key readiness areas has maintained, the PCDI instructor's presence is gradually faded. Initially, the instructor may be immediately behind the student, then fade to the back of the classroom, then to the hallway. Ultimately, the presence of PCDI staff becomes less predictable and occurs on a less frequent basis, such as weekly, and later, monthly. PCDI staff maintain ongoing communication with parents and educators in the transition setting and remain available to provide additional support as needed.

#### *Follow-Up*

After a student's graduation from PCDI, follow-up services remain available. These services are often utilized when changes occur in the classroom or the home environment. PCDI staff meet with parents and educators on a regular basis to continue to provide ongoing training to all members of the student's educational team. At times, PCDI has been called upon for guidance even several years following a child's graduation.

#### **PCDI Programs: Adult Program**

Services are delivered to adults in PCDI's Adult Program in multiple settings, including community workplaces, learner's homes, recreation and entertainment facilities, restaurants, and shopping malls, as well as at PCDI. Maintaining high quality of intervention in the Adult Program, with significantly less funding than is available in the Education Program, is only possible because of favorable intervention effects achieved during childhood and adolescence (McClannahan & Krantz, 2006). This permits a reduction in staff-learner ratio (1:2 as opposed to 1:1). Additional cost-savings are realized by distributing the cost of administration across PCDI's Education, Early Intervention, and Adult Program.

### **Day Program**

There were few options available to adults with autism when the first young person attained age 21 in 1987. To ensure consistency, the parameters of the Adult Life-Skills Program (ALSP) are very similar to those of PCDI's preschool and school programs—for example, staff members receive hands-on training and participate in regular performance evaluations. The ALSP emphasizes instruction in community- and home-living skills, self-care and social competence, and skills that will ultimately lead to employment, including sustained engagement and work endurance.

The instructional space used by adults within PCDI serves several purposes. It provides paid employment opportunities for learners who do not work out of house because of health or behavior problems, it serves as a practice setting for workers who are experiencing difficulty in mastering aspects of their job, and it represents a structured environment designed to help adults acquire skills that are prerequisite to their entry into community employment settings.

### **Supported Employment**

When adults achieve criterion performance in several key areas, they become candidates for supported employment opportunities. Critical prerequisites include sustained engagement, competence in completing tasks, direction-following skills, and near-zero levels of disruptive behavior. The goal of the ALSP is to have adults employed in community settings in which they work in close proximity to nondisabled coworkers and earn a competitive wage for their efforts. Although many of the adults served display severe deficits in expressive and receptive language skills, all adults participate in job interviews to the best of their ability.

Employment opportunities are diverse and match the preferences and skills of the adults served. Adults who have acquired appropriate reading and language levels and who have acquired the requisite technology skills have attained employment in pharmacology, insurance, and other companies in positions such as laboratory, administrative, and mail room assistants. Adult learners with more challenged language repertoires are employed in fields such as building maintenance and manufacturing. For example, several adults are currently employed by a cosmetics company and work on an assembly line where they package and label product for shipment.

Although it is preferred that adults attain employment for 25–30 hours per week, some adults have worked part-time or volunteered their services for a short period of time to demonstrate their work effort and productivity to potential employers. As of March 2020, 90% of PCDI's adult



learners were working at least 25 hours per week and were receiving wages commensurate with their nondisabled peers.

A Life-Skills Coach (LSC)—a college educated professional trained at PCIDI—is assigned to every two adults served in the program. This ratio allows adults to receive sufficient instruction whenever they secure a new position, a new work responsibility is added by their employer, or they require additional structure to manage their behavior. As LSCs attempt to fade their supervision and proximity, adults with autism learn to self-monitor their work performance and self-manage motivational systems. Although LSCs cannot always fade supervision completely, many adults with autism have learned to work for several hours without direct supervision. Teaching adults to use cellular phones to send and receive text messages or to receive calls provides another means for them to report on their performance and/or to request assistance.

### ***Residential Programs***

In 1977, PCIDI opened the first community-based group home in New Jersey for children with autism, Family Focus. At the time, there was a desperate need for a noninstitutional setting for children and adolescents who displayed severe challenging behavior that prevented them from living with their families. A second group home, Family Focus at Mountainview, opened in 1983, and a third, Family Focus Hopewell, opened in 2023. Five adult residents live in each home. All homes are based on the Teaching-Family Model, originally developed in 1967 for Achievement Place at the University of Kansas by Montrose Wolf, Dean Fixsen, Lonnie and Elaine Phillips, and others (Fixsen & Dunlap, 2004). A married couple, or an individual, serve as Family Teachers who live in the home. To maintain an appropriate learner-staff ratio, other professionals are employed in the home for portions of the day to assist in teaching individuals to engage in home- and community-living activities (e.g., cooking, cleaning, self-care), language and social interaction tasks, and leisure activities.

Some students who initially lived in the group home setting developed a sufficient level of independence to move from the group home to a supervised apartment. In 1994, PCIDI opened its first of two Supervised Apartments. The residents independently manage their own homes, prepare meals, grocery shop, and set dental and medical appointments. Although professionals trained in applied behavior analysis are available to provide instruction and assistance throughout the learners' waking hours, supervision is not constant, and no staff members are present in the apartments overnight. Each of the residents of the apartment program has learned to contact "on-call" staff members whenever they require assistance.

## **Program-Wide Accountability Systems**

PCDI employs the science of behavior analysis at every level of the organization. Contingencies across the program are yoked. Program administrators are only effective if training staff are effective, training staff are only effective if teaching staff are effective, and teaching staff are only effective if clients make meaningful progress. “Yoking the reinforcement contingencies of *all* of the participants in a human service organization is a systems design that supports clients’ progress” (McClannahan & Krantz, 1993, pp. 590–591).

### **Staff Training and Staff Evaluation**

A program is only as effective as the staff’s effectiveness in providing direct intervention to students. Thus, staff training is a critical component of any behavior analytic program. PCDI is a premiere staff training program, with partnerships with several colleges and universities aimed at providing essential training to the next generation of behavior analysts. PCDI maintains stringent requirements for employment. All staff in the Education and Adult Programs must minimally have a bachelor’s degree. Many also hold a master’s degree. Some have additional certifications, such as teaching credentials or a BCBA credential. During the interview process, prospective employees are asked to work with students and receive hands-on training. This allows PCDI staff to observe the prospective employee’s response to training and feedback and allows the prospective employee an opportunity to become familiar with the format of training employed at PCDI.

Ongoing hands-on training (modeling, supervised practice, immediate verbal feedback) is a cornerstone of the program. To provide this level of staff training, it is imperative that trainers master the skills they are mandated to teach (McClannahan & Krantz, 1993). Qualifications for individuals to take on training responsibilities are related to staff member’s demonstration of key skills that included professionalism, relationship building, data analysis, and clinical effectiveness.

Upon hiring, instructors receive intensive hands-on training. During the first few weeks of employment, it is common for a staff member to receive training during all sessions with students. From there, training is gradually reduced based upon the staff member’s acquisition of critical skills. Even the most senior staff continue to receive training in an ongoing manner. This level of training is applied in all areas—work with students, writing of instructional programs, home programming, creation of graphs, and analysis of data.

A formal evaluation is conducted for each employee on an annual basis, regardless of the employee’s tenure in the program. Evaluations of

instructors are conducted by a trainer outside of his/her module or a program director. Evaluations consist of measures of client performance, staff performance, and data analysis and graphing skills. The protocol used for staff evaluations also serves as the staff training protocol.

Training staff are also evaluated annually. These evaluations consist of observations of the trainer working with clients, providing training to staff, conducting staff evaluations, developing client goals and objectives, and designing new instructional programs. Evaluations of trainers are conducted by program directors.

### ***Program Evaluation***

It is critical that program directors remain accountable for administration of the program and are evaluated in this regard. Obtaining data across multiple areas of the program that measures effectiveness and social validity serves as a prompt system for program administrators. At the end of each school year, these data are compiled into an annual report that is shared with program administrators, board members, staff, families, an advisory board, and affiliate programs. The following items are included in the annual report.

#### *External Review of Individualized Programs*

Each year a professional behavior analyst who is not employed by PCDI is hired to conduct a review of client data. The evaluator reviews a sample of all instructional and home programs and all behavior-reduction programs. The evaluator calculates the percentage of reviewed programs that are individualized, effective, appropriate, display generality, and include sufficient measures of interobserver agreement. The evaluator also comments on the total number and type of programs in place across the Institute.

#### *Consumer Evaluations*

PCDI's consumer base is broad. At minimum, it consists of client's parents, employers of adults, case managers from sending school districts, board members, and staff members. Each year, PCDI provides consumers with a survey in which feedback is recruited in an anonymous manner across a wide array of critical areas. Survey questions vary by consumer group. Additionally, staff are given an opportunity to rate each of their colleagues, including program directors on a variety of important items, such as the helpfulness of that individual, the individual's professionalism skills, and their communication skills. Staff member scores and the accompanying written comments give program administrators an indication of a need

for increased staff training or changes to administrative policies (McClanahan & Krantz, 1993). When consumer data have been compiled, it is shared with all staff. This serves as an opportunity to discuss any program changes that will be made based on the data and provide additional training on the usefulness of the feedback that was provided. By repeatedly measuring consumer satisfaction, program administrators can assess the impact of changes made to the program over time.

#### *Program-Wide On-Task*

Another measure of client outcomes can be assessed using a measure of engagement, defined as appropriately manipulating materials and visually attending to others in the absence of stereotypy or disruptive behavior. This measure is obtained monthly across the program. Observers select a time to walk through the program and obtain data on on-task behavior using a momentary time sample. At the conclusion of the data collection window, the observer calculates the percentage of students' scored as on-task. Criterion is 80% of students engaged during the observation period.

### **Ongoing Commitment to Improvement**

The increasing prevalence of autism has created challenges through the years. It has led many school districts to create their own autism program as a cost-effectiveness measure. While this increases accessibility to autism services, not all district programs are well-equipped to meet students' needs. The age that students are referred to PCDI has increased through the years. There are far more referrals for older students who have failed in the public school system, and who are referred to an out of district placement after the emergence of severe problem behavior. This requires far more treatment resources, often delivered long-term, than when students enter the program at a younger age.

There has been an increase in dual-working families at PCDI. This has resulted in many more families requiring the assistance of qualified child-care providers in addition to parent training. PCDI has expanded parent training to include training alternate caregivers and collaborating with agencies to address the shifting needs in this area.

Additionally, the need for adult services is enormous and funding is not sufficient to cover the cost of providing high-quality, behavior analytic intervention. This results in many adult providers offering low-quality services. There is a shortage of appropriate options available to adults with autism. PCDI's hope is to disseminate its model of adult program services to increase access to high-quality intervention for adults with autism.

## **Program Dissemination**

PCDI's program has been replicated nationally and internationally. Additionally, components of the program have been adopted by other programs through consultation services, staff training, and published research.

## **Research**

PCDI applies a scientist practitioner model. This promotes a bidirectional relationship between research and practice, wherein clinical work inspires research and research improves clinical outcomes (Dorsey & Harper, 2018). Lines of research concerning the use of scripts and script-fading procedures (Brown et al., 2008; Krantz & McClannahan, 1993; Krantz & McClannahan, 1998; MacDuff et al., 2007; McClannahan & Krantz, 2005; Stevenson et al., 2000), and activity schedules (MacDuff, Krantz, & McClannahan, 1993; McClannahan & Krantz, 2010) were initiated and expanded upon at PCDI. Published research has also examined the use of incidental teaching, gestural communication, parent training, systems analysis, and a wide array of other behavior analytic procedures.

## *Partner Programs/Dissemination Sites*

The need for autism services remains far greater than the level of service any one program can provide. This has led to a need for dissemination of PCDI's program. Through the years PCDI staff have employed components of PCDI's program in a variety of settings. Professionals from Norway, South Korea, Greece, Russia, Norway, and Australia have received training by PCDI professionals.

PCDI's program has most thoroughly been disseminated in the development of other programs that employ the same accountability measures. Program directors at PCDI dissemination sites have conducted a training residency at PCDI. During this time, intensive training is provided related to clinical programming, program administration, and staff training. Other leaders within their programs, such as trainer level staff, may also complete trainings at PCDI. Newly developed programs require ongoing mentorship. They must acquire sufficient funding sources, work under the mentorship of a seasoned and skilled professional, and make modifications and adjustments to the program as needed while maintaining the model (Townsend et al., 2019).

In 2017, the leadership teams from PCDI's dissemination sites came together to form the Alliance for Scientific Autism Intervention (ASAI). This nonprofit organization is dedicated to ensuring the preservation and extension of the science-based model developed at PCDI by standardizing,

documenting, and extending the implementation of the systems originally proposed by McClannahan and Krantz to ensure the long-term fidelity of the model (Townsend et al., 2019). Foundry 6:1:3, (founded in 2023 in New York), the Institute for Educational Achievement (IEA, founded in 1995 in New Jersey), Somerset Hills Learning Institute (founded in 1998 in New Jersey), the Institute for Child Development—IWRD (Instytut Wspomagania Rozwoju Dziecka, founded in 2006 in Gdansk, Poland)—and PCDI serve as current full members. The Binyamin Birkan Academy (BBA, founded in 2019 in Istanbul, Turkey) serves as an affiliate member.

Each of these programs provides intervention based upon the system variables defined above, including the use of staff training and evaluation, data collection on intervention processes and outcomes, and engagement in research using the scientist-practitioner model. ASAI is committed to continuing the research and dissemination of system variables and science-based autism intervention strategies to improve the lives of individuals with autism. The goal is to disseminate information about critical standards of autism intervention, provide mentorship to agencies and professionals interested in implementing the standards and model, and collect and analyze data across member programs to further enhance the model (Townsend et al., 2019).

## Conclusion

PCDI has been recognized as an “enduring program in behavior analysis” (McClannahan & Krantz, 1997). Over 20 years later, PCDI remains an enduring program, committed to the use of the science of behavior analysis to create positive change among program administrators, trainers, instructors, parents, and students. Baer et al. (1987) hypothesized that “effectiveness for the future will probably be built primarily on system-wide interventions.” The development of such system is critical in protecting client’s right to effective and socially significant behavior change (Baer et al., 1968). The replication of these systems has produced positive changes for individuals with autism across the globe.

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