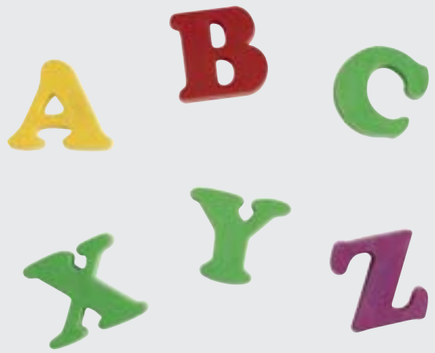

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Helping Ohio's Children:

Understanding the Impact of Early Childhood Mental Health Services

Benjamin W. Kearney, Ph.D.

Berea Children's Home and Family Services

Preparation of this report commenced at the initiative of Voices for Cleveland's Children and the Early Childhood Mental Health Advisory Counsel and was supported by the Ohio Department of Mental Health.

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The desire to know what works is very important to the providers, the funders and the families involved in early child mental health. In Ohio, there are six evaluations of "prevention" services that have been completed over the past few years. The purpose of this work is to examine what has been learned from the program evaluations completed across Ohio and to discuss recommendations about where Ohio can potentially go from here.

Many challenges face those who provide mental health services to young children with emotional and behavioral difficulties. These challenges lead to many programs having different agendas, foci, theoretical approaches and expected outcomes. The field has even had difficulty delineating exactly who their clients are – infants and toddlers or young children up to age six.

In the State of Ohio, many different types of services are provided to young children and their families which are aimed at reducing the impact of behavioral and emotional challenges on a child's development. These services aim to prevent the development of greater difficulties later in the child's life. Early intervention services tend to be services that are targeted to a specially defined group, and treatment services tend to be implemented after problems have been defined and diagnosed. However, Campbell (2002) argues that these distinctions may be theoretical. Regardless of how the individual projects in this synthesis identified their services – early prevention, prevention, intervention, or intense intervention – each assert that their services should reduce the impact of current challenges in the children's lives so that a more typical developmental trajectory is achieved. All of these program providers hope that their clients achieve a greater level of functioning so that future challenges are prevented. In this sense, all these services have prevention as a goal. Therefore, for the sake of discussion, all services discussed in this synthesis will be considered "prevention services." Hopefully, this discussion can avoid the somewhat artificial distinctions between types of services while examining what is most helpful to children and their families.

Into this challenging field comes the desire to know what works and what works even better. This question is especially important because much of the funding for these services either comes from local, state or federal budgets or from privately funded foundation grants. All of whom, due to limited monies, are requiring to know what their funded support produces and how it impacts the lives of the young children and their families.

In Ohio, there are six evaluations of "prevention" services that have been completed over the past few years. Evaluations have been completed on Cuyahoga County's Day Care Plus, Scioto Paint Valley Mental Health Center's 2004-2005 Early Childhood Mental Health Initiative, Ohio Department of Mental Health Early Childhood Mental Health Initiative, Cuyahoga County Early Childhood Mental Health Pilot, the Therapeutic Interagency Preschool of greater Cincinnati, and the Positive Education Program's Early Childhood Centers. The purpose of this work is to examine what has been learned from the program evaluations completed across Ohio and to discuss recommendations about where Ohio potentially can go from here. Each discussion of the different program evaluations will include a brief description of the program, the purpose of the program evaluation, the findings of the evaluation, and finally a discussion of the findings.

It is expected that when one discusses outcome evaluation studies that they will all be quantitative: "Just the facts!" Much information can be gained quickly by examining quantitative data. However, qualitative data can provide evidence for judging effectiveness of therapeutic programs (Hill, 2006). Qualitative approaches use "open-ended, data-gathering methods, the use of words and visual images rather than statistical data to describe psychological events or experiences" (Hill, 2006, p. 74).

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from funders and policy makers. However, it must be kept in mind that this is for the benefit of not only clients involved in current services, but for future clients of future services. Help and hope must be delivered as quickly, as effectively, and as efficiently as possible. Children and families deserve no less.

One of the evaluations discussed here is primarily qualitative. Other evaluations use a combination of both quantitative and qualitative data. Some of the evaluations are entirely quantitative in the ways they collect findings. Care has been taken to present only information that can be informative for the purpose of this synthesis and to inform the reader how the information was gathered.

Day Care Consultants Positively Impact Day Care Teachers and Administration: Positive Education Program's Day Care Plus

The first program evaluation discussed is *A Qualitative Study of Day Care Plus* written by Philip Safford, Linda Rogers and Jeanette Habashi. Day Care Plus is a jointly managed day care consultation program offered to child care centers in Cuyahoga County. The organizations which oversee the program are the Cuyahoga County Community Mental Health Board, Positive Education Program (PEP) and Starting Point. The services are provided by employees of PEP, which is a non-profit mental health and educational agency that focuses its work to serve children and families. The major objectives of the program were summarized as "linking families of young children with special needs with appropriate child care providers, and supporting child care providers' ability to provide developmentally appropriate services for young children with special needs" (Safford et al, 2001). It was expected that by providing technical assistance to child care centers, fewer children would be required to find another center because of behavioral challenges. It was also expected that the families of children who were having behavioral challenges would be aided in their search to find the appropriate child care setting. Childcare providers reported that children served by Day Care Plus were impacted by significant challenges:

> Severe physical and verbal aggression; social isolation and withdrawal; inability to interact appropriately with peers and adults; inability to tolerate frustration due to poor coping and social skills; minimal capacity to bond and attach to others, resulting in poor relationship capacities; poor communication skills including inappropriate language (e.g., obscenities); significant speech and language delays and living with unreliable /unstable and/or multiple caregivers (Safford et al, 2001, p.51).

Childcare providers also reported that the families of the children served were impacted by significant challenges:

> Unstable or inadequate child-rearing environments, noting single parenting; parental mental health; poor parenting skills; domestic violence; substance abuse; social and cultural isolation; parents' under - or unemployment; poverty; parents' lack of knowledge about age - appropriate child development; inconsistent and unreliable parenting, including multiple care givers; parents' poor communication skills; and difficulties in adapting to a different culture (Safford et al, 2001, p.52).

Consultation services were offered in two different ways. Some childcare centers were "intensive sites" which established an individualized plan and tended to work with one consultant for one day per week for two years. Other childcare organizations were "response sites" which received periodic, time-limited and, sometimes, crisis-intervention consultation services. When an organization completed their plan and were no longer intensive sites, they were welcome to access responsive consultation services.

Consultative services included the provision of on-site child/family focused technical assistance; linking centers with needed resources, such as art therapy or health referrals; and teaching or supporting training and professional development. Consultants reported that the most critical needs for their technical assistance included offering interventions for children; responding to center programming needs, including enrichment; modeling helpful interactions with children; supporting communication with families; and improving staff/staff or staff/management relationships and communication. (Safford et al, 2001,)

The purpose of this qualitative study was "not intended to assess the overall efficacy or cost effectiveness of Day Care Plus" (Safford et al, 2001, p.2). Rather the purpose of this research was to gain an understanding of problematic behavior of children in day care, to understand the dynamics of the consultative process and to examine what indicators in the programs are associated with a reduction of the child's problematic behaviors. Much of this study, though very informative, does not address what produces change for the client – those findings were not its intent. This study is a qualitative examination of the consultative process and its direct impact on the day care centers. However, there is some information in the study that can answer the question "What changes for clients in this program?" It is important to recognize that the respondents to the qualitative questions were either day care staff/administration or the consultants themselves. There is very little information available from the parents' perspective. This means that the client outcomes discussed are from the perspective of those who either provided the services or those who contracted for the services, not from those who received the services directly.

When the directors of the programs were interviewed about the impact of the program, many reported that the consultants "helped them work through a difficult *(client's)* family situation" (Safford et al, 2001, p. 90). They were also seen as "agents who helped day care centers be more responsive to the developmental needs of young children" (Safford et al, 2001, p.95). In centers that were heavily involved with Day Care Plus, consultants were seen as sources of aid, positive strategies and information.

to the number of clients who initially enrolled in the program. The results of programs could then be compared in a more valid manner.

Dosage also must be examined. Service amounts can vary greatly even when similar services are provided. In the CC-ECMH pilot, some families received up to five hours of service for 90 days, while other families received an hour or two per week for over a year. It is important to examine if some programs get behavioral change earlier than others. It is important to see if a program has greater impact by providing a lot of services up front or by providing those services across time. In the studies discussed above, there are different dosage amounts between the services. Child care mental health consultation appears to be the lightest dose, and PEP's ECC and the TIP program appear to be the greatest dose. CC-ECMH pilot appears to be a middle dose. The "dosage" discussion also provides an impetus for creating manuals so that the process of change can be examined and understood. There is no question that the therapeutic relationship has been found to contribute significantly to positive outcomes (Bachelor and Horvath, 1999). However, Olges (1999) claims that "models are essential to the advancement of psychotherapy research and practice." It is not necessary that models present techniques in a "cookie-cutter" or recipe style. However, creating models and, at some level, manuals permits the examination of both the common and uncommon factors between approaches. The most important purpose for the completion of models and manuals is that effective programs can be replicated so that the changes produced can be "generalized" to a wider client population. This information is not only important to those funding services, but also to families and clients who are dealing with tough challenges and desire relief as quickly as possible.

Finally, it needs to be recognized that a move towards efficacy will not be possible without comparison groups. It also needs to be recognized that random assignment is probably close to impossible with these families and children. Of course, no one would recommend no treatment for children in need of services, and in most communities, having programs available that would permit assigning children to clinically equivalent services with different service models will never happen. Both private and public funders need to support research that uses a "matched pair" model. This is expensive and time consuming, but only through this process will research stand up to the "evidence-based" requirements that many funders are requiring. Other evaluation processes can be used to enhance research. Case studies can be used to assess quality control (Stiles, 2006). Single-Participant (S-P) design research can be used to examine treatment effects (Hurst and Nelson-Gray, 2006) and support outcome studies. Funders need to be willing to pay the extra amount to support these costly but vitally important pieces.

After these steps are finished, programs and funders will have taken great strides to closing some of the gaps described by Burns (2005) when she discusses community based treatment. She calls for work in different areas that impact client outcomes. She argues that in order to decrease the gap between having evidence based interventions impact clinical practice and long term client outcomes, there has to be changes in training and public policy. It is the conclusion of this synthesis that some steps have been taken in creating evidence based interventions, some additional steps can be taken easily, and other steps will require great strides that cannot be taken without significant support

Cuyahoga County's Early Childhood Mental Health Pilot is an example of services in the middle range. It also has far to go to create a model of services that prove efficacy. The challenges – competing models, difficulties in outcome collection rates, and outcomes not directly related to programmatic goals – need to have a focused approach from all involved so that they can be met. Perhaps programs could examine models, determine shared or common factors, and then find outcome measures that directly measure the changes produced by these common factors. A matched pair comparison group would also be very helpful to determine what produced change.

Ohio has a broad range of services available for young children with behavioral and emotional challenges. However, the services do not have equal depth. Some counties have the complete range of services and many different providers. These counties also have services that are at different levels of programmatic maturity. However in other counties, both the breadth and depth of services are at best very new, and at worst, are extremely limited. This disparity needs to be addressed. However, in this time of either decreased funding or limited growth, growing and expanding services will be very challenging and will need significant support across the state. The types of services discussed in this synthesis represent the foundation of a spectrum of services that could be offered across the state. Consider it: when children are in childcare services, mental health consultants are available to support centers and families. If emotional or behavior challenges continue, referrals can be made to providers of family focused, home based therapeutic services. Finally if the problems continue, the most intensive supportive services would be offered – a center and home based program that requires very intensive parental participation. There are still gaps in this picture: services for toddlers either too young for or not enrolled in childcare, active participation of pediatricians who are often the first to see indicators of emotional and behavioral challenges, and even a broad approach that addresses prevention in much the same way of other prevention approaches (heart disease, smoking, etc …). This list could go on and on. Regardless, the programs discussed in this synthesis lay the groundwork for an early childhood service spectrum that deserves to be supported, strengthened, and made available to children and families throughout the state.

If this service spectrum is going to be built, some major issues should be addressed to make sure services can make claims of efficacy and effectiveness. Because outcomes are so important, the rate that outcomes are completed should be examined. There is no question that families who enroll in services can enroll in another child care center, have a family emergency and leave the center, or just decide that they will no longer participate in services. This phenomenon may skew data. It is possible that the most difficult clients and their families do not complete outcomes and this artificially makes programs look better than they are. For example, one project may report extremely significant results but only collected outcomes on 50% of their clients while another program had marginally significant results but collected outcomes on 90% of their clients. In that example, if the project that collected 50% had collected 90%, the significant difference might completely disappear. For this reason, outcome collection rates must be examined by project or program. To accomplish this, programs could report an "engagement rate." This would be the ratio of clients who engaged in treatment, completed according to plan and filled out all outcome reports in comparison

The consultants had an impact on how space and safety issues were addressed. With regard to space, the consultants helped center staff/administration understand how the creative use of equipment and available space impacts children's adjustment. In regards to safety, consultants encouraged staff to tolerate less structured activities, but the consultants also understood the staffs' need to be always on guard for harmful situations.

The researchers also found that the consultants impacted child care staff. The staff members interacted in more positive ways with children after suggestions were offered by the consultants, and the staff members were highly appreciative and receptive to these suggestions. Safford et al. (2001) asserted that many educational strategies and counseling skills taught or modeled by the consultants impacted their effectiveness with the staff directly and the children indirectly. A high priority that was assumed to influence effectiveness was when the consultants worked to bring the parents and providers together, in order to address the needs of the child. The authors concluded that they believed their work strongly affirmed the work of the consultants and asserted that children and families benefited from the consultants' actions.

When discussing this research, it is important to underscore that this work was not intended to examine the impact of the consultative process on the behaviors of children. However, it does appear that the researchers, the staff, and the consultants themselves believe that the program produced a positive impact on children. In their recommendations, Safford et al. (2001) discuss the need for a more detailed outcome study which would examine the longitudinal effects of this program and provide clear information concerning the programs impact on children's behavior. The authors also discuss the challenges of getting parents involved in the research. There were attempts to get the parents involved but with no success. Overall, this research has limited value to the process of examining the impact of effective services on children. There is no question that this evaluation found that those who participated in the research process found the services helpful and it also demonstrated that the program had a positive effect on staff. The link between the positive impact on staff and the positive impact on children's behavior is not made, but one should keep in mind that examining this link was beyond the scope of the proposed research.

An important piece of information about Day Care Plus was beyond the purpose of the qualitative evaluation but it is very informative about the service: PEP collects some very important pieces of outcome information on each of their clients. For over five years, PEP has tracked how many children they served and how many were asked to leave their child care settings. Beginning in fiscal 2003, PEP started following those who were asked to leave. PEP tracked how many of those asked to leave were then able to find another childcare setting that continued Day Care Plus involvement. This is a great example of a very appropriate outcome measure.

Tracking a great deal of information can be important - especially to ensure that programs keep a strength-based positive approach. But a child can develop any number of strengths and still be expelled from child care. It is important that real-world applications are also maintained when examining outcomes. In fiscal year 2001, PEP's Day Care Plus served 259 children and only six were asked to leave their child care setting. That is an expulsion rate of 2.31% . In fiscal year 2002, PEP's Day Care Plus served 289 children and

fifteen were asked to leave their child care setting. They were able to find another setting for six of them. That is a true expulsion rate of 2.08%. In fiscal year 2003, PEP's Day Care Plus served 281 children and eight were asked to leave their child care setting. They were able to find another setting for seven of them. That is a true expulsion rate of 0.36%. In fiscal year 2004, PEP's Day Care Plus served 270 children and seven were asked to leave their child care setting. They were able to find another setting for six of them. That is a true expulsion rate of 0.37%. This is a very powerful outcome because this is exactly what the program was designed to do.

Significant Increases in Children's Levels of Initiative, Self-Control and Attachment: Scioto Paint Valley Mental Health Center's Early Childhood Mental Health Initiative

Another organization that provides mental health consultation services for child care centers is Scioto Paint Valley Mental Health Center (SPVMHC) through their Early Childhood Mental Health Initiative. Mo Yee Lee (2005) completed an evaluation of the services provide by SPVMHC to Head Start Programs in Fayette County, Highland County, Pickaway County, Pike County and Ross County. The consultation services were provided between June 1, 2004 and May 31, 2005. The evaluation examined the services provided to the different counties individually. There was no evaluation of services provided in Fayette County and Ross County. Most counties only used one outcome measure but one county – Pickaway County – used three different outcome measures. The report indicated that there were challenges in timing (some programs were newer to consultation services than others), in the implementation processes and in the collection of outcomes. For this reason, results were not presented in a single overall analysis; rather, the results were presented in a county-by-county fashion.

The mental health consultation services offered by SPVMHC were somewhat different than those offered by PEP's Early Head Start. These consultants provided monthly trainings to the childhood educators on teacher behavioral assessment and interventions, helped implement a nonviolence curriculum, facilitated parent support groups, participated in Intervention Team meetings, as well as conducting classroom observations of at-risk children. This model's apparent goal was to provide significant instruction to the childhood educators. There was limited involvement of the mental health consultant in the classroom, except to observe at-risk children. There was also very limited contact with parents outside of the parent support groups. Lee states that the goals were to "provide mental health consultation services to teachers and parents as a venue to enhance Head Start early childhood educators' knowledge and application of a bio/psycho/social mode of prevention and early intervention strategies to address vari-

PEP's Early Childhood Centers and the TIP program have gathered a great deal of useful information. PEP's Early Childhood Centers may already meet most evaluators' guidelines of efficacy, and since there are similar programs throughout the U.S, they may be able to make some effectiveness claims. The TIP program is well on its way to establishing efficacy. They both can make very significant claims that their programs "are efficacious for producing specific outcomes for the population that they served." It may be necessary for both to examine whether they need to reproduce their findings, but it should be accepted that they are both strong programs and that the replication of these programs should be supported by funders. Funders, whether public or private, should not consider reinventing the wheel when it comes to this level of "most-intense" programming. Rather, private and public funders should consider ways to generalize these programs and to analyze cost/benefit in response to the level of funding the programs require. These programs should also be analyzed as to how they fit into their local systems of care. One program may be more costly than another, but the less expensive program may not fit into what the local area needs. Other determinants of value and need should also be considered by funders.

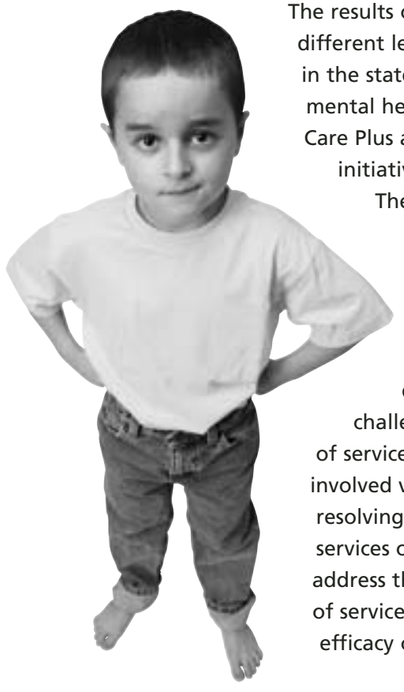
The mental health consultation model is still in the middle of working towards efficacy and funders should look at ways to move the service type along. One of the challenges in this study was the collection of outcomes. Some expect that this service is capable of impacting more change than it actually does. Some studies have found that mental health consultation impacts different types of outcome measures such as socialization measures, emotional competence and prosocial interactions. Yet, one of the difficulties with the ODMH-EMCH initiative was the lack of change on parental measures. The primary outcome of all child care mental health consultation models is maintaining the child in his or her current child care center, and if that is not possible, finding a day care where the child can be maintained. This is very important to families – especially to single parent families with little external support. Sometimes a child care placement can make the difference in the parent's employment status. Since daycare placement has such an impact on families, it is a primary concern for public funders as well. Therefore, this outcome – maintenance in a fulltime daycare – should be one of the outcomes measured in all mental health consultation evaluations. Secondly, a behavioral evaluation by the teacher should be an outcome as well. Parents may not see problematic behavior at home, or the behavior presented at home, while atypical, may not be problematic. On the other hand, parents' stress and depression level may impact their reported presentation of behavior. How the parent views the child's behavior may have little impact on whether the child is "expelled" from the day care setting. Yet the teacher's evaluation may play a very significant role in how the child's behavior is brought to the attention of the child care's administration. A change in the teacher's view of the child's behavior probably impacts the duration of a child's enrollment. If teachers see change, there is probably less chance of expulsion. This is a leap based on an assumption. Research could be examined to see if there is support for this assumption. If there is no current research about this question, then examining the correlation between the teacher's report on the child's behavior and expulsion status could validate this assumption. After these two outcomes are tracked, then secondary outcomes which probably either directly or indirectly impact the other two outcomes could be used.

obtained a sufficient amount of training in their formal educational endeavors. Program supervisors should also document that services are being delivered according to program planning. Training is provided by many of the programs, but it would be helpful to evaluators to have a sense of the capacity of the service providers. If there are outcome weaknesses, it could be possible to link them to either the model or to the delivery process.

8. **Outcomes should be evaluated on clinical significance and on statistical significance. It is statistically possible to get significant difference between large groups even though the difference is clinically meaningless. For example, with outcomes being measured on the Ohio Scales, two large groups may be statistically different with an average difference of 3-4 points; yet, it is possible that both group means were below the clinical cutoff (score of 25) and neither had clinical change (changes of less than 9 or 10 points – depending on the test – are subclinical).**

9. **Include client functioning outcomes whenever possible. The significant strength of PEP's research in the Early Childhood Centers lies in the evaluation of long-term functioning. It is one thing to see reduction in symptoms, but if the child is still not able to be maintained in day care, it has less meaning to funders. However, if symptoms are not reduced, yet the child is maintained in the day care, that is meaningful – especially if the goal of the intervention was to keep the child in day care.**

Where do we go from here?



The results of this synthesis indicate that there are at least three different levels of prevention (or prevention/intervention) present in the state. The broadest level of prevention discussed here is the mental health consultation models being used. This includes Day Care Plus and most of the programs involved in ODMH-ECMH initiative. These were typically child-focused and center based. They provided support so that the child could be maintained in his/her current day care setting. The next level of service intensity is offered in the different mental health models discussed in CC-ECMH pilot. These services could be for hours per week, in the client's home and some could go on for a year or more. These services were delivered in response to a child's significant, diagnosed challenges and involved parents heavily. The most intense level of services were offered by programs which created a center that involved very significant services and were completely focused on resolving atypical challenges for all of the children enrolled. These services could consume up to twenty hours of parents' time to address the child's behavioral challenges. The three different levels of services are also at different points in the process of determining efficacy or effectiveness.

ous problems in children…" (Lee, p. 34). There may have been a great deal of classroom involvement by the consultants, but the evaluation does not clearly delineate it. It is also not clear how much of the services were available to each center (i.e. was one staff member in the center full time or for one day per week). A full description of the program and the quantity of the services were probably beyond the purview of the commissioned outcome evaluation.

The purpose of the evaluation was to provide evidence of success on the mental health consultation services in the counties that SPVMHC served. Teacher Evaluation Form was used across all of the counties to report outcome. The primary focus of this questionnaire is the frequency of a child's appropriate or inappropriate behavior. The behaviors included following directions, taking turns, physically and verbally interacting, anger expression and overall ability to function. Other outcome tools were used by Pickaway County. These tools were the parent and the teacher version of the Devereux Early Childhood Assessment (DECA). The DECA has three strength focused scales – Initiative, Self-control and Attachment – which combine to form a fourth scale-Total Protective Factors. The DECA has a fifth scale which measures challenging and problem behaviors. The evaluation used a single group pre-test and post-test design repeatedly throughout the evaluation. This permitted an examination of change that took place for the children across time.

Lee's evaluation generated a great deal of information about the child outcomes of the centers in Pickaway County. The teachers' DECA evaluations showed significant changes on a number of measures. When comparing pre-test scores and post-test scores on the same child, the children showed significant positive differences on the Initiative, Self-Control, Attachment, and Total Protective Factors measures. Teachers' scores indicated that they saw improvement in the development of the children's strengths. However, on the measure which examines behavioral change, the Behavioral Concern Scale, there were no significant differences between the pre-test and post-test scores. Eight of the fourteen teachers completed the Teacher Evaluation Form both at the beginning and the end of the school year. Teachers' scores again indicated that they saw improvement in the frequency of appropriate behavior. When comparing pre-program and post-program assessments, all of the rates at which children followed directions, took turns with each other, appropriately physically and verbally interacted with each other, and generally functioned well all significantly increased. The children's ability to appropriately express anger was the only area which did not significantly improve, although the scores moved in a positive direction.

When Lee evaluated the results of the DECAs completed by the parents, the parents' perspective of change were not as encouraging. In general, the parents did not rate their children's strengths as highly as the teachers and were more concerned about behaviors than the teachers. This difference was present in both the pre-test and post-test scores. Depending on the scale, between 26.6% and 45.3% of the teachers saw the children with significantly higher levels of strengths than the parents did. These percentages increased on the post-test scores. Teachers saw even greater levels of strength in the children. However, the most important piece of information about parent pre-test/post-test comparisons is that the parents saw no significant improvement

at all. On two of the measures there was even a slight decrease in the level of strengths that the parents recognized.

The two other counties that were able to submit data that could be evaluated were Highland Count and Pike County. These counties only used one outcome measure – the Teacher's Evaluation Form (TEF). The overall findings on the TEF from Highland County were identical to Pickaway County: When comparing pre-program and post-program assessments, all of the rates at which children followed directions, took turns with each other, appropriately physically and verbally interacted with each other, and generally functioned well all significantly increased. The children's ability to appropriately express anger was the only area which did not significantly improve, although the scores moved in a positive direction. However, the results did not hold up when Pike County's data was evaluated. Although all of the rates did improve when the teachers completed their post-program assessments, the rates were not significantly different from the rates reported in the pre-program assessment.

Lee found very important significant changes for children in the centers of Pickaway and Highland Counties. However, there was some information that needs further discussion. If this model was primarily focused on the children's behaviors in the centers, it may not be surprising that parents saw no behavior change at home. That outcome was not the primary focus. Since it is the goal of most child care consultant models to maintain the child in the child care center, and as previously discussed, teachers play a very important role in that process, change recognized by teachers becomes more important. It is also interesting that the teachers in Pike County saw no significant change. The report does not indicate if the services provided to Pike County were different than those provided to other counties. The report does not discuss if the children in Pike County had any significant differences when compared to children in the other counties. This was probably beyond the purview of the evaluation as well. Pike County's unique response underlined the need for more than one outcome measure. If the teachers and parents from Pike County had completed the DECA, change may have been significant. After all, the Teacher Evaluation Forms did show improvement; it just wasn't significant. Perhaps the DECA would have been capable of more adequately measuring this change. The Pike County results also underline the importance of linking the outcomes measures directly to the outcomes. It is possible that Pike County had more children fail to be maintained in their centers than the other counties. It also might be possible that their children, as a group, were dealing with more challenges. The teachers from Pike County saw their children as having greater difficulties; they reported higher percentage of children in the more problematic categories. However, the significance of this difference was not determined.

Another piece of information could have been gleaned if changes for children who scored in the more challenging categories had been examined. When examined globally, the children in Pickaway County averaged in the positive areas on the DECA. This means that, according to the teachers, the typical kid in Pickaway County's Head Start Centers had strengths and that these strengths were enhanced through this program. The levels of change for children who scored in the lower quartile would be very informative. Perhaps these children experience more change. This question is important

1. **Programmatic interventions must be described in a manner that would allow others to implement or replicate it. Many of the programs in the state may already meet this criterion: for example, Day Care Plus, the TIP program and PEP's Early Childhood Centers. Others could do it without too much difficulty: the mental health programs in the CC-ECMH Pilot had to submit models initially that addressed how they facilitated change; and many programs in the ODMH-ECMH Initiative were based on the Day Care Consultation model. Logic models that clearly delineate how the programs work need to be included in program descriptions.**

2. **Behavioral and other outcomes must be measurable and the outcomes that may decay over time must have at least one follow-up measure after the intervention is complete. Some of the above studies already have this component because it was supported by external state, federal or grant funding. This is a very appropriate activity for funders to support.**

3. **Outcome measurements must be psychometrically sound. Almost all of the quantitative outcome measures used in the above studies met this criteria.**

4. **Information about the populations served and the sample of the population included in the studies must be collected so that efficacy can be claimed. Most of the programs collected information about the populations they served. Programs such as TIP did a good job of comparing the evaluation sample to their population. Other programs, such as those involved in ODMH-ECMH Initiative, did a good job of collecting information about the sample they evaluated and may have been able to compare it to the population if the request had been made and financially supported. It is important to see if there is any difference between the participants who completed the program and those who didn't.**

5. **The most challenging criterion is the need for a comparison condition. Randomization in this work is impossible. However, matched control designs are possible if funding is available. Comparison groups should not be required in every study, but it would be informative if matched control designs were included when possible.**

6. **Levels of clinical involvement should be tracked. After outcome data is collected, information could be gathered that examines "dosage" levels. Since much of the work that is done with clients is funded by some governmental entity or private foundation, it is important that at some point the amount of services could be analyzed for the amount of change that is produced**

The Society of Clinical Psychology assembled requirements for considering whether or not an intervention is "well-established" or "probably efficacious" (Lonigan, Elbert, and Johnson, 1998). There are a few of these requirements that are not redundant from the ones above and may be helpful to the process of establishing recommendations for programs.

7. **Programs should maintain evidence that all clinicians or service providers who are involved in evaluated programs have the same training around service production. Since the field is so new, it should not be expected that services providers**

with strong outcomes that could, with a little effort, significantly impact the world of early childhood programming. The question of how similar ECC's outcomes are to the school district's early intervention services needs to be resolved. Providing this information through a well designed research study could make PEP's ECC programs even more valuable – assuming a positive outcome. Kendziori continues to work on another question that will provide important information. Using the same four groups, Kendziori is completing a cost analysis that will examine the cost-effectiveness. She will be using data collected across time to examine the long term benefits of each program in terms of overall cost. This study will be very informative to those who are involved in supporting the funding of early childhood mental health services.

Recommendations for Programs and Funders

It is vitally important to families, funders and the program providers that they gain an understanding about what works in preventing a child's current challenges from impacting the child's future development. However, as the above studies indicate, gaining understanding is a very laborious, expensive, and time-consuming process. Yet, if the field cannot collect information about what facilitates change over time, funders will not continue to support programs that have only limited evidence about effectiveness. The studies above have, for the most part, made strong contributions to information about how clients can experience change following certain interventions, but more can be done. Individual programs need to lay the groundwork for the completion of efficacy and effectiveness studies. The completion of efficacy studies should be the first goal for programs throughout the state, and there may not be a significant way to go to make this happen. Of course, programs willing to complete efficacy studies, programs maintaining the follow-through to collect data in a very challenging environment, and the overall financial cost to complete these studies will be large hurdles to this goal.

The Society for Prevention Research (2004) delineated a set of principles and standards of evidence that programs could meet to be called effective and/or efficacious. Although the standards are meant to be used in a more academic and controlled environment, they may be useful for examining possible "next steps." Many of the programs in the state of Ohio are already meeting many of these standards. The desire is that programs, after meeting these standards, would be able to say "Our program is efficacious for producing these specific outcomes for this population that we served." The standards that would make this claim possible and are within the reach of programs (if given enough support) are listed here.

because prevention programs are aimed at children who are "at risk." Those who scored lower would be at even more risk; it would be very informative to see how this program impacted them. With the positive results in general, these children may have benefited even more than the typical child. This information is very important to funders.

Significant Change in Children's Behavior Continued When Measured a Year Later: Ohio Department of Mental Health's Early Childhood Mental Health Initiative

The third program evaluation discussed is *Evaluation of the Early Childhood Mental Health Initiative* and the follow-up evaluation *Continuing Evaluation of the Early Childhood Mental Health Initiative.* Both evaluations were completed by Diane L. Langkamp and Susan D. Blakemore at the request of the Ohio Department of Mental Health. Kristen Prough helped with the first evaluation and Tracy Loye helped with the second evaluation. This collection of evaluations was one of the key components of the Ohio Department of Mental Health Early Childhood Mental Health (ODMH-ECMH) Initiative. The ODMH-ECMH Initiative was launched in 2000 and it had three major goals. The first was to provide trainings for mental health professionals to serve as consultants for early childhood programs.

The second goal was to provide support for local activities to twenty-five community mental health boards throughout the state. In 2002, six additional boards were supported by this initiative. The community mental health boards were asked to submit their own requests; the boards presented many different models. Although they all addressed early childhood mental health and early childhood programming, they did not all provide services that were related to an early childhood mental health direct-child consultation model. The counties whose programming was related to mental health consultation still had significant variation in their service models. To overcome this challenge, the evaluators examined the models and determined which programs should be included in the program evaluation processes.

The third goal of the ODMH-ECMH Initiative was to complete an evaluation of the services provided in goal two. The purpose of the evaluation was "to develop a profile of young children needing behavioral health care services and a framework for evidence-based prevention and early intervention strategies….(and to) help identify effective strategies for infusing family-focused mental health strategies into existing early childhood

programs" (minutes of mental heath meeting 11-02). The analysis was to have four components: the collection of information about the children referred, an examination of the impact services had on staff, an examination of what families experienced when they received services from other programs after receiving an assessment, and a comprehensive examination of the outcomes produced by the programming on fifty children who received services.

In this evaluation, demographic and service data was collected on children who participated in mental health consultation – defined as a mental health professional meeting with a child "on an individual basis due to a presenting problem/concern" (3, p1.); this completed the first component. Mental health consultants and program directors were surveyed which fulfilled the second component. The third component was not fulfilled because of the difficulty in getting families who were referred to other service providers to participate in the evaluation process. The last component was fulfilled by examining client/family outcomes through an assessment of parent-child dyads. These were collected from families who received child-specific mental health services and were willing to participate in an evaluation process that required the completion of a family assessment, videotaping, and a series of home visits.

Langkamp, Blakemore and Prough (2003) collected a great deal of information about the children served and the services they received. Most of the children were dealing with behavioral challenges, such as anger and aggression, yet more than a fifth of them experienced difficulties in their families as a major challenge. The other two areas of significant challenges for these children were emotional difficulties, such as sadness or anxiety, and developmental or medical difficulties. Most of the children (73.6%) received ongoing consultation/treatment services from a mental health consultant while some (34%) were referred out for services after completing an assessment with the mental health consultant. (The overlap in percentages indicates that some children were referred out for some services while being maintained in the consultation process as well.) The referral process is important for the clients and families because it links them to services, such as medical care, that are beyond the expertise of the mental health consultants. Finally, for some of the children involved (26.7%), the mental health consultation process was only classroom based and the services provided were focused on classroom staff and child-caring professionals.

The second component, which was partially fulfilled by surveys sent to mental health consultants, did not directly address the effectiveness of the consultation process. It did, however, shed some informative about the services themselves. The different types of activities that comprised mental health consultation varied, and included both in-home and center-based direct child/family consultation, center-based staff education, community training, clinical supervision, and individual therapy. Nearly 90% of the mental health consultants stated that they provided mental health services. Surveys sent to program directors was the other part of the second component, and it did have some information about program effectiveness. Ninety two percent of the directors reported that the consultants were accessible to staff at least most of the time. 36% of the directors reported that the consultants improved community referrals at least most of the time. 80% of the directors reported that the consultants increased parent involvement at

school district based early intervention services had a high school average GPA of 2.51. These two groups of children had significantly higher GPA than children in the "typical" comparison group (GPA average of 1.83) and children who began receiving special educational services in first grade (GPA average of 1.96).

The second major focus of Kendziori's et al. evaluation was to examine whether the amount of the ECC services the children received impacted long term educational outcomes. They examined the educational outcomes of a total of 309 children who had either receive more ECC services than the average child and or had received less ECC services than the average child. The above average service group was considered the "high" dosage group and the less than average service group was considered the "low" dosage group. Comparisons were then made between high dosage and low dosage groups. The group that had above average participation in ECC services scored significantly better on both the fourth grade Ohio Proficiency Exam and on the sixth grade Ohio Proficiency Exam. The "high" dosage group also attended more days of elementary school, had fewer days tardy and fewer unexcused absences in elementary school, and had significantly higher grades in English or Language Arts while in elementary school. The only significant difference between groups when they were in middle school was that the "high" dose groups were significantly more apt to repeat a grade. In high school the significant differences between groups were that the students in the "high" dose group were tardy fewer times and they also had higher grades in English. These results indicate that the amount of dosage has most of its impact during the elementary school years.

Innes Helse and Kendzoria (2005) completed a qualitative component as part of the overall evaluation of PEP's ECC programs. Their qualitative examination found many interesting findings, but two are important to this discussion on client outcomes. They completed a focus groups discussion with parents of children who had participated in ECC. They also completed nine interviews with youth who had participated in ECC as young children. After analyzing their data using qualitative evaluation techniques, they reported that parents saw improved outcomes for their children and experienced improvement in their family interactions and levels of functioning.

PEP's Early Childhood Centers and the TIP program provide the greatest amounts of services when compared with all other programs discussed in this synthesis. It is also probable that ECC and TIP serve children with the greatest challenges when compared to all of other programs discussed. Some of the providers in Cuyahoga County's Early Childhood Mental Health Pilot may serve children with similar amounts of challenges, but their services are not as comprehensive. Since these two programs are the most intensive, they should produce the greatest amounts of change. They delivered the highest "dosage" which should provide more significant benefits. Kendziori's et al. (2005) evaluation support the claim that this amount of dosage works for the kids that ECC serves. Some other questions remain to be answered as PEP moves this program towards meeting all of the criteria for asserting "evidence-based practice" status: Is there other research that confirms these results? Is this service "manualized"? Can this service be generalized to other locations? Are there program fidelity measures? These questions are just a few. However it is clear that the ECC program is a mature program

the evaluation was to examine longitudinal outcomes of children who had received different types of early childhood services and compare them with children who had received none. This structure provided for the comparison of four groups: Group 1 – children who had received PEP's ECC services; Group 2 – children who received a school district's early intervention services; Group 3 – children who did not receive special educational services until first grade; and finally, Group 4 – children who were typical in development and received no special services. Outcome differences of these groups were compared on a number of measures which included attendance rates, unexcused absences and truancy rates, and suspension rates throughout the students' school career. The cumulative high school grade point averages of the different groups were also examined. An additional component of the research looked at "dosage." The researchers examined the difference in outcomes for children whose family had participated in the ECC program at above average rates versus the outcomes for children whose family had participated in the ECC program at below average rates. Kendziori, Spier, Goosby, and Innes Helsel, (2005) used a matched pair design to examine the different groups. The different groups were matched by gender, race/ethnicity and socio-economic status. Socio-economic status was crudely measured by examining whether participants received free or reduced price lunches when the children entered school.

The results, in general, reflected very positively on PEP's ECC programming. However, the results did reflect almost as positively on early intervention programming provided by a school district. On the child attendance outcome, children who participated in the ECC had significantly better school attendance through ninth grade – an average rate of 93% – than all of the other groups. The attendance rate of the children who receive school district based early intervention services was 90%. Thus was significantly better than the other two groups. The average attendance rate of children who began receiving special educational services in the first grade had an average attendance rate of 84%. The children in the "typical" comparison group had an average attendance rate of 87%. Children who participated in the ECC had the lowest truancy rate throughout their school career: their average truancy rate was 2.1%. The truancy rate of children who attended school district based early intervention services was not as good as the children who attended ECC: the school district based early intervention group's average truancy rate was 4.0%. The average truancy rate for children in the "typical" comparison group was 4.9% and the average truancy rate for children who began receiving special education services in first grade was 7.6%. Concerning suspensions, although all groups were low, children who participated in the ECC had the lowest rate of suspensions throughout their school careers: their average percentage of days suspended per year was 0.13%. The average percentage of days suspended per year for children who attended school district based early intervention services was 0.28%. Children who received special educational services beginning in the first grade had an average of 0.47% days suspended per year and the children in the "typical" comparison group had an average of 0.77% days suspended per year. The last between-group comparison was on high school grade point average (GPA). Here again, the children who attended ECC had a significantly higher GPA than the children in two of the other groups; their collective GPA was 2.55 on a four point scale. The GPA of children who had attended

least most of the time. 65% reported that they had observed improved relationships between staff and parents, and 57% reported parents expressing an increase in satisfaction in the quality of the center since consultations services were started (3. p3.7).

The fourth component examined the outcomes that the services produced for families involved in the program and compared the outcomes with a group of families with children who had behavioral challenges but did not receive mental health services. The comparison between the groups of children and families was made over a year so that the effects that followed consultation could be evaluated. This permitted outcomes to be examined over time. However, not all of the families in the comparison group were able to complete the third visit and this limited some of the information that was collected. The information gathered from the Assessment of Parent-Child Dyads was completed in two different phases. The first phase looked at the impact of consultation services after 4-6 months. During the second phase, information was collected from families who didn't receive consultation services and the longitudinal data from the families who did receive consultation services continued to be collected. This discussion will examine the results in the same manner.

In the first phase, a collection of assessment tools and activities were used to assess any changes in the child, the parent or in the child/parent relationship. The assessment tools included a depression scale and a stress index for the parents, two different behavior checklists and a developmental questionnaire concerning the child, and finally a scale that assessed the interaction between the primary female caregiver and the child. 68 families were contacted and asked if they were willing to participate in the study. Fifty-five families agreed to participate. Of those, thirty-four families were able to participate in the evaluation process. Information that focused on the specific child's problems was collected at some point when the families were receiving mental health services. Then information was collected again with that same family between four to six months later.

The findings at the four-to-six month follow-up are interesting. Scores on the parenting assessment interests showed no significant change. Almost the same percentage of parents indicated depressive symptoms initially and at the follow-up; and more parents reported parenting stress at the first follow-up session than initially. It appears, from the parents' report, that this could have been from the increased awareness or learning that had taken place. After all, finding out that one has to parent differently may not make a mother or father less depressed or less stressed.

The children who participated in the consultation process did show significant changes in their behaviors. The average scores on the behavioral checklist completed by the parents showed significant decline indicating that parents saw improvement in the children's behavior – especially in areas such as interpersonal conflict, anger, aggression and attention difficulties. At the first visit, 53% of the children had significant behavioral problems when compared to typical kids according to parents' reports. At the first follow-up, 32% of the children had significant behavioral problems when compared to typical kids according to their parents. The teachers of the children who received mental health consultation services also reported significant change in the children's behavior. The significant changes that the teachers reported were in the externalizing area as

well-including anger, aggression and attention difficulties. At the first visit, 44% of the children had significant behavioral problems when compared to typical kids according to teachers' reports. At the first follow-up, 24% of the children had significant behavioral problems when compared to typical kids according to the teachers' reports.

There was significant change in the relationship between parent and child at the four month follow-up. Relationships were examined by taping play sessions between parent and child and having the tapes evaluated by assessors who do not know if the sessions they were viewing were the first or follow-up session. The examiners assessed the interaction between parent and child using the Biringen Emotional Availability Scales which facilitated the examination of "maternal sensitivity, … maternal non-intrusiveness, … maternal structuring, … and maternal non-hostility" (3, p4.8). The scale also permitted child responsivity and involvement to be measured. When viewing the second visit, assessors found significant changes on the Maternal Non-Intrusiveness scale, the Child Responsivity scale and the Child Involvement scale and all moved "in the direction of a more positive interaction" (3, p.4.8). This indicates that families, after experiencing mental health consultation, improved their relating abilities because the parent intruded less into the child's activity, and the child responded better to the parents and accepted the parent's involvement more easily. The other scales – Maternal Sensitivity, Maternal Structuring, and Maternal Non-Hostility – did not change significantly.

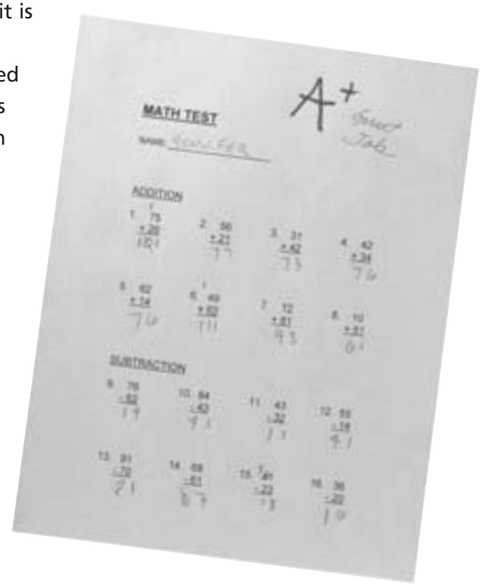
The second phase of the research included a third visit to the families involved in the research and collected information from a group of other families whose children had behavioral problems in a child care setting but did not receive mental health services. This group was examined as a "comparison" group for the original group of families who received mental health consultation services. The families who participated in the original study were visited eight months after the second visit. Many were no longer receiving mental health consultative services. These findings of the second phase of research were not as encouraging.

Langkamp, Blakemore and Loye (2005) examined parental depression and stress levels. The maternal scores on the depression scale were higher, but not significantly so. However, more parents reported substantial depressive symptoms at the third visit. In the first two visits, 38-39% of the parents reported substantial depressive symptoms; at the third visit, 55% reported substantial depressive symptoms. Parental stress levels did not change significantly, but they did tend to go up at the second visit and return to the previous level of stress at the third visit.

When evaluated by the parents, the behavioral changes in areas such as interpersonal conflict, anger, aggression and attention that the children had shown at the four-six month mark continued to be maintained eight months later. When evaluated by the teachers, the behavioral changes in these areas continued as well. The significant changes measured between visit one and visit two were maintained at the one-year mark. This is the most important piece of information that was produced by the second phase of research.

Long-term Effects: Higher School Attendance Rates, Lower Suspension Rates and Better Grades: Positive Education Program's Early Childhood Centers

The sixth program evaluation discussed is the *Long-term Educational Outcomes of Children in the Positive Education Program's Early Childhood Centers* assembled by a team of evaluators and researchers from the American Institute for Research in Washington D.C. The research team included Elizabeth Spier, Bridget Goosby, Fiona K. Innes Helsel and was led by Kimberly T. Kendziora. PEP is the same organization that provided the consultation services in the previously discussed evaluation on Day Care Plus. Early Childhood Centers (ECC), previously know as Early Intervention Centers, are service centers where parents can enroll their preschool and kindergarten age children and participate in supportive services. The ECC program is professionally administrated, but it is a therapeutic program operated by parents either currently involved or previously involved with their children. Upon enrollment, parents are trained to teach and work with their own children and then they teach other parents and children; this permits parents to "generalize" their learning to other situations and settings. When parents enroll in services – which are offered at no cost to the family – they are permitted to attend up to five three-hour classes with any of their preschool aged children. These classes are scheduled in the mornings, afternoons, evenings or weekends to meet the scheduling needs of families. Parents do not leave their children at the center: one parent must attend with the service-targeted child.



Children who are enrolled may be dealing with a broad range of developmental or behavioral challenges. These challenges include autistic spectrum behaviors, significantly aggressive behaviors, language delays, or difficulties in being able to help themselves adequately. They also may have difficulties in their current educational/child care setting. Parents may be dealing with significant frustration or lack the ability to respond to the behavioral challenges. Services offered include module based learning (based on family's priorities), group learning where parents are aids in classrooms (similar in structure to childcare classrooms), and "Theory Classes" where parents learn developmental and behavioral management concepts. Other services include staff home visits, follow up sessions and consultation services provided by other professionals (i.e., speech and language).

The current evaluation is one of a series that has looked at the effectiveness of PEP's ECC services. The other evaluations are out of the purview of this synthesis. The goal of

significant change on scales that measured cooperation, assertion, responsibility, and self control, as well as on the overall measure of social skills. Parents' responses on the questionnaire that examined their stress also showed significant change on the way they saw their own stress and on their views of their children. They also reported significant change in the overall measure of their stress. When Sites, Wade and Putnam examined the changes on the Galileo – the educational outcome – they found that at the second observation the children all showed significant improvement. The areas of improvement included social development, early math, self-help, fine and gross motor development, language and literacy, and finally nature and sciences.

The strength of this research is the evidence of change that it indicates. It also provides a very strong first step to a goal of "developing a more rigorous, definitive test of the efficacy and efficiency of TIP" (Sites et al., p.20). One of the next steps would be to continue to follow these children for a number of years – it appears that the process has already started. The evaluation also examined some of its challenges, such as the need for a comparison group and how that there could possibly be a selection bias which means that their children may be dealing with more significant challenges than other evaluated programs – this would make cross-program evaluations more difficult. The evaluators also examined some of their challenges – such as the rate of children who did not participate in the second assessment. They considered if there were any differences between the two groups. They found slight differences which did not shed much light on what contributed to children not completing the second assessment.

There are some facets of the study that should be considered. Although the researchers found evidence of on the Internalizing subscale of the CBCL, it is important to recognize that the average score for this subscale was not in the clinically significant or even in the "at risk" range. This means that although these children internalized more than most children, it was not significant enough to be atypical. This is true for the Externalizing subscale and for the Total score on the CBCL. This would indicate that parents do not see their children as dealing with clinically challenging issues. It might be helpful to also use the teacher report form of the CBCL. These families are dealing with very significant issues which may impact how they see their children's behavior. Another facet is the way that the scores on the *Galileo* are reported. There is no question that significant change from a previous level of knowledge is meaningful. However, programs such as this need to be narrowing the gaps in the children's learning. This means that measures such as the *Galileo* should be reported not only in amounts of change, but also in the amount of change that the child has made towards age appropriate levels. A child may learn a lot in a year but still not narrow the distance between where he or she is and typical children. It appears that this information is being examined because when the evaluators looked at the 23 children for whom they have three sets of *Galileo* scores, they reported changes in terms of standardized scores. This may even be how *Galileo* is scored, but for funders, information such as this should be stated as clearly as possible.

Overall all it appears that TIP is well on its way to making very significant changes in the lives of children and families. It is also well on its way to showing how these changes are maintained across time.

The parent-child relationship was assessed again eight months later and the gains made at the four-six month mark were not maintained eight months later. The gains on the Maternal Non-Intrusiveness scale, the Child Responsivity scale and the Child Involvement scale were no longer present at the third visit. The changes in those scales scores were no longer significant. They had increased at the four-month mark and returned to previous levels eight months later. Other scales on the Biringen Emotional Availability Scales showed similar change but the scores had not been significant at the four-six month mark. These similar but non-significant changes included Maternal Sensitivity and Maternal Structuring.

After Langkamp, Blakemore and Prough (2005) examined what changes had and had not been maintained through the first year, they compared the families who had received mental health consultation with a similar group of parents and children who had behavioral challenges but did not receive mental health services. The researchers completed at least two visits four to six months apart. A third visit was not possible for all of the families due to project timelines. However, 39.4% of the "comparison group" families did complete the third visit, but third visit data was not computed in the comparison data. This meant that no information could be presented concerning the impact of interventions after eight months.

When parent scores were compared between groups, no significant change was found to have occurred over the four to six months on the depression scale. However, the scores on the depression inventory for the intervention group indicated that the average parent was experiencing substantial depressive symptoms at both visits (using designations the researchers used in phase one). This was not the case for the comparison group. The average score for the comparison group was not in the elevated range at either the first or second visit. On the stress inventory, parents in the intervention group were significantly more stressed as indicated on the Parent Child Dysfunctional Interaction subscale, the Difficult Child subscale and on the Total Stress scale when compared to the comparison group. When examining the data from the first component, there is no question that the median parent in the intervention group scored as highly stressed at the second visit. The researchers do not discuss the level of stress that the comparison group was experiencing but they do report that group's average score on the PSI. Their scores do not indicate that the parents were highly stressed at either visit. It is clear from the research that the change for neither group over time met significant criteria; however, the comparison between group of change over time did *approach* significant criteria for Total Stress. It is clear that the parents in the comparison group were less depressed and less stressed throughout the four to six months between visits than the intervention group was.

The intervention group's child scores on the behavior scales in areas such as interpersonal conflict, anger, aggression, and attention difficulties changed significantly, as reported by their parents and teachers. This change was evident at four months and was maintained through the first year. This was a very important finding of this phase of the research. When the behavior scale scores in both groups were examined for change over the first four months, both groups experienced significant declines in their behavioral challenges. Yet, after four to six months, the intervention group experienced

change, but so did the group of children who did not receive mental health consultation services. Therefore the change rates of the different groups did not differ significantly; because of this, no one can assert that the change that happened for the intervention group was caused by the mental health consultation services that they received.

The last between-group comparison that Langkamp, Blakemore and Prough (2005) make is on the Emotional Availability Scales at the four-to-six month visit. In the first phase, there were some significant results on some of the subscales for the intervention group. The researchers found no significant change for the comparison group between the first and second visit. The researchers did find that the amount of change experienced in each group did differ significantly. The comparison group's subscale scores did not change and the intervention group's subscale did change – they became healthier – and the comparison of the rate of change showed a significant difference. This indicates that the maternal child interactions did not change for the comparison group. It is also important to recognize that all of the control group's subscale score averages were higher at the initial visit than the intervention group's subscale score averages.

At first glance, the more recent results appear troubling: the children who received no services or interventions changed the same amount as the children who did receive services and interventions. However, when discussing the findings from this report, "the devil is in the details." It was the hope of the researchers that the comparison group would provide the opportunities for valid comparisons with the intervention group. Since there was not random assignment of participants to each group, a quasi-experimental technique that permits the pairs to be matched could have been used. The point of using the technique called "matched-control design" is to ensure that members in both groups do not differ on key components. The researchers tried to ensure this by controlling for age, making sure that parents had concerns about the child's behaviors and by using geography as a control. However there were significant differences between the groups. When examining the severity of the children's behavior, the intervention group had significantly more behavioral challenges overall and especially in areas such as interpersonal conflict, anger, aggression and attention. When the differences in the parents are examined, the intervention group was significantly more stressed than the comparison group. The average parent in the intervention group was dealing with substantial depressive symptoms while the average control parent was not (the scores are not significantly different but they are different in clinical designation). It is possible that the comparison group of children got better because their parents were not as stressed or sad. The comparison group parents may have had greater capacities to respond to their children's behavioral challenges because initially they themselves were not dealing with as many challenges.

If the researchers had been able to use matched pairs, they would have been able to control for the differences between groups. It is important to recognize that there were probably important reasons for not doing so. It takes much more time to find additional families, and sometimes even with enough time, families willing to participate cannot be found. In research such as this, money to pay for a longer data collection process is not available. There are many other valid reasons that could have limited this process. It is just important to recognize that if a matched comparison group were used,

Putnam. The Therapeutic Intervention Preschool (TIP) program is a unique program which combines services and funding streams to provide a blended service of preschool and school readiness, mental health and intensive child-family support to families in Greater Cincinnati. It is a county-level, collaboratively funded, intensive, integrated Head Start and Early Intervention Service. Sites et al. described the TIP program "as a year round, interagency, wrap-around home-and-center-based therapeutic preschool" (p.7). TIP offers a broad range of services to children and families. These include assessment
services, diagnosis and treatment of mental health challenges, parent and child services, classroom services, transportation, interagency coordination and case management. These services can be provided in the family's home or in the child care center. Children receiving these services can be experiencing developmental delays, behavioral problems or symptoms of trauma. The program specifically targets the "most disadvantaged children, many of whom have experienced various and/or multiple forms of sexual abuse, physical abuse, emotional abuse, neglect and domestic household violence" (Sites et al, p.6). The goals of the program are "to help children with histories of abuse and neglect (and any resulting disorders): 1) to experience sustained safe, nurturing environments and relationships, 2) to accept and interact to positive adult and peer role models, and 3) to stabilize physically and mentally and make significant developmental and social-emotional progress" (Sites et al., p.7). The Childhood Trust and Cincinnati Children's Hospital oversee and administrate the program.

The purpose of the research funded by the Ohio Department of Mental Health was to complete a longitudinal outcome study of the four TIP sites. Baseline assessments and information were collected on 252 children when they enrolled into TIP programming. These assessments included different surveys, checklists and scales: *Childhood Trust Events Survey (CTES), Child Dissociative Checklist (CDC), Child Behavioral Checklist (CBCL), Social Skills Rating Scale (SSRS), Parent Stress Index (PSI), and the Galileo.* After one year, parents and teachers completed these assessment tools again. Most of the assessment tools were completed by the children's parents, but some were completed by the teachers in the program. Ninety-nine children and their families participated in the one year follow-up. There were only 189 children eligible to participate in the second assessment. Seventy-one of the children had not been in the program for one year at the point of this evaluation. They will have the opportunity to participate in the second assessment when they get to their one-year mark. Of the 99 children who did complete the follow-up, the evaluators were only able to collect the data generated by the teachers' post-assessment on the *Galileo* – which examines educational outcomes. The evaluation completed by Sites, Wade and Putnam is the project's first examination which looks at the collected data one year following the original assessment.

Sites et al. found significant differences on a number of subscales of the different measures and on the total SSRS scale and the total PSI scale. Parents' responses indicated significant change on the Internalizing subscale of the Child Behavioral Checklist. The symptoms on this subscale are related to depression and anxiety. When they took a closer look at whom experienced change, children who were the victims of physical abuse, neglect, or who were exposed to domestic violence experienced significant change on this subscale. Parents' responses on the SSRS showed that children experienced

measures both match the programs expected outcomes and measure the therapeutic change produced by the interventions. Only one of the programs proposed to reduce stress in the parents when they described their program but all programs used changes in parents' stress as an outcome measure. Another challenge is having a small number of participants in the study. This is a challenge that appears repeatedly when trying to measure change – especially when the work is early childhood work. The last challenge is also one that has repeatedly been discussed in this work: this evaluation attempted to examine the combined effect of three different programs on the lives of children. Three very different models were used in the attempt to produce change. The authors examined the programs for similarities and listed the instrumental outcomes. However, it is possible that some interventions were more impactful on outcomes than others. For this reason, it is important that therapeutic models are examined individually to see how each produces therapeutic change. After understanding how each model works, comparisons can be made with other models that work similarly. In other words, the programs must produce change before comparisons are made with other programs. Comparing the rate of change between programs is useless if the individual programs produce no change. If a program cannot produce outcomes, comparing it to other programs is useless.

Beechbrook was one of the mental health agencies that participated in CC-ECMH Pilot, and they compiled their own data about the clients they served. One of the challenges for that study was that the models were evaluated collectively to see what change they were able to produce. The CBCL1.5-5 pretest to posttest comparisons showed no significant behavioral change in the clients. In January 2004, Beechbrook examined the difference between pretest and posttest scores for children who had been in their services between July and December of 2003. There were 28 active clients and they were able to collect pretests and posttests on 21 of these clients. Their findings were significant. They found that 81% of the clients showed improvement at the second test. The significant changes for their clients were in the Aggressive Behavior subscale, the Externalizing subscale (the "interpersonal conflict, anger, aggression and attention" subscale discussed above) and on the Total Problems scale. This is meaningful because although when all of the services were examined collectively, statistical significance was not present. However, when Beechbrook's services were examined independently, statistically significant change was present.

School Readiness Significantly Improved as Emotional Processing Improved: Therapeutic Interagency Preschool of Greater Cincinnati

The fifth program evaluation discussed is *A Preliminary Evaluation of a County-Based Therapeutic Intervention Preschool Program for Severely Maltreated Children* by Jane Sites, Terrance Wade and Frank

information about the intervention effect may have been available. The good news is that even with these differences between groups, the intervention group's parenting capacity showed significant improvement while the comparison group's parenting capacity remained stable.

Children Experience Clinically Significant Change: Cuyahoga County's Early Childhood Mental Health Pilot

The fourth program evaluation discussed is *The Cuyahoga County Early Childhood Mental Health (CC-ECMH) Pilot, Final Evaluation Report* written by Phillip Safford, Gerald Mahoney and Espe-Sherwindt (2003). The purpose of the Early Childhood Mental Health Pilot was "to ensure optimal development and future success of children through addressing early emotional, social and behavioral concerns (Safford et al. 2003, p.1). This overarching goal was facilitated by introducing and training therapists in the use of the DC 0-3 (Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood), coordinating services on one service plan for each family, and by addressing significant mental health challenges and other issues that impact young-child development. Finally there was an evaluation that examined the above components.

When compared to the other programs involved in the six major evaluations, the individual programs that participated in the CC-ECMH Pilot were the most similar to traditional mental health services – two were definitely mental health therapy models and the other was a family behavioral, psycho-educational model. Each child received a diagnostic assessment, the family and service provider created a service plan, and then those services were delivered. Three separate mental health agencies were selected to provide services and each had their own unique model of theoretical and therapeutic approaches. The models differed in terms of treatment: each model provided different amounts of involvement between the family and the therapist, including how many sessions took place, how long the sessions were and how many months the family was expected to be involved with therapy.

The purpose of the CC-ECMH Pilot's evaluation was to provide "evidence of the efficacy of mental health services in the context of early intervention, and of the comparative

efficacy of three alternative service delivery models, provided to young children with diverse social-emotional developmental needs" (Safford et al. 2003, p.39). Safford et al. (2003) examined all of the individual providers' proposals and summarized that the expected client outcomes could be to

- **Stabilize children's home environmental situation by alleviating stressors, where possible, and enhancing the coping abilities of children and their caregivers**
- **Enhance parenting skills and ability of parents/caregivers to use personal resources and external, as well as internal, supports effectively**
- **Foster positive and satisfying caregiver-child relationships and constructive caregiver-child interactions**
- **Relieve children's presenting symptoms interfering with positive social-emotional development**
- **Help children get "back on track" with respect to social-emotional developmental progress (Safford et al2003, p.40)**

In other words, it was expected that children would be less stressed, cope better, have fewer problems, have better relationships with their parents, and catch up emotionally if they were behind.

The evaluation of the CC-ECMH Pilot had many components that were process and program focused. However, for the sake of this discussion, only the outcomes that are client focused will be discussed. The evaluation found three sources of data that suggested the CC-ECMH Pilot was effective in positively impacting family relationship "in order to promote children's positive social-emotional development" (Safford et al. 2003, p.53). Two sources were qualitative and one source was quantitative. One source of evidence indicating effective treatment comes from an analysis of 42 parent/caregiver interviews conducted by the evaluators:

> 79 percent of the parents/caregivers stated either that the intervention had enabled them to understand their child better, or to interact with their child more effectively, or both.
>
> 83 percent indicated their parenting skills had improved.
>
> 86 percent perceived that, in a variety of ways, the services had significantly helped to stabilize their domestic circumstances
>
> 90 percent of those interviewed indicated that their child's inappropriate or problematic behavior had decreased.
>
> 81 percent saw a corresponding increase in positive coping or prosocial behavior. (Safford et al. 2003, p.41)

The evaluation concluded that "if the 42 caregivers …were representative of the families served …, most caregivers perceived that the services …had been highly beneficial" (Safford et al. 2003, p.42).

Another source of evidence indicating effective treatment was the report of the therapeutic providers themselves. A survey of agency staff members involved with the families showed that staff believed 74% of the children served made either substantial or moderate improvement. Safford et al. (2003) asserted that improvement rates taken in this manner which are greater than 70 percent are generally accepted as indicating valid psychotherapeutic procedures.

The last source of evidence which indicated effective treatment was quantitative; it was also based on the perceptions of the staff members involved with the families. The therapists or resource consultants were asked to complete the *Parent-Infant Relationship Global Assessment Scale* (PIR-GAS). The PIR-GAS, which delineates different child-caregiver relational challenges, was completed initially at the onset of the mental health intervention through the diagnostic process. The PIR-GAS was completed at some point following treatment for 43 children. The post-treatment scores were significantly better for these children when compared to the pre-treatment scores.

Keeping the positive and significant outcomes that were achieved as a backdrop, it is important to recognize what possible client-based outcomes the CC-ECMH Pilot did not achieve and possible reasons why they were not achieved. The most notable of unachieved outcomes was the impact of treatment on the child's behavior: there were no significant changes across the programs. Although positive changes were indicated by the improvement in the children's assessment scores, the changes were not significant. Before and after treatment scores on the *Child Behavioral Checklist* (CBCL 1.5-5) were used to measure this. However, there is an important caveat here that the authors did not discuss. After treatment the average score on the CBCL fell out of the "borderline" category. The initial average score was in the "borderline" category and at the end of treatment the average score was in the average range. When using such a small sample it can be difficult to reach statistical significance; however, even though it cannot be asserted that the treatment made the difference, the average client experienced clinical change. Before receiving services, the average client's behavior was borderline problematic – somewhere between the 83rd and the 90th percentile. Achenbach and Rescrla (2000) state that scores in this range are high enough to be of concern. After services the average client's behavior was no longer in the borderline area.

The second notable unachieved outcome was the absence of a reduction in parents' stress. The *Parent Stress Inventory (PSI)* was used to measure stress at the beginning and at the end of treatment. The amount of change in parent's stress was statistically insignificant following treatment. The authors mention two important caveats when considering changes in the levels of stress: not all parents of special needs children report significant stress; and other parents, after appropriate therapeutic interventions are implemented, may actually experience an increase in levels of stress. This finding is related to some of Langkamp et al. (2005) findings discussed above.

There are a number of factors that contribute to the challenges of collecting client outcomes in a program such as the CC-ECMH Pilot. These factors are important to keep in mind when considering effectiveness studies in the future. It appears that the client population differed greatly across the agencies and this can impact how outcomes can be collected. Another factor that can be challenging is making sure that the outcome