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Therapist Perspectives on Community Mental Health Services for Children with Autism Spectrum Disorders

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Abstract

This mixed methods study examined therapist perspectives on serving children with autism spectrum disorders (ASD) in community mental health (CMH) clinics. One hundred therapists completed a survey about their experiences with this population and 17 participated in subsequent focus groups to clarify and expand survey results. Results indicate that CMH therapists serve many children with ASD for behavior or other psychiatric problems and perceive serving this population as challenging and frustrating due to their limited training. Therapists are highly motivated for comprehensive ASD training on ASD characteristics and intervention strategies. These data were used to tailor and package evidence-based intervention strategies for delivery in CMH services.

Keywords

Provider perspectives; Autism spectrum disorders; Evidence-based practices

The Centers for Disease Control and Prevention (CDC) estimates that 1 in 110 children have an autism spectrum disorder (ASD) (CDC 2009). Currently, the costs of ASD to society is estimated to be \$35–\$90 billion annually, with costs between \$3 and \$5 million per child beyond typical costs of child-rearing (Ganz 2007). The community mental health (CMH) system plays an important role in caring for children with ASD for treatment of emotional

and behavioral symptoms related to ASD and for a number of co-morbid psychiatric problems frequently occurring with ASD, such as anxiety, mood problems, ADHD, and disruptive behavior disorders (Gillott et al. 2001; Kim et al. 2000; Leyfer et al. 2006; Simonoff et al. 2008). Although significant variability in prevalence rates of co-morbid psychiatric disorders among children with ASD exists (Lainhart 1999), recent research suggests approximately 70% of children with ASD meet criteria for at least one additional psychiatric disorder (Leyfer et al. 2006; Simonoff et al. 2008). These high rates of psychiatric problems for children with ASD underscore the importance of the CMH system in caring for children with ASD.

Several evidence-based practices (EBPs) address behavioral and psychiatric problems for children with ASD (e.g., child skills training, parent-mediated applied behavior analysis interventions) (National Autism Center 2009; National Research Council 2001). However, there is limited knowledge about how EBPs may be implemented in “usual care” community-based service settings (National Advisory Mental Health Council 2001). Detailed research on usual care service contexts and treatment for childhood disorders is critical to bridge the gap between what is known about EBPs and community-based practice (Bickman 2000; Hoagwood and Kolko 2009; McLennan et al. 2008; Westfall et al. 2007).

While it is not known how frequently therapists serve children with ASD in CMH clinics, previous studies using administrative datasets indicate children with ASD receive outpatient psychotherapy for similar problems as children without ASD (e.g., disruptive behavior disorders) within the same system (Mandell et al. 2005). Moreover, observational data of outpatient psychotherapy for behavior problems suggest that therapists use similar strategies with school-age children with and without ASD and indicate discrepancies between EBPs and usual care (Brookman-Frazee et al. 2010b). This finding is consistent with research on usual care psychotherapy for children with disruptive behavior problems more broadly (Garland et al. 2010), and early intervention/education services for children with ASD (Stahmer 2007; Stahmer et al. 2005). Further, parents view CMH care as ineffective and are frustrated by the slow pace of child progress and lack of therapist “tools” to work with this population (Brookman-Frazee et al. in press). This research suggests that improving care in CMH settings is clearly warranted.

The discrepancy between research and community practice may be related to therapists’ lack of specialized training in ASD symptoms and EBPs necessary for effectively treating this population. For example, community providers (including mental health professionals) have been found to hold a number of inaccurate beliefs about ASD (e.g., social/emotional characteristics, social relationships and attachments, social interactions, descriptive features of ASD necessary for making clinical diagnoses) (Heidgerken et al. 2005). Further, EBPs for behavior problems in children with ASD (National Autism Center 2009) are typically “focal intervention practices” (Lord and Bishop 2010) that are not packaged as comprehensive protocols that may be readily adopted for use in CMH clinics.

Despite growing information about CMH care for children with ASD, there have been recent calls for alternative approaches to developing and disseminating EBPs specifically for children with ASD that meet community therapists’ needs and capacities in order to facilitate use in community settings (Dingfelder and Mandell 2010). A paucity of literature exists exploring the perspectives and attitudes of CMH therapists providing services to children with ASD and co-occurring problems and training in EBPs—important factors for successful adoption and implementation of EBPs (Aarons 2004; Kennedy et al. 2004). Detailed information on therapists’ experiences and perceived training needs related to working with children with ASD are important to tailor EBPs for use in usual care community settings. This study used multiple methods to gather in-depth information about

CMH care for children with ASD from the therapist's standpoint, and characterize their experiences and perceived training needs related to serving children with ASD.

Methods

Therapist Survey Participants

Survey respondents included 100 therapists practicing in nine CMH clinics primarily or exclusively serving publicly-funded children and adolescents in San Diego County. These clinics do not specialize in one particular psychiatric disorder, but rather, serve children with a variety of psychiatric problems (Garland et al. 2001).

Therapist survey participants ranged in age from 23 to 65 years old, with an average age of 35.8 years. Seventy-nine percent of the therapists were female. Therapists had a range of 0 (<1 year) to 38 years of clinical practice, with a mean of 6.52 years. All were currently seeing multiple patients and had been providing care for at least 6 months in the clinic when the survey was administered. Therapists were: 58% Caucasian, 18% Hispanic/Latino, 7% Asian American, 7% Mixed, 4% African American, 3% Other, 2% Filipino/a American, and 1% Native American. Sixty-nine percent of therapists self-identified as staff and 31% as trainees. In terms of education, 13% had a Bachelor's degree, 74% had a Master's degree, and 14% had a Doctorate degree. Therapists varied by discipline and by theoretical orientation: Marriage and Family Therapy (MFT) represented 61% of the sample followed by 18% Social Work, 13% Psychology, and 8% Psychiatry. Therapists self-identified their primary theoretical orientation as: 40% Family Systems, 32% Cognitive Behavioral/Behavioral, 12% Eclectic, 7% Humanistic, 5% Psychodynamic, and 4% Other.

Therapist Survey Procedure

In the Fall of 2007, research staff visited regularly-attended staff meetings at the nine participating clinics. The voluntary survey was distributed to all therapists present. Approximately 85% of all staff (including employees and trainees/interns) employed at the nine clinics completed the survey.

Therapist Survey

The therapist survey, developed for the current study, consisted of 24 items comprising five sections related to therapists' experiences with this population (described below). Survey items included restricted responses (e.g., highest level of education, familiarity with intervention practices) and open-ended questions (e.g., "What do you find most challenging about working with children with ASD?").

1. *Background* (12 items). Respondents reported demographic characteristics including age, gender, and race/ethnicity as well as professional characteristics including educational level, professional discipline, primary theoretical orientation, staff/trainee status and years of practice. They also indicated whether they had ever worked with a child with ASD in a psychotherapy setting, and were considered an ASD expert.
2. *ASD training* (3 items). Respondents indicated whether they had ever received ASD training during their graduate training (restricted response), to describe any training that was received outside of their graduate school (open-ended response), and how likely they would be to attend an ASD training if offered through their clinic (restricted response ranging from "Not at all likely" to "Very likely").
3. *Current caseload* (3 items). Respondents reported the total number of clients on their current caseloads, the number of clients *diagnosed with* and *suspected of*

having (1) Autistic Disorder, (2) Asperger's Disorder, (3) Pervasive Developmental Disorder—Not Otherwise Specified (PDD-NOS), (4) Childhood Disintegration Disorder, and (5) Rett's Disorder, and the number of clients on their current caseloads who were clients of the San Diego Regional Center (California's Mental Retardation/Developmental Disability [MR/DD] services).

4. *Clinical experience with ASD* (5 items). In the open-ended items, respondents described (1) how clients with ASD are typically referred to their clinics, (2) typical presenting problems of clients with ASD, (3) intervention strategies they considered most useful with this population, and (4) challenges working with children with ASD. Respondents also selected two out of a list of 11 topics they considered most helpful to include in trainings regarding ASD.
5. *Familiarity with intervention practices* (1 item). Respondents rated, on a five-point likert scale, how familiar they were with various specialized intervention practices for ASD (e.g., Applied Behavior Analysis, Social Skills Training).

Focus Group Participants

After the survey data were collected, therapists were then recruited via flier and presentations at staff meetings to participate in subsequent focus groups. Three focus groups were conducted with 17 therapists who completed the therapist survey and were employed in four of the nine community-based clinics. Racial/ethnic distribution was as follows: 77% Caucasian, 12% Hispanic/Latino, and 12% Asian American/Pacific Islander. Eight-two percent self-identified as staff and 18% as trainees. Fifty-three percent of the sample was from the MFT discipline, 24% was from Social Work, and 24% was from Psychology.

Focus Group Procedures

Three focus groups were conducted to complement, clarify, and expand findings from the therapist survey regarding potential ASD training topics. The groups were highly structured and had between five to six participants per group. Focus group meetings were video-taped and were approximately 90 min long, including a short break. Participants signed an informed consent form prior to research activities beginning. The moderator (the same for each group) guided participants through a structured agenda (listed below); the resulting discussion was summarized as it occurred using a computer and projector.

1. *Freelisting potential topics to include in ASD training*. Participants were instructed to list 3–5 topics related to serving children with ASD that would be helpful to cover in training.
2. *Clarifying and expanding training topics most frequently endorsed on the therapist survey*. The moderator briefly presented the four most frequently endorsed training topics from the survey and facilitated discussion of these topics: (1) “What about (topic) would be helpful to cover in training?” (2) “What would you like to know more about related to (topic)?” (3) “What are examples of what you would like to know about (topic)?”
3. *Obtaining feedback on preliminary list of training topics*. The moderator briefly presented a proposed training outline, developed after reviewing survey findings. Participants commented on the potential usefulness of the proposed training topics and how they fit with topics already discussed.
4. *Integrating topics generated during freelisting into list of training topics*. Once survey topics were defined and expanded upon, the moderator read each topic generated during the freelisting asking, “What might (topic) refer to?” and “Does this topic fall under any of the others that we've identified?” If the group decided

that the topic was different than previously listed topics, it was added to the list and defined.

Data Analysis

Analyses of the therapist survey and the focus group data were first conducted independently. Descriptive statistics were used to analyze items from all five survey sections with restricted responses. The open-ended items were independently coded by two research team members and then analyzed using descriptive statistics.

Two sources of data from the focus groups were used in the analyses: (1) participants' lists of training topics generated during the freelist exercise, and (2) summaries developed during the focus group discussion generated directly from participant feedback. These sources of data were analyzed using a coding, consensus, and comparison methodology (Willms et al. 1992), which followed an iterative approach rooted in grounded theory (Glaser and Strauss 1967). Topics lists and discussion summaries were independently coded by two research team members at a general level in order to condense data into analyzable units. Responses and items on the summaries were assigned codes based on a priori or emergent themes. At times, the same topic description was assigned more than one code. Disagreements in assignment were resolved by reviewing relevant focus group transcripts and through discussion between research team members. The final list of codes was developed through consensus including therapists' opinions and experiences serving children with ASD, and a list of suggestions about the content of ASD trainings. Based on these codes, the process of axial coding was used to generate a series of categories arranged in a treelike structure connecting segments into separate categories or nodes to describe the relationships between codes and between categories and subcategories (see Table 1). Nodes and trees were used to create a taxonomy of themes including a priori and emergent categories and new, unrecognized categories. The qualitative coding was then quantified, using frequency counts, to highlight the most salient themes. Lastly, focus group transcripts and videos were then reviewed by an independent member of the research team (who had not been involved in coding the freelists and focus group discussion summaries) to validate the themes generated from coding the topics lists and discussion summaries, and elaborate on salient issues not previously reflected to ensure that the themes captured the discussion topics.

To integrate findings from the two data sources, results of the surveys and focus groups were constantly compared to generate broader a priori and emergent themes illustrating links between findings from the two data sources. These final themes are described below.

Results

The final themes that emerged through constant comparison of themes from the five sections of the surveys and focus group data are presented below. Supporting data from the surveys and focus groups are presented by theme, and passages from the focus group transcripts are included to provide additional contextual information.

Therapists Frequently Provide Psychotherapy to Children with High Functioning ASD Who Have Complex Service Needs

The first important finding from this study confirmed that therapists frequently serve high-functioning children, primarily school-aged, with ASD in CMH clinics. Survey results from the "Current Caseload" section, indicated that 76.0% of respondents have served a child with ASD in a mental health treatment setting. Children diagnosed with ASD or suspected of having ASD represent an average of 20.7% ($SD = 25.3$; Range: 0–100%) of therapists'

current caseloads. Specifically, children with a current ASD *diagnosis* represent an average of 15.1% of caseloads. The majority are diagnosed with Asperger's Disorder or PDD-NOS ($M = 86.6\%$). The remaining 13.4% are diagnosed with Autistic Disorder. An additional 5.6% are *suspected* of having an ASD. Lastly, children who are clients of the Regional Center (California MR/DD services) (regardless of ASD diagnosis) represent a smaller proportion (6.9%) of caseloads.

Therapists also reported the most common presenting problems of children with ASD or the survey. The presenting problems therapists most frequently reported included disruptive behaviors (84.6%), social problems (82.1%), attention/regulation problems (44.9%), and anxiety/fears (39.7%).

Focus group participants confirmed that they have many school-age clients with ASD in their clinics, especially those who are high-functioning, and suggested that there had been an increase in children with ASD served over the years. As one therapist observed, "I'm interested (in training) because we're just bombarded. We have so many kids referred to our clinic with autistic spectrum as part of their diagnosis." Therapists also confirmed the frequent presentation and intensity of behavior problems displayed by their clients with ASD, often within the school setting: "...Going back to the behavioral problems, I'm thinking there are definitely some problems that are...severe behaviors that need to be treated... like emotional outbursts at school, running into the streets or running out of the classroom,...aggression,... peer aggression or hitting a teacher..." Additionally, participants explained that these children frequently have co-occurring symptoms or diagnoses that increase their clinical complexity and impact treatment. Further, focus group participants indicated that due in large part to their complex clinical presentation and service needs, children with ASD remain in the clinics for long periods of time, often until they graduate high school: "...you get a case that has anything to do with the autism spectrum and you're basically going to have that kid 'til they turn 18."

Therapists View Serving Children with ASD as Challenging and Frustrating

The perception of serving children with ASD as challenging was illustrated in both the survey and focus group data. From the "Clinical Experience with ASD" section of the survey, respondents listed many challenges associated with serving children with ASD. The most frequently cited challenges therapists reported were the children making slow progress/lack of improvement (27.4%), coordination of care/system issues (17.8%), and lack of client insight (12.3%).

The frustration of serving children with ASD was confirmed and expanded during the focus group discussions. There was often significant negative emotion when therapists described their experiences with this population and desperation for further training to work more effectively with these families, which was reflected in their suggestions for specific training topics (see Table 1). Overall, therapists emphasized the difficulties they experience in serving clients with ASD related to their slow rate of progress, perceived ineffectiveness of treatment strategies, and system issues (described below).

Slow Progress—Participants described the slow rate of change as a key component to the challenging nature of working with these clients: "...I find that I'm doing a lot of repeating...How many times do we need to go over...you know, how to greet someone... you can tell the frustration... How long do I have to expect to go over this? Are we ever going to get this? Or should I just give up on this? Is this—am I going down the wrong path here? Should I concentrate on something else?"

Ineffectiveness of Typical Psychotherapeutic Strategies—Focus group participants also reported that they perceived typical treatment strategies as ineffective with their clients with ASD: "... a lot of what...seems to work with other children doesn't work with these children, so if you're talking about positive and negative consequences and shaping behavior...then can become completely ineffective with these kids. So a lot of the... traditional stuff just doesn't work." They also highlighted that they felt ineffective building rapport with children with ASD.

System Issues—Focus group participants highlighted challenges associated with coordinating care and system constraints. They highlighted the relationship between the special education and mental health systems. Participants indicated that children with ASD are often referred and funded through the California Assembly Bill AB2726/3632 which provides state funding for students in California whose mental health problems are deemed to interfere with academic functioning. They indicated that it was particularly challenging that mental health goals listed on the child's individualized education plan and often developed by another professional.

Focus group participants also frequently mentioned that they found the constraints of the CMH service setting (e.g., limited therapeutic time, competing job/time demands) impacted their work with this population: "...how do we affect change when we see this kid one hour a week and then during that one hour a week...make a choice between seeing the parents part of the time to do parent ed and the child to make a determination of where this child is? ...how does an outpatient clinic even deal with these children?"

Therapists Have Limited ASD Training and are Highly Motivated for Additional Training

Another primary factor associated with the frustration of therapists was the lack of clinical preparation to serve children with ASD. Survey data from the "ASD Training" and "Familiarity with Intervention Practices" sections indicated that although 48% of survey respondents indicated that they had received some ASD training during their graduate training and many had attended some ASD trainings, they were not familiar with specialized ASD interventions (e.g., Applied Behavioral Analysis) and only 5% considered themselves ASD experts. Focus group participants further described their limited ASD training and feeling of unpreparedness: "...Asperger's Disorder is never mentioned in the three-year training of a master's degree in Marriage and Family Therapy...maybe in the DSM class for ten minutes... it's amazing how little is taught in universities." Therapists elaborated on the belief that they did not possess the "tools" to treat children with ASD and lacked confidence to work with these clients: "...we're probably somewhat all out of scope of practice when we're dealing with these kids because obviously, we're saying we don't really have a whole lot of training. We're getting it as we go!"

Importantly, therapists were highly motivated to receive more training. On the survey, 98% of respondents indicated that they would likely attend training if it was offered in their clinic. The strong desire for additional training was confirmed in all three focus group meetings.

Therapists Desire Comprehensive ASD Training

When asked about the type of training that would be most useful for working with children with ASD, focus group participants perceived comprehensive training—in both content and format—as necessary to increase their skills. Participants suggested that interactive, intensive training that included concrete examples would be particularly helpful. They suggested training that covered many topics related to (1) information about ASD and

characteristics of children with ASD and (2) specific intervention strategies for a number of specific areas (see Table 1). These topics are described below.

Information About Child Characteristics—This topic included information on diagnosis, screening, and red flags of ASD. During the freelisting, many therapists in all three focus groups generated suggestions related to better understanding specifics of the ASD diagnosis and information on ASD assessment tools. According to one of the therapists, “I think it’s extremely useful...if we go beyond the DSM...I think a more concrete description of the problems ends up with more concrete solutions as well...making it specific as possibly makes it easier to find a way to deal with it.” This was confirmed by survey findings indicating that 35.0% of therapists had at least one child on their current caseload who they suspected had an ASD. In addition to ASD diagnosis, the need for information about common behavior and social problems was confirmed. This was consistent with the survey results. The most frequently endorsed topics on the survey for training included disruptive behaviors (60.5%) and social skills (55.8%).

Information About Intervention Strategies—Therapists generated several topics related to practical therapeutic techniques for working with children with ASD, their parents, and other service providers. As expressed by one of the therapists, “We want... what can we do in our session tomorrow? That would be beneficial.”

- *Strategies to target specific child problems.* Therapists suggested including information about EBPs linked to specific treatment targets. The most commonly mentioned areas were affect management and social skills.
- *Treatment planning.* This topic included identifying realistic treatment goals, prioritizing goals with input from parent and other service providers, tracking treatment progress, and selecting appropriate EBPs tailored to their client’s needs and abilities.
- *Coordinating child’s care.* This primarily related to coordinating with school professionals. Additionally, participants indicated that they would like more knowledge about available, adjunctive services in order to provide appropriate referrals and identify opportunities for their clients to become more involved in the community.
- *Strategies for working with parents.* Participants requested training in how to help parents understand their child’s ASD diagnosis and develop realistic expectations for their child. They also requested information on how to meaningfully incorporate parents into their child’s treatment.

Discussion

This study examined therapist perspectives about serving children with ASD in CMH clinics. Through surveys and focus groups, therapists provided information about how frequently they serve children with ASD, the clinical characteristics of the children served, and their experiences serving this population, previous ASD training, familiarity with evidence-based ASD practices, and perceived training needs (i.e., content and format of training). Survey and focus group results indicate that a vast majority of therapists practicing in CMH clinics have worked with children with ASD and that these children represent a significant proportion of their caseloads, despite working in settings not specialized in ASD. Therapists primarily serve children with high functioning ASD (Asperger’s Disorder and PDD-NOS) referred for behavior problems and other co-occurring problems. Therapists perceive serving children with ASD as challenging and frustrating, particularly due to their very limited training with this population. Therapists are highly motivated for

comprehensive ASD training that includes information about the characteristics of ASD and intervention strategies to target specific child needs (e.g., behavior and social skills problems) and coordinating care.

The finding that most therapists have served children with an ASD and that children with ASD or suspected of having ASD represent, on average, 21% of therapists caseloads is not entirely surprising given the high rates of psychiatric disorders in this population (Leyfer et al. 2006; Simonoff et al. 2008). The observation by some therapists during focus groups that the number of children with ASD served is increasing is supported by the dramatic increase in the prevalence rates of ASD in recent years. The diagnostic profile (primarily Asperger's Disorder and PDD-NOS) and co-occurring problems observed in the current study is consistent with a quantitative study of children with ASD in the same service system (Brookman-Frazee et al. 2010b) as well as other psychiatrically referred populations (Joshi et al. 2010).

One of the primary reasons for therapist's frustration serving children with ASD was their perceived lack of "tools" to work with this population. They also viewed current strategies as ineffective with this population. This finding is consistent with a previous observational study indicating that therapists generally use the same strategies for children with and without ASD (Brookman-Frazee et al. 2010b). It also supports the general lack of specificity of treatment strategies based on the child's primary diagnosis (Brookman-Frazee et al. 2010a).

A promising finding related to this lack of "tools" is therapists' high level of motivation for additional training in ASD. Of note, focus group participants specifically requested training in effective/research-based intervention strategies, suggesting that they hold positive attitudes towards EBPs for this population and are open to adopting EBPs. This is particularly important given that attitudes are associated with behavior changes (Addis and Krasnow 2000; Jensen-Doss et al. 2009).

The number of topics highlighted as useful for training suggests that comprehensive, intensive training is needed for therapists in this setting. This includes comprehensive content and training format. Results indicate that therapists perceive a brief workshop, providing an overview of ASD and/or treatment approaches, as insufficient to meet their needs. This is supported by the broader literature on provider training that consistently demonstrates ongoing training is required to result in sustained behavior changes (Beidas and Kendall 2010).

While much of the existing work in ASD services research has relied on large administrative datasets to describe the broad types of services that children with ASD receive (Mandell et al. 2005, 2006; Mandell and Palmer 2005; Ruble et al. 2005), this study provides detailed description on the nature of CMH services. These findings have important implications for bridging the research-practice gap for ASD. Namely, they validate the need to examine care for children with ASD in the mental service sector and highlight the importance of providing comprehensive training to mental health therapists to both reduce the perceived burden of serving this population and improve care provided in outpatient psychotherapy settings. Further, the findings provide specific direction to tailor EBPs for this service setting context based on the needs and constraints of the system. For example, they highlight the need to select EBPs that target behavior and related social skills as well as include parents in treatment.

Study Limitations

Some study limitations should be noted. First, there was no formal verification based on record review to confirm the therapist-reported ASD diagnosis of the children on the survey. Second, we do not have specific data on the cognitive functioning of the children with ASD on therapists' caseloads. However, the findings that most children had diagnoses of Asperger's Disorder or PDD-NOS (rather than autistic disorder) and few children on therapists' caseload (regardless of whether they had an ASD diagnosis) received MR/DD services, suggest that most do not have intellectual disability. Lastly, this study was conducted in one large, geographically diverse county. While the distributions of therapist education level, gender, race/ethnicity, and trainee status is similar to other studies of community providers (Glisson et al. 2008; Hawley and Weisz 2005), the characteristics of children with ASD served in these setting may differ from children receiving services in privately-funded mental health settings and/or other locations that may have different fiscal policies that impact service referrals for the Mental Health, Special Education, and MR/DD systems. For example, in California, as in many states, the mental health and developmental disability systems are administered separately. Children with Asperger's Disorder and PDD-NOS (who represent most of the children with ASD in the current study) are less likely to qualify for MR/DD and specialized ASD Education services in California where children with intellectual disabilities or autistic disorder are typically served. This may explain why they represent the vast majority of children with ASD in CMH clinics. The characteristics of children in CMH settings (e.g., ASD diagnostic profile, presenting problems) in states that do not separate MH and MR/DD services in such a way potentially differ from those in the current study.

Despite the limitations, this study has several methodological strengths, which contribute to the significance of the results. This study used mixed methods and data sources to capture a sufficient breadth and depth of the information gathered. Through integrating the quantitative and qualitative data, findings were validated, as there was relative consistency. Finally, these results facilitate the development of a training model targeting children with ASD served in CMH settings. It is anticipated that explicitly incorporating therapist perspectives regarding training goals and format will increase the feasibility of efforts to implement EBPs for children with ASD in community-based clinics.

This study was conducted as part of a comprehensive line of research aimed to tailor the implementation of EBPs in CMH clinics to the clinical needs of children with ASD served in these settings and the training needs of therapists who serve them. Information gathered through this mixed method study was combined with findings from an observations study of usual care psychotherapy (Brookman-Frazee et al. 2010a, b), qualitative study on parent perceptions of CMH services for ASD (Brookman-Frazee et al. in press), and the literature on EBPs for children with ASD (National Autism Center 2009) to develop a mental health intervention protocol for children with ASD served in CMH clinics and corresponding therapist training model. The resulting intervention protocol (*An Individualized Mental Health Intervention for Children with ASD; AIM HI*) is a package of parent-mediated and child-focused EBP strategies, based on the principles of applied behavior analysis, designed to reduce behavior problems in children with ASD ages 5–13 served in CMH clinics (Brookman-Frazee and Drahota 2010). Results of a recent pilot study (Brookman-Frazee 2010) indicate that CMH therapists participate in ongoing ASD training, are able to deliver the intervention with fidelity, and perceived the intervention as useful. Meaningful reductions in child problem behaviors occurred over 5 months providing promising support for the intervention. Overall, this line of research highlights the utility of incorporating community stakeholder perspectives from the outset in order to ensure the "fit" of EBPs in community settings.

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Table 1

Frequently coded training topics from focus group freelisting responses and written discussion summaries

	Responses from participants' freelisting % (#)	Items listed in discussion summaries % (#)
Information about child	21.8 (19)	36.5 (31)
Characteristics		
Diagnosis, ASD characteristics	12.6 (11)	11.8 (10)
Specifics about social difficulties	3.5 (3)	12.9 (11)
Specifics about behavior difficulties	1.2 (1)	10.6 (9)
Information about intervention	78.2 (68)	64.7 (55)
Strategies		
Strategies to target specific child problems	21.8 (19)	5.9 (7)
Treatment planning	20.7 (18)	16.5 (14)
Coordinating child's care	18.4 (16)	22.4 (19)
Strategies for working with parents	14.9 (13)	17.6 (15)

There were a total of 87 codes assigned to participants' freelisting responses and 85 codes assigned to the focus group discussion summaries