

# Parent Perspectives on their Toddlers' Development: Comparison of Regular and Inclusion Childcare

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A growing number of community childcare programs are including children with developmental disabilities. While some studies have explored the effects of inclusion for preschool and school-age children without disabilities, there is little knowledge about inclusion for typically developing toddlers enrolled in such programs or about parent attitudes regarding inclusion. In this study, parent perceptions of the benefits and limitations of their child's toddler program (inclusion or typical) were assessed. Parents from both programs gave comparable responses to a semi-structured survey with regard to changes in their child's development and parental level of satisfaction. Parent feedback from the inclusion childcare program also provided insight into the advantages of an inclusion program. These findings suggest that there is little differentiation between inclusion programs and regular childcare programs in providing a quality experience for all children, but that there may be additional benefits to enrolling children without disabilities into inclusion programs.

**Keywords:** Inclusion; Parent perceptions; Toddler development

## INTRODUCTION

Parents of infants and toddlers who rely on childcare centers are often concerned that the care their child is receiving will adequately support his/her development. Between 1976 and 1990, the proportion of children younger than the age of 12 months in childcare increased four-fold, and the proportion of children ages 1 to 2 nearly doubled (Willer, Hofferth, Kisker, Divine-Hawkins, Farguhar, and Glantz, 1991). The increase in the number of parents who are relying on childcare programs makes it important to investigate different early childcare programs and whether these programs are providing young children with appropriate experiences at this critical stage in development.

In addition to the increase in typically developing children seeking childcare, the number of children with developmental disabilities receiving early intervention has risen dramatically in the past 10 years. There has been a push within early intervention to provide the most naturalistic educational experiences possible. In fact, US Federal regulations state: "To the maximum extent appropriate to the needs of the child, early intervention services must be provided in natural environments, including the home and community settings in which children without disabilities participate" (Part C of the Individuals with Disabilities Education Act, 34 CFR Part 303, Early Intervention Program for Infants and Toddlers with

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Disabilities, section 300). Often, this includes educating children with disabilities alongside typically developing children of the same age in preschool settings. Inclusion programs integrate children with disabilities and typically developing children into the same classroom. This frequently includes incorporation of specialized services, such as having a speech therapist or physical therapist working with the children in the classroom. With the rise in the number of parents seeking high-quality childcare for their toddlers, and new federal regulations mandating inclusion opportunities, the option of full-time inclusion programming is more common. In fact, Wolery, Holcombe, Huffman, Schroeder, Martin, Venn, Weits, and Fleming, Bookfield, (1993) reported that the percentage of programs that enrolled at least one child with disabilities was 74.2% in 1990.

Much of the literature promotes inclusion programs for children with disabilities. Most research on inclusive preschool programs reports that children with developmental disabilities in integrated classes make gains in language, cognitive, and motor development that are above or comparable with peers in special education classrooms (for example, Fewell and Oelwein, 1990; McGee, Morrier, and Daly, 1999; Odom, 2000; Peck, Odom, and Bricker, 1993). Additionally, a study by Burack and Volkmar (1992) demonstrated that students with special needs in integrated (as compared with segregated) programs are better able to learn, accept individual differences, interact, communicate, and develop friendships. Toddler age children have been included in these studies, indicating that very young children with disabilities benefit from education that includes typically developing peers (Ingersoll, Schreibman, and Stahmer, 2001; McGee et al., 1999). Benefits demonstrated by toddlers in these investigations include improved language and communication, improved social skills, improved play skills and marked gains on cognitive assessments. Research clearly indicates that inclusive classroom programs offer many advantages for children with disabilities and those demonstrating special needs; however, little is known about how these programs affect typically developing children.

A small number of studies have focused on the benefits of inclusive school programming for typically developing preschool and school age children. One study reported that typically developing children from inclusive classrooms gave significantly higher acceptance ratings to hypothetical peers with disabilities than did children from settings that did not include children with disabilities (Hestenes and Carroll, 2000). These investigators concluded that early childhood inclusive environments encouraged positive interactions, and thus promoted learning for all children in the classroom. Daly (1991) also reported that typically developing children exhibited advanced social skills such as how to get along with others. Strain and Cordisco (1994) reported that typically developing children in inclusive settings displayed both improved social skills as well as fewer disruptive behaviors when compared with children in non-inclusive settings. In a study of parent perceptions, parents reported that typically developing preschool-age children enrolled in integrated settings displayed less prejudice and fewer stereotypes, and were more responsive and helpful to others, than were children in other settings (Peck, Carlson, and Helmstetter, 1992). Additionally, teachers have reported that children without disabilities became increasingly aware of the needs of others when they participated in inclusive settings (Giangreco, Dennis, Coninger, Edelman, and Schattman, 1993). Other studies report that inclusion programming has been shown as integral to improve the social and academic development of students with and without special needs (for example, Egel and Gradel, 1988; Odom and McEvoy, 1988; Sailor, 1991). Furthermore, typically developing children have been found to rate higher levels of acceptance of peers with disabilities after participating in an inclusive classroom (Diamond, Hestenes, Carpenter, and Innes, 1997; Peck et al., 1992).

There has been some research on parent perceptions of early childhood inclusion. These studies generally find that parents of typically developing children are supportive of inclusion

(for example, Miller, Strain, Boyd, Hunsicker, McKinley, and Wu, 1992; Turnbull, Winton, Blacher, and Salkind, 1982). Researchers examining associations between the demographics of parents of typically developing children and their ideas about mainstreaming found that well-educated parents were less concerned with behavior issues in inclusion than parents with lower education levels, especially if their children were included with peers who had sensory or physical disabilities (Green and Stoneman, 1989). Well-educated parents also perceived fewer drawbacks for children without special needs when compared with parents with less education (Guralnick, 1997). All parents did, however, have concerns regarding inclusion when inclusion classrooms enrolled children with behavioral or emotional disorders (Green and Stoneman, 1989). This is consistent with anecdotal reports from parents of typical children who are concerned about behavioral issues such as biting, aggression and the imitation of aberrant behaviors. Another study of parental perceptions of inclusion examined the perceptions of parents of children with special needs as well as typically developing children aged 48–71 months (Guralnick, 1994). Of the sixty mothers of typically developing children surveyed, approximately 85% perceived inclusion programs as positive for children without special needs, particularly in the area of learning about individual differences and in helping their family understand the experience of families who have children with special needs. However, the families were specifically chosen because their children were not in inclusion programs, so their perceptions were not based on their own experience with integrated childcare.

One study has compared preschool children (primarily ages 4 and 5) in integrated settings to children in community preschools without integration (Miller *et al.*, 1992). Parents of children in integrated settings rated those settings more favorably than parents in community settings, but both groups held generally favorable attitudes toward inclusion settings. The parents of the children in the integrated setting felt that their children's development had been influenced in a positive way by the inclusion experience. This study did not address the reasons families chose a particular program or specific perceived benefits of the program for their children.

Unfortunately, the literature on understanding the effects of inclusive programs for typically developing children is minimal in comparison with the number of studies examining outcomes from inclusion programming for children with disabilities. Moreover, the few studies that have addressed the effects of inclusive programs on typically developing children have not matched these children to children participating in non-inclusion programs to control for typical development. Additionally, there have not been studies conducted in early intervention programs with toddler-age children. The previous studies all involved older preschool children and/or school-age children. Parents of very young children may have specific concerns regarding placing their toddler in an inclusion program during this critical period of language and social development. Because inclusion programs have been proven beneficial to children with special needs, it is probable that the availability of these programs will be increasing. In order to ensure that parents of typically developing toddlers are comfortable with inclusion, their perceptions need to be examined and their concerns addressed.

The current study examines toddler programs from the parents' perspective. Parents of typically developing children enrolled in an inclusive childcare program are compared with age-matched typically developing children enrolled in a typical community childcare program. This study investigates the following topics: (1) parent perceptions of the program, (2) parent's reasons for choosing the program, (3) perceived benefits of the program, and (4) perceived changes in child development. The current study uses a semi-structured survey to collect parent perceptions of the childcare facility and their typically developing children from two toddler childcare facilities, a full inclusion childcare program and a regular community childcare program.

#### **METHODS**

# **Participants**

Participants were recruited from two childcare facilities operated by a Children's Hospital in a large metropolitan community. The two programs involved in the project were: (1) the Children's Toddler School (CTS), a part of the Children's Autism Intervention Center (the inclusion program); and (2) the Children's Child Care Center (CCC), a regular preschool that is run by the hospital and enrolls both children of employees and other community children. Eligible participants were parents of toddlers aged 25-36 months enrolled in one of the two hospital childcare centers for a minimum of 6 months. The parents were recruited to participate either through volunteering to complete a short questionnaire placed in their information box at school or by agreeing to answer the questions via interview. Recruitment for study participation was attempted for twenty-eight parents at the CTS and twenty parents at the CCC. Thirty-one (65%) of the families approached agreed to participation. Several parents declined to participate. Reasons for non-participation included the following: eight parents (17%) did not return repeated phone calls or messages delivered to them at the facility through their child's mailbox; six parents (13%) were contacted, but were unable to complete the questionnaire (e.g., most cited time constraints); one parent (2%) did not feel he/she would be able to provide useful information (e.g., not enough experience); and two parents (4%) directly declined participation. There were no group differences on non-participation.

The majority of participating parents in this study were mothers (74%, n = 23) and just 26% were fathers (n = 8). The exact ages of the children were not collected. However, all of the children ranged in age from 25–36 months of age and had been enrolled in their childcare program for a minimum of 6 months.

# Setting

The CTS at the Children's Autism Intervention Center is located adjacent to the Children's Hospital main building in San Diego, California. The CTS enrolls twelve children total per class session, four children with autism and eight typically developing children. The program houses one classroom. The ages of children in the classroom range from 18 to 36 months. There are two sessions for the children with autism that run Monday – Friday, a morning session from 8:30 to 1:30 p.m. and an afternoon session from 1:00 to 5:00 p.m. The typically developing children are enrolled for full-day care, which includes lunch and a nap period (in which the children with autism are in another area of the building). At the minimum there are four teachers in the classroom at any given time, which results in a 3:1 ratio of students to teachers. All of the teachers have obtained at least a bachelor's degree in child development or a related field. On a typical day, the children follow a structured daily schedule of free play, snack time, circle time, lunch, nap, and free play outside. As a part of the inclusion program, speech and occupational therapists include all of the children in specialized group activities designed to promote communication and motor development. In general, the program attempts to provide a developmentally appropriate toddler curriculum to the children enrolled in the program. Additional emphasis is placed on language, social skills, and self-help skills development in order to encourage and facilitate these skills in the children with autism as well as the typically developing toddlers. Incidental teaching techniques are used with all of the children in the classroom, and additional techniques designed specifically for use with children who have autism are implemented with these children (see Ingersoll et al. (2001) or contact the first author for further information about the inclusion program). While these techniques are not specifically utilized with the typically developing toddlers (e.g., picture communication), all of the children are exposed to the various teaching methods.

The CCC of the Children's Hospital can accommodate up to thirty-two infants and toddlers, and one hundred and sixty preschool children in its eleven-classroom facility. There are two toddler classrooms at the CCC, which provide full-time day care for typically developing children. While at this time the CCC does not have any children with autism or related disorders enrolled in their toddler classrooms, they do not have policies that exclude these children. However, they do not provide specialized programs either. There are two teachers in each toddler classroom who provide quality care for the ten children enrolled in each of these classrooms, resulting in a 5:1 ratio of children to teachers. All of the teachers have completed at least six units of early childhood education. All of the students participate in classroom activities, snack time, circle time, free play outside, lunch, and nap time. The program uses a developmentally appropriate curriculum, which includes hands-on experiences with an emphasis on sensory and language activities. The main focus of the toddler program is on social/emotional development.

#### **Procedures**

A five-part questionnaire was developed by the authors to examine parent perceptions. The same questionnaire was used for both sets of parents with the exception of an additional question regarding parent attitudes towards their child's participation in an inclusion program on the CTS questionnaire. This question was not applicable to the parents at the CCC. The questionnaire was semi-structured in that the questions were well defined, but still allowed parents to give open-ended responses. Specifically, these questions were structured to evaluate parent's perceptions of their reasons for choosing the program for their child, benefits of the program, and indications of any changes in their child's development as a result of program participation. The questionnaires, along with a statement of confidentiality, were sent out to approximately forty-eight parents of typical children at both facilities. Parents were instructed to fill out and send back the information by a specified deadline. For those families who did not respond to the initial written questionnaire, phone interviews or in person contacts were conducted. For a sample questionnaire, please refer to Appendix A.

## **Qualitative Data Analysis**

The data were coded and then analyzed to examine the frequency of specific categories of responses. The authors, based on the range of possible responses, developed a systematic coding scheme. Parents gave a wide-range of responses to the questions from short and general replies to more in-depth and specific replies. After careful review of the wide spectrum of responses collected from the thirty-one parent questionnaires, broad categories were created to group the parent responses into coding schemes. A consensus agreement approach was used to develop each of the coding categories. The coding scheme was discussed by multiple investigators to examine the degree of agreement between coders. Two investigators then coded a random selection of surveys independently. The coders compared their codes and discussed those responses in which there were discrepancies until the two coders could arrive at an agreement. All responses were categorized to the central study questions, and concise quotes were selected to reflect the responses in that category.

#### RESULTS

A total of thirty-one questionnaires were obtained from the two groups of parents, sixteen questionnaires from the parents at the CTS and fifteen questionnaires from the parents at the

TABLE I Data Collection Procedu
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Method of data collection	CTS (%) $(n = 16)$	CCC (%) $(n = 15)$
Mailed questionnaire	18.8	26.7
Interviewed in person	0	73.3
Telephone interview	81.3	0

Note: CTS, inclusion program; CCC, regular childcare program.

CCC. A breakdown of the three methods of data collection used to obtain the questionnaire information from the parents is represented in Table I.

Parental response categories were organized into six comprehensive tables (refer to Tables 2–7 presented in the following). The six tables were organized into the categories as follows: (a) child's length of attendance in the program, (b) environmental factors that contributed to the parents choice of program, (c) aspects of the program design parents reported as beneficial, (d) areas of development in which parents felt their child improved due to the program, (e) specific behavioral changes parents attributed to their child's participation in the program, and (f) any program services that parents felt their child or themselves benefited from. The frequencies of responses are reported as the percentage of parents generating that response for each category by childcare center. Due to the open-ended nature of questioning, percentages of responses displayed in the tables are not equal to 100%. Parent responses to any given question may range from no response to multiple responses. Each response is reported within the indicated category.

Comparing the percentages of parent responses from the two distinctive childcare programs illuminated some similarities as well as differences between the two groups. Table II displays the length of attendance for each of the childcare centers. The majority of the children at the CCC attended the preschool program longer than the children at the CTS. The minimum length of attendance for the CCC and the CTS was 6 months. Since these programs are toddler programs, all of the children in the study attended the programs for no more than 30 months.

Comments about the childcare environment and facility itself were positive across both sites. As indicated in Table III, there was very little variation between parent perceptions of environmental factors at these two childcare programs on most factors. However, there was a large difference between the sites on the number of parents reporting learning about the facility from a recommendation from another parent. Fifty-three percent of the CCC parents learned about the program via a recommendation from another parent, while only 19% of the CTS parents learned about the program through a recommendation. Parents in both programs

TABLE II Child's Length of Attendance in the Program

Length of attendance	CTS (%) $(n = 16)$	CCC (%) (n = 15)
6 months	25	0
7–12 months	56.3	20
13-18 months	18.8	40
19 + months	0	46.7

Note: CTS, inclusion program; CCC, regular childcare program.

TABLE III Environmental Factors that Contributed to Choice of Program

Factor	CTS (%) $(n = 16)$	CCC (%) $(n = 15)$
Clean facility	18.8	20
Good location (convenience)	18.8	22.3
Recommended	18.8	53.3
Secure/safe place	18.8	20
Good reputation	31.3	33.3
Friendly atmosphere	0	13.3

Note: CTS, inclusion program; CCC, regular childcare program.

felt that the programs were clean, safe, in a good location and had a good reputation. Parents from the CCC also remarked that the program provided a friendly atmosphere.

Parents at the CTS provided more positive responses about the program design than did parents at the CCC (see Table IV). The most notable program design difference related to staff ratios. An overwhelming 81.3% of the parents from the CTS reported that they were impressed with the small 3:1 ratio of students to teachers, as compared with 26.7% of parents from the CCC who made positive comments of the slightly higher child to teacher ratio of 5:1. The small size of the classroom was also important to the CTS parents, with three times as many of them naming this as a positive program component in comparison with the CCC parents. In addition, twice as many parents from the CTS reported that they chose the program based on the curriculum. Interestingly, 100% of the CTS families reported that the inclusion aspect of the program was important in their decision to send their children to this particular program.

Among the parents who commented on changes in their child's development, a comparably high percentage from both programs reported improvement in social and language development (see Table V). Also illustrated in Table V, a substantially higher rate of parents from the CTS (43.8%) reported that their child gained independence as a result of being in that program as compared with parent reports (6.7%) from the CCC.

Table VI presents responses regarding specific changes in child behavior that parents attributed to their selection of programs. A high rate of parents from the CTS (81.3%) felt that their child displayed greater acceptance of children with special needs as a result of being in an inclusion program. No CCC parent generated such a response. More CTS parents than CCC parents reported other pro-social skill development such as patience, sharing and positive interaction with peers. Also interestingly, no parents from the CTS reported any

TABLE IV Beneficial Aspects of the Program

Program design aspect	CTS (%) $(n = 16)$	CCC (%) (n = 15)
Teacher to student ratio	81.3	26.7
Qualified teachers	75	66.7
Size of class	43.8	13.3
Curriculum	56.3	26.7
Inclusion program	100	0

Note: CTS, inclusion program; CCC, regular childcare program.

TABLE V Developmental Changes Attributed to Program Participation

Area of development	CTS (%) $(n = 16)$	CCC (%) $(n = 15)$
Social skills	81.3	100
Language skills	81.3	60
Attitude	25	46.7
Independence	43.8	6.7

Note: CTS, inclusion program; CCC, regular childcare program.

negative development such as undesirable habits or discipline problems; however, 6.7% of the parents from the CCC reported a development of these negative behaviors.

Table VII presents comments regarding specific program services that parents felt were beneficial. As shown, parents of typical children at the CTS reported that the services provided by the Occupational and Speech Therapists in the classroom were beneficial for their children. The CTS parents (12.5%) also reported that they felt a program benefit was the amount of individual attention given to their child. Additionally, over 37% of parents from the CTS reported receiving support from staff as beneficial to them, whereas no CCC parents

TABLE VI Behavioral Increases Attributed to the Program.

Behavior	CTS (%) $(n = 16)$	CCC (%) $(n = 15)$
Acceptance of children with:		
Special needs	81.3	0
Patience	18.8	0
Trust (peers/adults)	6.3	0
Expressing emotions	18.8	26.7
Sharing	25	13.3
Willingness to learn	6.3	20
Adaptation to group setting	43.8	40
Positive interaction with peers	56.3	46.7
Undesirable habits	0	6.7
Discipline problems	0	6.7

Note: CTS, inclusion program; CCC, regular childcare program.

TABLE VII Beneficial Program Services

	CTS (%)	CCC (%)
Program service	(n = 16)	(n = 15)
Observation room	12.5	0
Speech therapy activities	18.8	0
Occupational therapy activities	12.5	0
Support from staff	37.5	0
Individual attention to child	12.5	0
Opportunity for parental learning	31.3	13.3

Note: CTS, inclusion program; CCC, regular childcare program.

named this factor. Similarly, more CTS parents reported receiving parental learning, such as learning by observing the teachers in the classroom, as a valuable program component compared with the CCC parents.

#### DISCUSSION

The results of this study replicate and extend previous findings on the perceived benefits of inclusion for typically developing children in important ways. First, the perceptions of parents of toddler age children are very similar to those of preschool and school age children (for example, Guralnick, 1997; Miller *et al.*, 1992). Second, results indicate that there are many similarities between parent perceptions of the benefits of inclusion programs and regular childcare programs. By comparing parent perceptions of same-age typically developing toddlers from both an inclusion program and a regular childcare program, this study demonstrated that parents do not perceive any detrimental effects for their typically developing children enrolled in a childcare program alongside children with developmental disabilities. In fact, there may be additional benefits of participation for all children in a well-defined inclusion model program. Moreover, this was the first study to examine the reasons parents might choose one program over another and therefore provides insight into methods of making inclusion programs more attractive to families of typically developing children.

Similar to previous studies on parent perceptions of typical children in inclusion programs, all of the CTS parents in this study reported that they liked the idea of an inclusion program for their child. These parents were satisfied with the program overall, and often chose the program because of the inclusion component. While parents from both of the programs assessed were very satisfied, some benefits of inclusion were found. The most important factors that parents perceived as beneficial in the inclusion program were the low student to teacher ratio, the curriculum, the high level of support from the staff and the increased opportunities for parental education. These types of perceived program benefits might be used by inclusion programs to attract potential parents in areas where parents are hesitant to enroll their young children. Indeed, inclusion programs may wish to specifically include some of the elements described by these families in order to ensure that the typically developing children and their families are obtaining the most benefit from the program.

Additionally, parents of children enrolled at the CTS reported that they were pleased with the amount of individual attention their children received from the CTS staff. Anecdotally, many parents and teachers report concern that the inclusion of children with special needs will reduce the amount of teacher attention and supervision provided to typically developing students. Clearly this was not the case in this inclusion model.

There were several behavioral changes, which parents reported for children in both programs, including increased language and social development. This indicates the typical developmental trajectory of children at this age, as well as the quality of the two programs studied in this project. The majority of parents whose children were enrolled in the inclusion program also felt that their child gained a greater acceptance and understanding for children with disabilities as a result of being in an inclusion program, as well as increased sharing and interaction skills. One parent from the CTS divulged that the "inclusion program was wonderful in teaching my child compassion and understanding of children with special needs". Another benefit to the inclusion program, which parents from the regular childcare program did not mention, were special services such as an observation room for parents to monitor their child in the classroom at any time. These parents also reported benefits of having Speech and Occupational Therapists in the program who were available to all the children in the classroom.

Parents of the children enrolled in the inclusion program did not report any increases in difficult behaviors such as biting and aggression. In fact, only one parent reported an increase in undesirable behaviors and this was a parent whose child was enrolled in the typical toddler program. These data, then, can help to allay fears that children enrolled in inclusion programs will "pick up" bad habits from their disabled classmates. The literature shows that this concern is often expressed by parents of typically developing preschool-age and school-age children who had not had the opportunity to experience an integrated setting (for example, Green and Stoneman, 1989; Guralnick, 1994). Data from the current study indicates that once families participate in inclusion programming, this fear will probably be reduced. Data regarding these issues are important for attracting families to inclusion programs initially, and it may be especially important for programs involving young children with autism, who are often perceived as being very difficult behaviorally.

There are a few limitations to the study that should be considered. This study accounts for a small sample of parent perceptions collected from two childcare programs, thus the results have limited generalizability across other programs. Both of these childcare facilities are high-quality programs serving an educated population of families. The programs operate at a prominent Children's Hospital and have the benefit of many added resources from the hospital. The inclusion program is a model program developed by clinicians and researchers with expertise in the area of early childhood development and inclusion programming. The results of this study may not generalize to typical preschool programs in which staff do not have adequate training in children with special needs, adequate space and/or resources. Results cannot be considered applicable to unstructured inclusion programs, or programs in which children with disabilities are placed into a community preschool without the appropriate level of support.

Additionally, the programs, although similar in location, client base and philosophy, were very different in size. The size of the program may have been one area that influenced enrollment. Additionally, the results indicated that parents were likely to have had the CCC program specifically recommended to them. This may be due to the increased number of children enrolled in the program. Also, there may be some influence on the types of information the parents provided from these two distinct childcare programs due to the discrepancy and variation between the methods of data collection. Although the same questions were asked to both sets of parents, the majority of the parents from the CCC program responded to the questionnaires by interviews conducted in person after picking up their child from the CCC, and their answers were overall more brief and simplified when compared with the CTS parent responses. Likewise, the majority of the parents from the inclusion program responded by telephone interviews in the early afternoon and they generally provided much more in-depth and specific responses. Additionally, the fact that these parents had enrolled their children in an inclusion program may have affected their answers. They may have been already looking for certain behavioral and social changes in their children that they then attributed to the program. However, many of the children in the CTS program attended the CCC infant program and many transitioned to the CCC when they reached 36 months, indicating that similar needs are being met by both programs.

Despite these limitations to the study, the results suggest several positive benefits to an inclusion program that parents from regular childcare programs do not mention. Future research should involve more participants to expand the pool of data and verify these results. It may also be advantageous to restrict the study to one method of data collection, to ensure greater consistency in the quality of responses given by parents. As indicated by the data, the in-person interview method may provide the highest level of participation; however, it may provide less specific responses. Another area of interest would be objective measures of the children's progress in the areas of language, social skills, self-help skills and general

developmental ability. Standardized measures administered to matched groups of children would provide interesting information regarding programming differences between inclusion and general childcare settings, and stronger evidence that development in children in inclusion settings is not affected adversely.

Overall, this study represents an important step towards combating misperceptions about inclusion programming, especially during critical periods of development. As mentioned, parents and teachers have reported concern that interacting daily with children with disabilities may negatively impact typically developing children (Green and Stoneman, 1989). Anecdotally, teachers and parents have suggested that participation in inclusion programs somehow lessens opportunities for learning and growth, and they voice concerns that their typical children will learn negative behaviors from their peers with disabilities. This unfounded perception is offered even more frequently for early intervention programs of children in the critical development years of toddlerhood. This study provided no evidence for such difficulties. In fact, all of the parents from the inclusion program reported positive development comparable with parents of children from the regular childcare program, as well additional areas of growth in acceptance of differences and pro-social skills. Thus, results of this study suggest that an inclusion program, as a childcare option for all children, provides comparable if not better services and benefits than a community childcare program. Furthermore, this study reaffirms what past research has shown; inclusion programs can be beneficial to children with and without disabilities.

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## References

- Burack, J. A. and Volkmar, F. R. (1992) Development of low- and high-functioning autistic children, *Journal of Child Psychology and Psychiatry*, **33**, 607–616.
- Daly, T. (1991) Social behavior and social understanding of mainstreamed and non-mainstreamed typical preschoolers. Unpublished doctoral dissertation, University of Massachusetts, Amherst, MA.
- Diamond, K. E., Hestenes, L. L., Carpenter, E. and Innes, F. K. (1997) Relationships between enrollment in an inclusive classroom and preschool children's ideas about people with disabilities, *Topics in Early Childhood Education*, 17, 520–536.
- Egel, A. L. and Gradel, K. (1988) Social integration of autistic children: evaluation and recommendations, *The Behavioral Therapist*, 11, 7–11.
- Fewell, R. R. and Oelwein, P. L. (1990) The relationship between time in integrated environments and developmental gains in young children with special needs, *Topics in Early Childhood Education*, **10**, 104–116
- Giangreco, M., Dennis, R., Coninger, C., Edelman, S., and Schattman, R. (1993) "I've counted Jon": transformational experiences of teachers educating students with disabilities, *Exceptional Children*, **59**, 359–372.
- Green, A. L. and Stoneman, Z. (1989) Attitudes of mothers and fathers of nonhandicapped children, *Journal of Early Intervention*, 13, 292–304.
- Guralnick, M. J. (1994) Mothers' perceptions of the benefits and drawbacks of early childhood mainstreaming, *Journal of Early Intervention*, **18**, 168–183.
- Guralnick, M. J. (1997) The Effectiveness of Early Intervention. Baltimore, MD: Paul Brookes.
- Hestenes, L. L. and Carroll, D. E. (2000) The play interactions of young children with and without disabilities: individual and environmental influences, *Early Childhood Research Quarterly*, **15**, 229–246.
- Ingersoll, B., Schreibman, L. and Stahmer, A. (2001) Brief report: differential treatment outcomes for children with Autistic Spectrum Disorder based on level of peer social avoidance, *Journal of Autism and Developmental Disorders*, 31, 343–349.
- McGee, G. G., Morrier, M. J. and Daly, T. (1999) An incidental teaching approach to early intervention for toddlers with autism, *Journal of the Association for Persons with Severe Handicaps*, **24**, 133–146.

- Miller, L. J., Strain, P. S., Boyd, K., Hunsicker, S., McKinley, J. and Wu, A. (1992) Parental attitudes toward integration, *Topics in Early Childhood Special Education*, **12**, 230–246.
- Odom, S. L. (2000) Preschool inclusion: what we know and where we go from here, *Topics in Early Childhood Special Education*, **20**, 20–27.
- Odom, S. L. and McEvoy, M. A. (1988) Integration of young children with handicaps and normally developing children, In: Odom, S. and Karnes, M. (Eds.), *Early Intervention for Infants and Children with Handicaps: An Empirical Base* (pp. 241–248). Baltimore, MD: Brookes.
- Peck, C. A., Carlson, P. and Hemsetter, E. (1992) Parent and teacher perceptions of outcomes for typically developing children enrolled in integrated early childhood integrated early childhood programs: a statewide study, *Journal of Early Intervention*, **16**, 53–63.
- Peck, C. A., Odom, S. L. and Bricker, D. D. (1993) Integrating Young Children with Disabilities into Community Programs: Ecological Perspectives on Research and Implementation. Baltimore, MD: Paul Brookes.
- Sailor, W. (1991) Special education in the restructured school, RASE: Remedial and Special Education, 12, 8-22.
- Strain, P. S. and Cordisco, D. (1994) LEAP preschool, In: Harris, S. L. and Handleman, J. S. (Eds.), *Preschool Education Programs for Children with Autism*. Austin, TX: Pro-Ed.
- Turnbull, A. P., Winton, P. J., Blacher, J. and Salkind, N. (1982) Mainstreaming in the kindergarten classroom: perspectives of parents of handicapped and nonhandicapped children, *Journal of the Division of Early Childhood*, **6**, 14–20.
- Willer, B., Hofferth, S., Kisker, E., Divine-Hawkins, P., Farguhar, E. and Glantz, F. (1991) *The Demand and Supply Childcare in 1990*. Washington, DC: National Education Center for the Education of Young Children.
- Wolery, M., Holcombe, A., Brookfield, S., Huffman, K., Schroeder, C., Martin, C. G., Venn, M. L., Weits, M. G. and Fleming, L. A. (1993) The extent and nature of preschool mainstreaming: a survey of general early educators, *The Journal of Special Education*, 27, 222–234.

## APPENDIX A: PARENT QUESTIONNAIRE

Dear Parents,

We are interested in evaluating how your child's participation in Children's Toddler School (Children's Child Care Center) has affected your family. We'd appreciate if you could complete this short form and return it to us. All responses will be kept confidential, and will not be shared with CTS (CCC) staff. PLEASE RETURN BY *Specify date*. If you have any questions, please feel free to talk to *First or second author*. Thank you!

- (1) How long has your child attended CTS (CCC) or how long did your child attend CTS (CCC)?
- (2) What were some of the factors that led you to choose this program? (For example, number of teachers, size of class, curriculum, teacher training . . .?)
- (3) How do (did) you feel about your child participating in an inclusion program (one that includes children at risk for autism)?
- (4) Have you seen changes in your child since he/she began attending CTS (CCC)? If so, please comment. For example, have you seen social changes in your child? Language changes? Attitudinal changes?
- (5) Overall, do you feel that your child's participation in CTS (CCC) benefited him/her? If so, how?
- (6) Overall, do you feel that your child's participation in CTS (CCC) benefited you? If so, how?
- (7) \*If your child has moved to a new childcare program, please compare the inclusion aspects of the program to your child's new placement.

<sup>\*</sup>This question was only asked of parents attending Children's Toddler School.