

A SUMMARY OF THE RESEARCH OF THE WISCONSIN EARLY AUTISM PROJECT

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This study found that 48% of autistic preschool aged children achieved average post-treatment scores, and at age 7, were succeeding in regular education classrooms after participating in a program to treat their symptoms of autism. The method used was intensive in-home behavioral therapy. These results are consistent with those reported by Lovaas and Colleagues (Lovaas 1987; McEachin, Smith & Lovaas, 1993).

Here is a summary of how the therapy was done and how the data was collected for the research study:

In 1995 the Wisconsin Early Autism Project began providing intensive in-home behavioral therapy for preschool aged children who had been given a diagnosis of autism. The program provided in-home services for 300 to 400 children each year.

The children discussed in this research were referred by Birth to Three (special education) programs. They were all between 2 and 3 ½ years old. In all, there were 35 children who participated in the Wisconsin Research Project. The first two groups, which were each made up of 12 children, began treatment in 1996 and 1997. The results of their treatment are reported in this research paper. The data for the 1998-1999 group are now being analyzed and combined with that of the first two groups. When this process is finished a second research paper will be prepared discussing the performance of all 35 children.

Before treatment began each child was screened and evaluated. Their IQ, language, social skills, self care skills, and ability to imitate others were carefully measured and documented along with other aspects of their functioning. Pre treatment testing showed that every child had fallen behind other children their age in all areas of functioning. The average IQ for the whole group was 51, which represents mild to moderate cognitive delay. They all had tantrums, most ate with their fingers, were not toilet trained, did not speak to communicate and none could play with other children. They were ritualistic, engaged in self-stimulatory behaviors, and didn't pay attention to other people.

Then therapy began. Half of the parents (Parent Directed group) could choose the number of hours of therapy their child received. On average they chose about 32 hours per week. Supervision for this group was 6 hours per month in the home. The other half of the parents (Clinic Directed group) agreed to have 40 hours of therapy as directed by the clinic, and supervision of the team was 6 hours per week. Therapy was provided by trained paraprofessionals, primarily college students majoring in psychology or special education. Following their training, they worked one to one with the children, usually in two hour shifts.

In the initial weeks of treatment, we focused on building a positive relationship with the child by playing with him in favorite activities and responding to the gestures he used to indicate what he wanted.

Once the child was interacting happily with us, we began to teach tasks requiring only visual attending, for example puzzles and matching. During these early work sessions, children worked only for 10 to 15 seconds before taking a play break. Next, we taught children to imitate actions, then sounds and words. Once children could say several words, we taught them to use these words to ask for things that they wanted, for example “juice”, or “cookie”. Next, children learned more complex concepts; to speak in full sentences and begin pre-academic skills such as counting and letters.

Social interaction and cooperative play were taught as part of the in-home program. Children gradually moved from playing with us to playing with siblings and then other children their age for up to two hours per day. As children learned social interaction skills, they began attending preschool, initially with a member of their therapy team accompanying them to assist with following directions and joining playmates on the playground.

Each child was evaluated at the end of the first year. Eight of the 24 children had IQs in the average range. Three more children reached this level after 3 to 4 years of therapy, for a total of 11, or 48%, of the 23 children (one child dropped out because of foster care placement).

At age 7, the 11 children who reached an IQ in the average range were attending regular first or second grade classes following the regular curriculum. They achieved average scores on achievement tests designed for grade schoolers in spoken language, understanding language, reading, math, spelling and academic knowledge. They exhibited average communication and social skills as rated by their teachers. On the Personality Inventory for Children, this group received average scores, although 2 had a tendency to worry. Three children had part time aides in school because of inattentiveness and 3 received speech therapy, although all of the children spoke fluently.

The 12 children who did not achieve IQ scores in the average range did gain many important skills. Their cognitive skills increased from 16 to 44 months; adaptive skills from 16 to 37 months; language skills from less than 12 months to 27 months; and social skills, from 10 to 31 months. At the end of the study, these children were continuing to gain skills at a rate of 3 to 4 months per year in expressive language and social skills. All but 2 of the children learned to speak, allowing them to communicate their basic needs. Eight of the children learned to read simple stories, and most learned to relate to others and play with peers. Four of the children were placed in regular classes with an aide, but all had a modified curriculum. Six children had a mixture of some time in regular class and some time in special education, and 2 were in full-time special education classrooms.

When the study was completed we were able to look back at what the children were like before they began therapy. We found some factors that predicted which children would learn faster. Children who could imitate, say a few words, and showed some social responsiveness were more likely to show rapid learning.

We will continue to follow the children’s progress and report our findings. For questions and copies of the study contact the authors at gsallows@wiautism.com. Or phone (608)288-9040.