

Integrating Faith and Treatment for Children with High Functioning Autism Spectrum Disorders

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With a prevalence rate of between 2 and 6 per 1,000 individuals, Autistic Spectrum Disorders (ASD) are increasingly prominent in today's society. Spreading knowledge of the various ASD disorders in the medical community, along with ever more accurate diagnostic tools, have led to an increasing number of diagnoses of ASDs. The increased focus on these disorders has, in turn, spurred a flurry of treatment methods in recent years. This article provides an overview of the behavioral method of treatment for ASD. In addition, the Inner Health Ministries Model is introduced, a Christ-centered treatment program for High Functioning ASD that uses research-based interventions. As an exemplar of this model, an overview of the Building Behaviors treatment program is presented, along with program evaluation data gathered during a Building Behaviors 5-day treatment camp.

There are few, if any, studies that detail the integration of research-based interventions into Christian treatment programs for children diagnosed with Autism Spectrum Disorders (ASD). This article presents the Inner Health Ministries (IHM) Model, a comprehensive treatment method for children diagnosed with High Functioning ASD. The IHM Model addresses the behavioral, mental, social, physical, and spiritual health of each child in treatment, integrating behavioral principles while teaching about Christ. The model is suitable for adaptation to a variety of treatment programs, such as group therapy, family therapy, after-school treatment programs, and treatment camps. The model can also be adapted for children diagnosed with Attention-Deficit/Hyperactivity Disorder and disruptive behavior disorders. This article provides an overview of the IHM Model, along with a description of an exemplar treatment program titled Building Behaviors. Results of data collected during a Building Behaviors 5-day treatment camp are also provided.

Autism Spectrum Disorders

ASDs are increasingly prominent in today's growing society. As knowledge about the various ASDs has spread throughout the medical community, more accurate diagnostic tools have been developed (Gilliam, 2001; Smith Myles, Jones Bock, & Simpson, 2001). This has led to

an increase in the number of ASD diagnoses given (Fombonne, Zakarian, Bennet, Meng, & McLean-Heywood, 2006). The National Center on Birth Defects and Developmental Disabilities (2006) estimates that prevalence rates for ASD are between 2 and 6 per 1,000 individuals.

Disorders included under the ASD categorization include Autistic Disorder, Asperger's Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS). These disorders are characterized by impairments in reciprocal social interactions, language development, and/or stereotyped behaviors and interests. For purposes of this article, we will refer to those diagnosed with any of these three disorders as having an ASD. The designation of High Functioning ASD refers to those who are diagnosed with an ASD but display a relatively high level of adaptive functioning and are able to participate in society without significant modifications.

Autistic Disorder

The *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994)*, describes Autistic Disorder as "the presence of markedly abnormal or impaired development in social interaction and communication and a markedly restricted repertoire of activity and interests" (p. 66). Onset of Autistic Disorder is typically before the age of three. Impairments in social interactions may include difficulties understanding nonverbal cues (e.g., eye contact, facial expressions, body postures, and gestures), inability to establish age-appropriate peer relationships, lack of

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spontaneous seeking to share others' interests, or lack of social or emotional reciprocity (e.g., difficulty sensing and responding to others' emotions, difficulty expressing emotions, carrying on "one-sided" conversations). Communication impairments may include delay of verbal language, inability to initiate or sustain conversations with others, stereotyped and repetitive use of language or idiosyncratic language (e.g., repetition of meaningless words or sounds, inappropriate use of words), or lack of varied and spontaneous imaginative or social age-appropriate play (e.g., lack of relational interactions within play, concrete repetition of play sequence). Due to a tendency toward concrete thinking, individuals with autism typically have a difficult time understanding language, such as metaphors, sarcasm, and jokes. Lastly, markedly restricted repetitive and stereotyped patterns of behavior, interests, and activities may include abnormal intensity or focus in a preoccupation with a specific behavior or interest (e.g., repetitively watching and talking about one movie for an extended period of time), inflexible adherence to routines (e.g., insistence on eating the same food at the same time prepared in the same way), repetitive motor movements (e.g., hand-flapping, body twisting), or obsession with specific parts of objects (e.g., continuously playing with the wheels on a truck rather than the truck itself). Sensory issues (e.g., hypersensitivity or hyposensitivity to sound, light, touch, taste, or smell) may also be present.

Autistic Disorder is approximately four times more common in males than females (Ehlers & Gillberg, 1993; Ritvo et al., 1989; Yeargin-Allsopp et al., 2003). Cognitive abilities are varied, although a majority of children with Autistic Disorder have a comorbid diagnosis of mental retardation or some other cognitive impairment (Yeargin-Allsopp et al., 2003).

Asperger's Disorder

Asperger's Disorder differs from Autistic Disorder in that there are no clinically significant delays in communication, cognitive development, age-appropriate self-help skills, adaptive behavior, or curiosity about the environment. The similarity between the two disorders, however, lies in their sustained impairment in social interaction and restricted and repetitive patterns of behaviors, interests, and activities. Children with Asperger's Disorder typically have average or above average IQ levels, and their language development is normal or above normal. Many

children with Asperger's Disorder demonstrate pedantic or formal speech patterns (resulting in speech that can sound very adult-like), and they have difficulty reading nonverbal social cues (e.g., picking up on another person's lack of interest in a conversation).

Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS)

The label of PDD-NOS is used for individuals who have symptoms of Autistic Disorder or Asperger's Disorder but do not meet the full *DSM-IV* (APA, 1994) criteria for either diagnosis. Children with a diagnosis of PDD-NOS present in a variety of ways, displaying characteristics of Autistic Disorder or Asperger's Disorder at a lower severity. They typically display social difficulties, inflexibility with routines, and concrete thinking.

Treating ASD with Behavioral Therapy

The IHM Model is based on behavioral therapy, a research-based, empirically supported method of treatment for ASD. More specifically, the model integrates many techniques used in Applied Behavior Analysis (ABA). This technique was first presented by Dr. O. Ivar Lovaas (1987) at UCLA, and is based on reinforcement (or operant) theory. ABA is supported in the literature as an effective approach to teach new skills and behaviors, reduce maladaptive and disruptive behaviors, maintain and generalize positive behaviors, enhance attention and motivation for children with ASD, and teach social skills (Goldstein, 2002; Horner, Carr, Strain, Todd, & Reed, 2002; Lovass, 1987; Odom et al., 2003; Sallows & Graupner, 2005; Weiss & Harris, 2001). Children with ASD are believed to benefit most extensively from early intervention with behavioral therapy, such as that provided through Early Intensive Behavioral Intervention (EIBI). EIBI applies the principles of ABA to young children, providing 25 to 40 hours per week of behavioral intervention for two or more years (Lovaas, 1987; Rogers & Lewis, 1989). Children participating in EIBI have been shown to demonstrate significant improvements in intellectual, educational, and adaptive behavior functioning (Cohen, Amerine-Dickens, & Smith, 2006; Lovaas, 1987).

Behavioral programs typically focus on correcting individual skill deficits. This correction occurs primarily through shaping, a process in which positive behaviors are identified and reinforcement is provided for steps taken towards imple-

mentation of these behaviors. Shaping is followed by chaining, a process in which these learned positive behaviors are connected into a more complex series of behavior. The main focus of the behavioral approach is on positive reinforcement, but negative reinforcement is also employed when needed. Goals may include an increase in on-task behavior, communication, positive social interactions (e.g., eye contact, initiating play/conversations, reciprocal conversations), self-help skills (e.g., hygiene, toileting, getting dressed, feeding), self-control and self-monitoring related to stress and anger management, and appropriate behaviors to replace maladaptive behaviors (e.g., self-injurious behaviors, repetitive behaviors, stereotyped behaviors, aggression).

Other approaches for treating ASD are often integrated into behavioral treatment. For example, creating structured environments through organizing the setting, using visual cues, and implementing schedules, is extremely important in working with a child with ASD (Mesibov, Schopler, & Hearshey, 1994). Using nondisabled peers as change agents has led to beneficial effects for children with ASD (Goldstein, Kaczmarek, Pennington, & Shafer, 1992). Pragmatic approaches, such as social stories (providing education regarding social situations), comic strip conversations (involving the child in the creation of comic strips that reflect social situations), and written cues (creating pictures that indicate to the child what the next appropriate step might be in a certain situation) (Hutchins & Prelock, 2006; Scattone, Wilczynski, Edwards, & Rabian, 2002; Thiemann & Goldstein, 2001), are also widely used with the ASD population. Although case studies have shown social stories and comic strip conversations to be promising interventions with the ASD population (Hutchins & Prelock, 2006), further research is needed to explore the efficacy of these alternative methods of ASD treatment.

The Inner Health Ministries Model (IHM Model)

Target Population

The IHM Model was created for children diagnosed with High Functioning ASDs who are mainstreamed into the educational system. Often, the symptoms displayed by these children create social and behavioral difficulties, but are not at a level requiring intensive behavior-based intervention. Such children often "fall between the cracks," particularly in educational settings where behavior-based interventions for ASDs are

lacking. In some cases, children have a history of effective behavioral treatment (such as ABA), but the intensity of their behavioral treatment plan has been reduced over time as their functioning has increased. These children function at relatively high levels, but display ongoing skills deficits related to ASDs in areas such as social skills, communication, self-help, and self-control. Such children are appropriate candidates for treatment with the IHM Model.

Because Christian teaching is integrated into the IHM Model of treatment, it is important that children and their parents are open to participation in a faith-based treatment program. However, it is possible to adapt the model for those who desire a treatment program that does not include Christian elements.

Assessment

One of the most important components of any effective treatment program is an individualized focus on the child's development and skill deficits (Lansing & Schopler, 1978; Rogers & Lewis, 1989). This is especially true for children diagnosed with ASDs, given the complexity of pervasive developmental disorders and the variability of presentation between each diagnosed child. Individualized, comprehensive assessment is critical before beginning treatment. Initial evaluation should include thorough assessment of cognitive, behavioral, social-emotional, and family functioning.

Cognitive ability. Cognitive ability is a significant predictor of outcome for children with ASD (DeMyer, Hingtgen, & Jackson, 1981), and therefore needs to be carefully evaluated prior to beginning treatment. Assessment of cognitive abilities can be done through common measures of intelligence, such as the Wechsler Intelligence Scale for Children, Fourth Edition (Wechsler, 2003), Stanford-Binet Intelligence Scales, Fifth Edition (Roid, 2003), or the Woodcock Johnson III Tests of Cognitive Abilities (Woodcock, McGrew, & Mather, 2001).

Behavioral and social-emotional functioning.

Adaptive behavior skills are another significant predictor of outcome in the treatment of children with ASD (Gillham, Carter, Volkmar, & Sparrow, 2000). The Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1984), recently revised to the Vineland II Adaptive Behavior Scales (Sparrow, Cicchetti, & Balla, 2005), has been widely used to assess delays in adaptive behaviors for children with ASD (Carter, et al., 1998; Paul et al., 2004).

Diagnostic tools that measure specific symptoms of ASD are also recommended, such as the Childhood Autism Rating Scales (Schopler, Reichler, & Renner, 1988), Gilliam Autism Rating Scale-2 (Gilliam, 2006), Gilliam Asperger's Disorder Scale (Gilliam, 2001), the Autism Diagnostic Interview, Revised (Lord, Rutter, & LeCouteur, 2005), and the Autism Diagnostic Observation Schedule (Lord, Rutter, DiLavore, & Risi, 2002). Other rating scales, such as the Behavior Assessment for Children-2 (Reynolds & Kamphaus, 2004) or the Child Behavior Checklist (Achenbach, 1991) provide additional assessment of current behavioral and social-emotional functioning, helping to identify areas of maladaptive behavior. The most severe problem behaviors (such as aggression, incontinence, noncompliance, and repetitive interests) should be subject to functional analysis, which involves understanding the antecedents, function, and consequences of each behavior. Observation and interviews provide the in-depth information necessary for such analysis, and ideally include the family, school, and church systems.

Family functioning. Assessment of family functioning provides information regarding the family's emotional adjustment and their ability to implement needed interventions at home. This can occur through interviews or using family rating scales. Such assessment includes gathering information on the spiritual beliefs and practices of the child and family and their openness to the integration of Christian teaching into their treatment program.

Treatment Goals

Treatment goals for participants should be driven by the results of assessment, targeting identified problems and building on existing strengths. The development of communication skills, social skills, and daily living skills is especially important for children with High Functioning ASD, along with reduction of maladaptive, repetitive, and/or aggressive behaviors (Rutter, 1985). Promoting positive family adjustment, reducing family stress, and providing psychoeducation to related systems (such as the school and church) are also important to the improvement of life for the child with ASD within the larger systems context. Treatment goals are encompassed within the five components of health: behavioral, mental, social, physical, and spiritual.

Intervention

The IHM Model can be adapted for a number of different treatment settings, including group

therapy, family therapy, after-school treatment programs, and treatment camps. The five components of health are a key concept within the IHM Model, and they serve as a guide for planning interventions in any treatment setting under the model.

Behavioral health. Due to the vast body of research supporting behavioral intervention in treating the child with ASD, the IHM Model is based on the use of behavioral therapy in treatment. Each treatment session involves teaching a particular skill, which is reinforced by the child's treating therapist during the session. Parents play a pivotal role in monitoring their child's progress outside of sessions, and they receive instruction on the application of behavioral principles in the home setting. Both parent and treating therapist implement task analysis while using reinforcement, incidental teaching procedures, and shaping and chaining of the child's behaviors.

Mental health. Given that children with ASD have difficulty with self-regulation and self-control, the IHM Model focuses on teaching strategies such as recognizing, labeling, and expressing emotions, self-monitoring, coping strategies, and stress and anger management. Cognitive-behavioral techniques are used to increase mental health and improve emotional regulation.

Social health. The need to improve communication and socialization skills is imperative for the child with ASD. Specific skills taught under the IHM Model (depending on the results of individual assessment) may include basic conversational responses (e.g., answering simple questions, reciprocal conversations), understanding nonverbal cues in other people (e.g., body language and facial expressions), initiating conversations, eye contact, recognizing voice tone and volume, understanding figurative speech, and conflict resolution.

Physical health. Given that many children with ASD lack the necessary daily living skills to function independently, a focus on self-help skills is essential. Specific skill deficits often include self-care activities, such as bathing, brushing teeth, getting dressed, applying deodorant, shaving, and so forth. In addition, children with ASD may also lack domestic skills, such as cooking and cleaning, and lack of exercise may be a problem. The IHM Model involves teaching these skills through the behavioral techniques of shaping, chaining, and reinforcement.

Spiritual health. The spiritual development of children with ASD is often ignored, as many families find it a daunting task to impart spiritual wisdom to their children. The IHM Model provides children with direct instruction regarding matters of faith, as well as training parents in effective ways to communicate spiritual truths to their children. Such instruction can effectively occur through the teaching of Bible passages, prayer, written scripts (e.g., social stories), role-playing of biblical stories, and educational activities. By integrating biblical principles into treatment, children and their families have the opportunity to develop a closer relationship with Christ.

Fostering Spiritual Health in Children with ASD

Spiritual instruction is a core element of the IHM Model, setting it apart from other behavioral treatment programs. Treating therapists use scripture, prayer, and developmentally appropriate hands-on activities to help the child and family grow spiritually through the treatment process. This section outlines typical questions and issues that arise when helping children with ASD grow in their spiritual understanding, along with specific scriptural references that can be helpful in addressing these issues.

The task of Christian instruction for children with ASD can be complicated by their tendency toward concrete and rigid thinking. Understanding the concept of a God they cannot directly experience through their senses can be challenging. As a result, teaching children with ASD about Christ is best accomplished in a straightforward and factual manner. Concrete concepts to be taught include God wanting you to become His child (e.g., 1 John 3:1), what happens when we do things wrong (sin) (e.g., Rom. 6:23), that God sent His own Son to take the punishment (die) for what you do wrong (your sin) (e.g., 1 Cor. 15:3, 1 John 4:14), that God will forgive you when you ask (e.g., 1 John 1:9), and that God will let you live with Him forever (e.g., John 3:16). Parents who question how to help their children grow in the understanding of God are encouraged to use a similar straight-forward approach in the home setting when discussing spiritual concepts.

Because of their propensity toward concrete thinking, children with ASD sometimes have difficulty with prayer, as it involves speaking with a being that cannot be touched or seen. In addition, they may be easily disappointed when

God's answers to their prayers are not clear and direct. Teaching children with ASD about prayer involves discussing the characteristics of God, helping them form a conceptualization of who God is and how he relates to them. Children can also be taught to recognize God's answers to their prayer coming in forms other than concrete, human answers. Learning to pray helps children grow closer to God, as well as providing them with an important coping skill for dealing with challenges in their lives.

Children and teenagers with ASD sometimes question why God created ASD, as do their parents. They need help in understanding that they were uniquely created to fill a role in God's kingdom. Pointing out that scripture describes *everyone* as being made in God's image, along with the fact that "we have different gifts according to the grace given to us" (Rom. 12:5), creates a platform for discussing the role that a child with ASD plays in God's creation. For example, children with ASD provide a unique view of the world, due to their attention to and fascination with detail, and they often highlight the small wonders of God's creation that others overlook.

Several scriptural references provide additional information regarding the unique value of each created person, and can be useful in addressing these questions. Such references include being made in God's image (e.g., Genesis 1:27; 2 Cor. 3:18), being made for a purpose (e.g., Eph. 2:10; Rom. 12:6), being made as an essential part of a whole body (e.g., Rom. 12:4-5), and praising God for being "fearfully and wonderfully made" (e.g., Ps. 129:14) (Newman, 2006). These scriptures are read aloud during treatment sessions and used as references for prayer. They are also integrated into instructional activities that are age-appropriate, concrete, and hands-on, such as music, games, art activities, and worksheets.

Parents sometimes blame themselves for their child having a disorder. John 9:3 can be helpful in explaining to parents that God is not punishing them, but that God allowed their child to have ASD so that the work of God would be displayed in their child's life. Praying with parents for acceptance and peace about having a child with ASD is an integral part of intervention.

Building Behaviors Program: An Exemplar

The Building Behaviors program is an application of the IHM Model, which is presented here as an example of the model in practice. The program is implemented through Inner Health

Ministries Retreat Center, a nonprofit, faith-based, behavioral health psychology organization in Cleveland, Ohio. Building Behaviors provides treatment for children with High Functioning ASD, as well as children diagnosed with Attention-Deficit/Hyperactivity Disorder and disruptive behaviors disorders, and their families. The program is based on behavioral principles, and is implemented in three treatment domains: family therapy, weekly after-school classes, and an annual 5-day treatment camp.

Family Therapy

Families entering the Building Behaviors program are administered a comprehensive psychological evaluation, including assessment of the family's desire to integrate Christian teaching into treatment. Through the assessment process, target behaviors are established and a treatment plan is formed that addresses the five components of the child's health: behavioral, mental, social, physical, and spiritual. As appropriate, communication is made with the multiple systems in which the child functions, such as the family, school, church, and community.

Individual and family sessions are then provided on a weekly or biweekly basis, focusing on teaching the child skills specific to their deficit areas through the use of shaping and chaining procedures. Parents receive education on the application of behavioral principles, as do participants of other systems working with the child (e.g., school, church, extended family). As treatment progresses, parents participate in functional analysis of their child's target behaviors through the use of an ABC chart, examining the Antecedent-Behavior-Consequence sequence related to each behavior. A daily behavior chart is created to monitor and reinforce target behaviors and to track the frequency of each behavior.

Throughout treatment, the family's spiritual health is addressed in an ecumenical, highly personalized manner, depending on the needs of the individuals involved. Faith-related questions are addressed through the use of biblical passages and prayer, as previously described.

After-School Program

Children attend after-school classes on a weekly basis, and are grouped into classes of same-age peers (i.e., ages 5 to 8, ages 9 to 12, and adolescents). Each class contains children with High Functioning ASD, along with children who have been diagnosed with other chronic mental health conditions, such as disruptive behavior

disorders. A token economy system is used, providing children with tokens or points for positive behaviors displayed during the class period. These tokens are then traded in for secondary reinforcers at the end of the class. For each child, different target behaviors are identified, such as initiating conversations, increasing eye contact, engaging in reciprocal communication, and decreasing aggressive behavior. These target behaviors are specifically reinforced by behavior therapists during class.

Class duration is 90 minutes, beginning with unstructured social time, followed by structured class time, and ending with social time where the class-taught behavior is specifically reinforced. During unstructured social time, the child is reinforced with tokens and praise by behavior therapists for engaging in appropriate social skills and positive behaviors with same-age peers. A direct explanation is provided to the child each time they are provided with a reinforcer, ensuring clarity about which behavior is being rewarded. During structured class time, a new skill, drawn from the behavioral, mental, social, physical, or spiritual health domain, is introduced to the entire class simultaneously, using various means of teaching, such as role-play, discussion, worksheets, games, and so forth. Each step of learning the new skill is reinforced, both throughout the structured class time, and during the subsequent social time. At the end of each class, parents are brought into the classroom and educated about the skills taught to their children, along with behavioral principles necessary to reinforce the behavior at home. Parents are also asked to share information regarding the child's target behavior with the child's teacher at school and any other professionals involved. The child is given a daily behavior chart to track the number of positive behaviors displayed throughout multiple settings during the week (e.g., school, home, church). The points given during the week are subsequently rewarded in class the following week.

Treatment Camp

On an annual basis, a 5-day, nonresidential treatment camp is offered for children at the end of the summer. The camp assists families in preparing their children for the new school year, which can be a critical time of transition for children with ASD. The structure of the treatment camp is similar to that of the after-school program, with an increase in intensity. Goals of pro-

gramming are defined by skills within the five components of health.

The five components of health are addressed during the treatment camp using a "treasure hunters" theme, with a different component of health addressed on each of the 5 days of the camp. Spiritual issues are addressed throughout the camp, with particular emphasis given to developing a relationship with Christ on the final day. Each morning, portions of an ongoing social story are presented to participants. Target skills (e.g., compliance, good hands/no hitting, good eye contact, initiating conversations) are embedded within each story portion, and the story is followed with specific instruction for children regarding use of these target skills. This instruction is reinforced through group sessions of psychoeducation, music therapy, recreational therapy, and art therapy throughout the day.

In addition to target behaviors learned in the group setting, individualized target behaviors are provided for each child on a daily basis. These behaviors are written down and then placed near the child as a reminder of which behaviors earn tokens during the day. Each child participant is assigned a behavior therapist during the treatment camp and placed on an individualized token economy system. Reinforcement is given in the form of "gold coins" for engaging in learned target behaviors. Children are permitted to trade in their tokens at designated times during the day, exchanging the tokens for back-up reinforcers (small prizes based on parent feedback regarding their child's favorite reinforcers).

During treatment camp, parents attend a daily workshop focused on teaching behavioral principles. Caregivers learn the same skills their children learn each day, making it possible for them to reinforce the target behaviors at home. The curriculum for the treatment camp is titled Building Behaviors Treatment Program Curriculum (Marker, 2006), and is available upon request.

Program Evaluation

As an example of treatment outcomes for the IHM Model, we present evaluation results from the Building Behaviors 5-day treatment camp held in August 2006 in Cleveland, Ohio. The camp followed the structure outlined above, and was facilitated by a combination of doctorate-level psychologists, masters-level therapists and educators, and undergraduate-level psychology majors. All facilitators received specialized training in behavioral principles and applications.

Participants

Sixteen children, ages 6 to 14 years, attended the treatment camp along with their families. All participating children carried a diagnosis of ASD. The average age of all child participants was 9.7 years. Based on a review of the children's school reports, their cognitive abilities ranged from a Full Scale IQ of 50 (extremely low) to 128 (superior), with an average of 84.4. School reports also provided adaptive behavior scores, which measured each child's communication (e.g., what the child understands, says, reads, and writes), socialization (e.g., how the child interacts with others, plays and uses leisure time, and demonstrates responsibility and sensitivity to others), and daily living skills (e.g., how the child eats, dresses, and practices personal hygiene, what household tasks the child performs, the child's use of time, money, and the telephone, and job skills). The average adaptive behavior composite among participants was 67.6, which falls in the mildly impaired range. Most of the children (87%) who participated were male.

Procedures

All program evaluation data was collected through the use of paper surveys and standardized rating scales. A pre and posttest survey was created to measure specific skills taught throughout the Building Behaviors treatment camp. Caregivers completed these surveys on day one and at the end of day five of the camp. On a five-point Likert scale, the surveys asked caregivers to rate their child's skill level in following directions, active listening skills, stress and anger management, social skills, daily hygiene habits, diet, and having a close relationship with God. Parents were also asked to rate their own ability in teaching their children these same skills.

In addition to the paper surveys, caregivers completed the BASC-2 Parent Rating Scale (Reynolds & Kamphaus, 2004) on days one and five of the camp. The BASC-2 measures caregiver perceptions of their child's adaptive and problem behaviors in community and home settings. The form contains descriptors of behaviors that the caregiver rates on a four-point scale of frequency, ranging from *Never* to *Almost always*. The BASC-2 provides *T*-Scores (< 60 = Average Range, 60-70 = At-Risk Range, > 70 = Clinically Significant Range) for the following clinical scales and composites: Hyperactivity, Aggression, Conduct Problems, Externalizing Problems

Composite, Anxiety, Depression, Somatization, Internalizing Problems Composite, Atypicality, Withdrawal, Attention Problems, and Behavioral Symptoms Index. It also yields *T*-Scores (> 40 = Average Range, $30-40$ = At-Risk Range, < 30 = Clinically Significant Range) for the following adaptive skills and composite: Adaptability, Social Skills, Leadership, Activities of Daily Living, Functional Communication, and Adaptive Skills Composite.

Results

Descriptive statistics (i.e., means and standard deviations) were calculated to describe all samples. Due to missing data, only 10 of the 16 children's data are included in the statistical test analyses. Given the small sample size, the results should be interpreted with caution.

Based on the 10 completed pre and posttest surveys collected, parents reported significant results in their child learning skills to become a better listener (*T*-test = -4.0 , $p = .003$), to follow directions (*T*-test = -2.59 , $p = .03$), to calm down when upset (*T*-test = -3.2 , $p = .01$), and to improve his/her nonverbal communication (*T*-test = -3.55 , $p = .006$). Parents also reported that they learned strategies to help their child follow directions at home (*T*-test = -2.71 , $p = .02$), to help their child recognize when they are getting upset (*T*-test = -2.33 , $p = .04$), and to help their child improve their social skills (*T*-test = -3.97 , $p = .003$). All of the parents reported that they were glad their child attended the camp ($M = 4.73$, $SD = 0.47$).

Out of the sample of 10 who completed pre and posttest surveys, only nine completed the BASC-2 pre and posttests. Results show that parents reported significant decreases in their children's levels of aggression (*T*-test = 2.56 , $p = .03$), anxiety (*T*-test = 2.75 , $p = .02$), and attention problems (*T*-test = 3.13 , $p = .01$) after the 5-day treatment camp. Furthermore, they reported significant increases in their children's abilities to take care of themselves at home (Activities of Daily Living scale, *T*-test = -3.2 , $p = .01$).

Discussion

These initial findings related to the Building Behaviors treatment camp demonstrate the positive impact of the IHM Model, although results should be interpreted with caution due to the small sample size. Parent perceptions indicate that the child's overall aggression, anxiety, attention, and daily living skills improved during the program. Also, parents reported that

they felt their child learned the needed skills to become better listeners, to follow directions, to calm down when upset, and to improve their nonverbal communication skills. Parents also felt that they learned the skills necessary to help their child follow directions, recognize when they are getting upset, and improve their social skills.

No significant differences were found between children's and parents' relationship with God pre and posttreatment. This may have been affected by the timing of posttreatment questionnaire administration, which occurred before parents picked up their children from the day of camp focused on spiritual health. It is also possible that other modalities of integrating spiritual health could be more effective in future treatment programs. Regardless, overall results of the evaluation suggest that the IHM Model is an effective framework for providing research-based interventions to families with ASD while integrating faith. Additional research is needed on the impact of the IHM Model in multiple treatment settings, such as family therapy, group therapy, and after-school programs.

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