

DOCUMENT RESUME

ED 151 631

CG 012 209

AUTHOR Mesibov, Gary B.
TITLE Effectiveness of Several Intervention Strategies With Some Common Child-Rearing Problems.
SPONS AGENCY National Inst. of Child Health and Human Development (NIH), Bethesda, Md.
PUB DATE Aug 77
GRANT HD-03110
NOTE 24p.; Paper presented at the Annual Convention of the American Psychological Association (San Francisco, California, August 26-30, 1977)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.
DESCRIPTORS *Behavior Problems; *Child Rearing; *Developmental Guidance; Followup Studies; *Intervention; *Parent Education; *Positive Reinforcement; Program Evaluation
IDENTIFIERS *Pediatrics

ABSTRACT

This paper briefly describes a parent education program in a private pediatric office, including some of the concerns parents have brought to the program and their perception of the advice received. Some of the main problems include negative behaviors, toileting, developmental delays, school problems, sleeping difficulties, personality problems, peer/sibling interaction and handling parental divorce and separation. The main advice includes reassurance to the parents and instructions to ignore inappropriate behaviors; use a time-out procedure; focus more on positive behaviors; and be less punitive about negative behaviors. The implications of the data for future parent education programs are then discussed, and the following conclusions are drawn: (1) Parents want support and assistance in bringing up their children and are delighted when a service such as the one described is provided. (2) Some child-rearing techniques for specific concerns seem potentially more effective than others, although much more research is needed. (3) Parents concerned enough to call professionals about a problem are not satisfied if only told to ignore the problem. (4) Parents are most responsive when given support and told to emphasize their children's positive behaviors while easing up on their negative behaviors. (5) Parents are very receptive to professionals who call them back to follow up on a problem. (Author)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED151631

Effectiveness of Several Intervention Strategies
With Some Common Child Rearing Problems.

Gary B. Mesibov

University of North Carolina at Chapel Hill

Paper presented at the meeting of the American Psychological
Association, San Francisco, August 1977.

Running head: Intervention Strategies

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

G B Mesibov

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM

0012209

Effectiveness of Several Intervention Strategies

With Some Common Child Rearing Problems

The isolation of the nuclear family and accompanying lack of adequate support systems for raising children has recently been described by many child rearing experts (Byrne, 1977; Zigler, 1973) as a major problem for parents raising this generation of children. One attempt to fill the void created by the dispersion of the extended family has been to provide greater parent education (Mesibov, Schroeder, & Wesson, 1977; Schroeder, Goolsby, & Stangler, 1975). Parent education efforts have taken many forms including specific classes, programs, books, and the use of a wide variety of media and other techniques. Although parent programs are, no doubt, useful, they are often hindered by the lack of consensus among professionals on appropriate child rearing practices. The purpose of this presentation is to evaluate the effectiveness of some child rearing practices that were applied to normal children in the context of an ongoing parent education program, so that, as professionals, we may be of greater help to parents in our ongoing parent education efforts.

The setting for our parent education program is a private pediatric office that has been described in various publications (Mesibov, et. al., 1977; Schroeder, et. al., 1975). The service will not be described in detail but it briefly includes a Call-In and Come-In service plus evening parent education groups. The service is staffed by pediatric psychologists, social workers and nurses who are part of a larger interdisciplinary team representing 12 health disciplines that focus on developmental and learning problems. It should be noted that our Chairperson for this session, Dr. Carolyn Schroeder, was the main person responsible for starting this service and has been its leader and unofficial Director during the 4 years the program has been in operation.

The data to be presented are based on the Call-In hour and Come-In appointments. The Call-In hour consists of a telephone line in the pediatric office which is opened twice weekly for parents to make direct calls on any non-medical problems to the parent education staff. Problems that appear too complex to handle over the telephone are dealt with in face-to-face Come-In appointments. Complete records concerning the nature of and response to each Call and Come-In appointment have been kept since the service began in 1973.

Before turning to the intervention programs, let me briefly describe the kinds of problems that have been presented to us. For the first 2½ years that the program was in operation, each parental concern was classified into one of 22 categories. These categories were designed to be descriptive of the ways in which parents think of their problems. Overall, we found that 8 of our categories accounted for over 80% of the parental concerns. These categories, in order of frequency, are:

- (1) negative behaviors defined as oppositional behaviors toward parents such as not listening to them, not obeying, tantruming, being bossy and demanding, crying, and whining,
- (2) toileting defined as toilet training, soiling, enuresis and encopresis,
- (3) developmental delays defined as perceptual-motor problems, slow development, speech problems (stuttering), overly active and questions about school readiness,
- (4) school problems defined as hating school; not doing well in school, reading or math problems and aggressiveness toward teachers,
- (5) sleeping problems defined as won't go to bed, wakes up during the night and problems with the nap,
- (6) personality problems defined as lacking self-control, poor motivation, dependent, lying, stealing and won't assume responsibility,
- (7) sibling and peer problems defined as having no friends, won't share, aggressive toward siblings or peers, sibling rivalry and fights a lot; and
- (8) divorce, separation defined as questions of who should have custody, visitation schedules, what should the child be told.

Insert Table 1 about here

Table 1 shows the breakdown of the 672 parental concerns by the major categories. These concerns were generated from a total of 428 parent contacts. Each parent contact during the first 2½ years of the service was classified into one or more categories. We have more concerns than contacts because parents often contact us about more than 1 concern.

Insert Table 2 about here

Table 2 presents the number of calls we have received by age. You will notice that the most calls are received for the 2 to 3 age range with a significant decrease after age 10. Although we received only about 10% of our calls on the 10 and above age bracket, this number is significant because our service is currently advertised as for age 10 and below. There certainly appears to be a need for similar services for older children.

Insert Table 3 about here

Table 3 presents the categories by sex. Overall, 60% of our calls were for males and 40% were for females, a highly significant difference. In terms of our specific categories only four differentiated significantly by sex: toileting,

developmental delays, school problems, and personality problems. The first three of those categories represent difficulties with a strong developmental component, probably reflecting the fact that boys mature more slowly than girls. The slower maturation rate appears to cause added concerns and difficulties for parents of boys.

Hopefully, this brief summary and data give you an overview of our service and the kinds of problems we deal with. Our major evaluation effort was begun in the summer of 1976 and has continued to the present day. We have been trying to contact each person who has used our service since its inception to ask questions about their satisfaction with the service and the effectiveness of specific techniques. Because a study of our first 100 callers by Ms. Judy Eastman (1974) found that they were extremely satisfied with the service (95% noted the service as helpful), our current efforts have been designed to evaluate the effectiveness of specific advice rather than the service in general. Our main goal in this evaluation effort has been to find out what advice is useful to parents and what advice is not.

In conducting the follow-up telephone calls, our general approach was to remind the parents of the reasons for their contact, and to restate the suggestions that we made. We then asked them to rate the effectiveness of each suggestion separately on a scale from 1, which was not at all effective to 5 which was very effective. We also asked them for any comments or thoughts they had that might be helpful to us. In general, many of the parents who had used the service found it extremely difficult to attach a numerical rating number to each piece of advice; however, they were often sympathetic to our efforts and tried to do this as best they could.

Before continuing with the data from our follow-up calls, a few methodological issues should be noted. In undertaking this evaluation effort, we, of course, realized that this would not be a strictly experimental effort because instead of different techniques, we might be measuring the effectiveness of different pro-

professionals or the interaction of specific factors surrounding a problem and the advice that was given, among other things. Although these methodological concerns are real and serious, we still felt that our service might be a good starting point for the generation of hypotheses concerning effective child rearing intervention strategies which might later on be confirmed by more rigorous experimental investigations.

In addition to the methodological problems outlined above, our follow-up attempts have encountered 2 other difficulties. First, our university community is extremely transient and many of the people who had called us were no longer living in the area and could not be contacted. Second, the extremely positive perceptions that most people had about our service were reflected in their ratings of the effectiveness of our advice. Because the ratings of all of the advice are so high, it is often difficult to discriminate the effectiveness of different kinds of advice.

A final concern is that any effort at classifying and categorizing something as complex as clinical intervention techniques has to represent a significant simplification and perhaps even oversimplification of what actually occurred. Our efforts are, of course, no exception in this regard. Although this will not represent a true picture of our intervention efforts in all of their complexity, I hope to show that by simplifying and classifying our techniques in this way, we may point out some trends and new approaches that intervention and parent education efforts might take.

With these limitations in mind and in the spirit of hypothesis generation instead of hypothesis testing, I will go on to present the results of our follow-up study. In general, the follow-up telephone calls have provided some interesting insights into our service, our intervention strategies, parental needs and other aspects of child rearing in our country today. These insights include: (1) parents want support and assistance in bringing up their children and are delighted when a service

such as ours is provided, (2) some child rearing techniques for specific concerns seem potentially more effective than others, although much more research is needed, (3) parents concerned enough to call professionals about a problem are not satisfied if only told to ignore the problem, (4) parents are most responsive when given support and told to emphasize their childrens' positive behaviors while easing up on their negative behaviors, and (5) parents are very receptive to professionals who call them back to follow-up on a problem. Let me now proceed with an in-depth analysis of the follow-up data from 4 of the most frequent parental concerns so that you can have a better idea of the basis for these 5 conclusions.

The first of our major categories to be examined is the one receiving the most calls, negative behaviors. The most frequent kinds of advice we gave for this problem and their effectiveness ratings are listed in Table 4.

Insert Table 4 about here

As you can see, the advice has been classified into the following general categories:

(1) suggesting rewarding appropriate behaviors with charts and stars, (2) focusing more on positive behaviors by giving praise, (3) suggesting punishing inappropriate behaviors using a time-out procedure, (4) suggesting ignoring inappropriate behaviors, and (5) reassuring the parents that the behavior is normal for that specific age. Although our sample sizes are somewhat small because of some of the limitations described earlier, parents appear to prefer being reassured and told to focus on appropriate behaviors, whereas ignoring inappropriate behaviors is rated the lowest. This trend also occurs for several of our other categories, as you will see shortly. There were, of course, many other suggestions made in this, as in other categories, but only those suggestions which received more than 5 separate ratings

have been included in this table. Some of the other suggestions that parents seemed to especially like included planning more fun activities with their children, acknowledging their children's feelings, allowing their children more choices in little things, and trying to reduce the number of orders or demands placed upon the children.

Insert Table 5 about here

The second major category to be examined is toileting problems. As table 5 demonstrates, there were 4 main categories of advice that were given to parents calling about this problem: Parents were generally receptive to the advice that they should not be overly punitive, that they should make the child clean up after his/her own accidents and that they should reward appropriate behaviors such as sitting on the potty or successfully eliminating in the potty or the toilet. In general, this is similar to the data on negative behaviors suggesting parents were responsive when advised to be more supportive, focused on more positive aspects of their children's behavior and less punitive toward inappropriate behaviors. It's almost as if parents want to like and have fun with their children but feel that this somehow compromises their roles as disciplinarians. Having a child development professional say it is all right to ease up on their children seems to have come as a relief to these parents.

The advice that was least acceptable to our parents concerning toileting involved recording toileting behavior. This was never the only advice given to parents but was usually followed by the suggestion to place the child on the toilet when he/she was most likely to go or to use the recordings as a basis for rewarding and punishing the child. Because the parents never seemed to object to the rewarding or punishing aspect of this advice, or even the placing of the child on the toilet at optimal times,

it seems that our difficulty involved a communication problem. Perhaps the purpose of the recording was never adequately explained and many parents given this advice became discouraged before ultimately following out the program. Another possibility is that recording behavior might be too much to ask of parents in the context of the short-term contacts that we have in our program. Perhaps this advice is better received in the context of a longer term parent-professional contact.

A small number of parents were not aware that children are trained faster when diapers are replaced by training pants and consequently found this advice very helpful. The use of a potty chair instead of the regular toilet was also well received by several people as was the suggestion to postpone training in a child who did not seem ready. One of our staff frequently suggested allowing children to play with their favorite toys while on the toilet and this was rated positively by the small number of parents who followed this advice.

The next two most frequent concerns of our parents included developmental delays and school problems. It was difficult for us to categorize our advice in these two areas in a way similar to those already presented because when faced with these questions, most of us followed a very similar procedure. In general, when asked about developmental delays and/or school problems, we would initially try to make a quick assessment as to whether or not the concern was one that needed to be pursued. For example, if a parent called about a two-year old child who was not speaking in complete sentences, it would be obvious to us that the parent's expectation was somewhat unrealistic and we would convey this information, outline appropriate developmental levels, and request that they call back if their child did not meet those revised levels when expected. In cases not as simple as this one, we would contact the day-care center, play group leader, school teacher, or any other outside agency to find out their perception of the child and their feeling about his or her level in relation to the other children in the group or class. If the parents' concerns and the main teacher or caretaker's observations left any question as to the child's level,

we would recommend that the parents bring the child for a screening test to be done in the pediatric office. If the screening test was at all questionable, we referred the parents to a private or public agency for more in-depth testing.

As I indicated earlier, this procedure that we almost always followed for developmental and/or school problems made it difficult for us to accurately differentiate the effectiveness of different kinds of advice. It is curious to note that parents are less satisfied with our advice concerning developmental delays than they are with other areas. We are now in the process of reviewing our referral sources to try to determine if this is the problem. We hope to be able to get a feeling as to which referral sources are most satisfactory and which parents find less satisfactory. The other possibility is that we have less satisfaction in this area because we are in a position of giving many parents information that they would rather not have. No one wants their fears that their child might be delayed confirmed. If this is the case, I am afraid our responsibilities to these families require us to continue this practice, but we might look for better ways to convey this information.

Table 6 presents the data on the major intervention categories for sleeping problems. You will note that we had more variability concerning our advice for this problem than for the other ones presented. This might suggest that this is a more intractable problem or that it lends itself less readily to a variety of different approaches.

Insert Table 6 about here

Table 6 indicates that there were 4 general classes of advice for which adequate follow-up data were obtained: (1) rewarding appropriate behaviors, (2) ignoring by

shutting the door and allowing the child to cry it out, (3) rearranging the child's schedule, and (4) reassuring the child by being supportive. Rewarding appropriate behaviors involves having charts and stars and rewarding a child for each night that he goes to sleep and meets parental expectations without undue fuss or strife.

This is obviously most useful for children over 3 years of age. Crying it out is probably self explanatory and I am sure that all of us have found this necessary from time to time and can never forget the horrible screams accompanying this technique. Rearranging the schedule involved changing nap times, making bedtime later, establishing a regular bedtime routine, and other similar procedures. Reassuring the child involved sitting with the child for a brief period of time, having a night light, providing music, telling the child you were nearby, and other similar gestures.

Our data suggest that schedule rearrangements, if possible and appropriate, were the most effective and satisfactory with our parents. Rewarding appropriate behaviors and being supportive is also very helpful. Our parents are least impressed with the advice to allow their children to cry it out and many, in fact, reported that this didn't work and made everybody in the house both miserable and uncomfortable. This finding is somewhat similar, yet more dramatic, than the findings for negative behaviors. Although myself and my colleagues feel that ignoring inappropriate behaviors or allowing a child to cry it out can be necessary and effective from time to time, our data suggest that if a parent is concerned enough about a problem to contact our service, they want to hear more than simply leave it alone and it will go away.

Although we had many calls about problems of personality development and divorce, these were very sensitive areas and we did not feel comfortable having our research assistant call people about these issues. We are developing a new call-back procedure for sensitive issues and hopefully this will make data on these most important issues more available in the future.

The last category that I will discuss are sibling and peer problems. In general, the data on sibling problems is similar to the other data reported in this paper.

Insert Table 7 about here

Overall, most of our advice was well received. Although some people were told to leave their children alone, I have presented this data anyhow because the trend is similar to that in other areas. Time-out, as a punishment technique, is very popular when recommended, but still not widely known. Particularly with the alarming increase in child abuse being reported these days, this less violent alternative to physical punishment needs wider dissemination. Reassurance is an important aspect of our service and seems particularly important in regard to interpersonal relationships. Parents who are told that their children's interpersonal behaviors which seem inappropriate from an adult point of view are, in fact, normal for their age, are relieved and satisfied. Parents probably don't realize that conforming for a 4 or 5 year old or hitting and pushing for a 2 year old are to be expected though not always tolerated. Reinforcing positive interactions is again a popular alternative. It is interesting that we are constantly reminding parents that this is appropriate and effective, and perhaps this is a commentary on our society which seems to accentuate the negative.

In summary, the data presented in this paper, though not as rigorous as we would like, still point out some important aspects of parental education and child development that deserve careful scrutiny in the years ahead. In conclusion, I would like to reiterate some of these major points. First, the incredibly high ratings that our service and advice have consistently received over the past 4 years reinforce what many people have been saying for a long time: parents want help and support in bringing up their children and are appreciative and delighted when these are available.

The Eastman study of our first 100 callers found that an amazingly high, 95% of these parents found the service to be helpful. Our own follow-up study of the first 2½ years found that 76% of the callers rated the advice as effective or very effective and 87% said they were confident in the person they had spoken with. Time and again we are told that one of the most vital services we provide is "just being there." As child development specialists, we should feel some responsibility for meeting these compelling parental needs on a nationwide basis.

Second, I think the data suggest that there may, in fact, be some techniques for rearing children and handling certain problems that are more effective than others. As child development professionals, I think we have been negligent in our responsibility to isolate some of these important techniques so that parents may know that certain practices have a higher probability of working than others. Parent education is a big business today and books are available advocating every possible technique and viewpoint. One reason professionals are able to give such contradictory advice is because there haven't been many carefully controlled studies on these various problems and their solutions. While we realize that individual children can often respond differently to techniques that are generally effective, I don't think this is adequate justification for doing as little controlled research in this area as we have.

Third, as has been stated over and over again, parents who are concerned enough about a problem to call us are not satisfied if only told to ignore the inappropriate behaviors. Although overreacting in either a negative or positive way can sometimes be worse than doing nothing at all, we must keep in mind parents' need to do something, however small.

The fourth factor is the responsiveness of our parents to advice emphasizing reinforcing positive behaviors and easing up on negative behaviors. As indicated earlier, this might suggest that parents want to enjoy their children but somehow fear they will become too permissive. As professionals, I think most of us realize

that encouragement, warmth, attention and support go a lot further than a quick smack on the rear; however, we have not communicated this to the parents who need, and in many cases, want to hear this. Our data suggest that it is not the parents who are resisting the advice to be positive toward their children, but rather it is the professionals who are not getting this advice out to people.

Finally, another important revelation to us from this study was how receptive and responsive most parents were to the follow-up procedure. Although originally designed as simply a research tool for obtaining data on normal child rearing problems, many parents felt it was helpful to them and suggested instituting it as a regular part of the service. Even though our service is designed to provide maximum accessibility, calling us is still a big step for parents to take and they are reluctant to do it again and again. Many suggested that a regular follow-up call from us about 4-6 weeks after the initial contact would be very comforting and useful if further advice, intervention or even support were needed.

A concluding observation is that most of the parents we spoke with had truly enjoyed these contacts. For these parents, having someone to talk to about their children made the whole activity of child rearing and parenting more rewarding and perhaps even more satisfying. I hope that being a child in these homes became more rewarding and satisfying as well.

Table 1

Frequency and Percentage of Concerns According to Problem

| Problem | Frequency | Percentage |
|-----------------------|-----------|------------|
| Negative behaviors | 98 | 14.58 |
| Toileting | 85 | 12.65 |
| Developmental delays | 72 | 10.71 |
| School problems | 72 | 10.71 |
| Sleeping problems | 68 | 10.12 |
| Personality Problems | 56 | 8.33 |
| Sibling/peer problems | 56 | 8.33 |
| Divorce/separation | 42 | 6.25 |
| Other | 123 | 18.30 |

Note. Total number of concerns was 672.

Table 2.

Frequency and Percentage of Concerns According to Age

| Age Range (in years) | Frequency | Percentage |
|-------------------------|-----------|-----------------|
| 0-1 | 21 | 3.13 |
| 1-2 | 68 | 10.12 |
| 2-3 | 104 | 15.48 |
| 3-4 | 78 | 11.61 |
| 4-5 | 81 | 12.05 |
| 5-6 | 63 | 9.38 |
| 6-7 | 63 | 9.38 |
| 7-8 | 50 | 7.44 |
| 8-9 | 28 | 4.17 |
| 9-10 | 47 | 6.99 |
| 10 & over | 69 | 10.26 |

Table 3

Frequency and Percentage of Concerns by Sex of Child

| Problem | Frequency Male | Percentage Male | Frequency Female | Percentage Female |
|------------------------|-------------------|--------------------|---------------------|----------------------|
| Negative behaviors | 50 | 53% | 45 | 47% |
| Toileting** | 54 | 65% | 29 | 35% |
| Developmental delays** | 53 | 77% | 16 | 23% |
| School problems** | 49 | 68% | 23 | 32% |
| Sleeping problems | 38 | 56% | 30 | 44% |
| Personality problems** | 35 | 66% | 18 | 34% |
| Sibling/peer problems | 29 | 58% | 21 | 42% |
| Divorce/separation | 18 | 55% | 15 | 45% |

**Significant sex difference, $p < .01$.

Table 4

Effectiveness of Advice for Negative Behaviors

| Advice | Mean Rating | N |
|--|-------------|---|
| Reward appropriate behavior with stars or charts | 4.57 | 7 |
| Focus more on positive behaviors by giving more praise | 4.92 | 5 |
| Punish inappropriate behavior using time out | 4.56 | 5 |
| Ignore inappropriate behavior | 3.67 | 6 |
| Reassurance to parents that behavior is normal developmental stage | 5.00 | 5 |

Table 5

Toileting Problems.

| Advice | Mean Rating | N |
|--|-------------|----|
| Reward appropriate behaviors like sitting on potty or successfully eliminating | 4.18 | 11 |
| Do not be overly punitive when child has accidents | 4.30 | 5 |
| Have child clean up when he/she has accidents | 4.00 | 5 |
| Collect data on number, time and place of accidents | 3.17 | 6 |

Table 6

Sleeping Problems

| Advice | Mean Rating | N |
|---------------------------------------|-------------|----|
| Reward appropriate behaviors | 3.29 | 7 |
| Let child cry it out | 2.60 | 10 |
| Rearrange child's schedule | 4.33 | 5 |
| Be supportive and reassuring to child | 3.60 | 5 |

Table 7

Sibling and Peer Problems

| Advice | Mean Rating | N |
|--|-------------|---|
| Reward positive interactions | 4.42 | 6 |
| Time out for inappropriate behavior | 4.67 | 6 |
| Leave children alone and allow them to work out their own problems | 3.67 | 3 |
| Reassurance to parents that behavior represents normal developmental stage | 4.20 | 5 |

References

- Byrne, S. Nobody home: The erosion of the American family: A conversation with Urie Bronfenbrenner. Psychology Today, May, 1977, pp. 41-47.
- Eastman, J.N. Parent's evaluation of the effectiveness of a Call-In Service for management of behavioral problems. Unpublished masters thesis, University of North Carolina at Chapel Hill, 1974.
- Mesibov, G.B., Schroeder, C.S., & Wesson, L. Parental concerns about their children. Journal of Pediatric Psychology, 1977, 2, 13-17.
- Schroeder, C., Goolsby, E., & Stangler, S. Preventive services in a private pediatric practice. Journal of Clinical Child Psychology, 1975, 4, 32-33.
- Zigler, E. On being a parent. Human Behavior, 1973.

Footnotes

The author would like to thank Dr. Carolyn Schroeder, Ms. Elaine Goolsby and Ms. Sharon Stangler who were instrumental in setting-up and carrying out the Call-In/Come-In service and also Ms. Judy Eastman and Ms. Marva Price who have participated in the program as well. Drs. Senior, Schaeffer, Conley and Christian have continually supported the program in their office and Ms. Lynn Wesson and Mr. Alan Bell made all of the follow-up telephone calls and helped with the collection and analysis of the data. The thoughtful comments of Mr. Brian Premo, Dr. Carolyn Schroeder and Ms. Laurie Mesibov were also very helpful. The research was supported in part by U.S. Public Health Service, Maternal and Child Health Project 916 and by Grant HD-03110 from the National Institute of Child Health and Human Development.

Requests for copies should be sent to Cary B. Mesibov, Division for Disorders of Development & Learning, BSRC 220 H, University of North Carolina, Chapel Hill, North Carolina 27514.