

Mothers' Perceptions of the Benefits and Drawbacks of Early Childhood Mainstreaming

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The possible benefits and drawbacks of early childhood mainstreaming were evaluated by mothers of both special-needs and non-special-needs children representing a large community-based sample. Separate groups were recruited to establish comparisons related to children with cognitive delays, communication disorders, physical disabilities, and those at risk. A sample of typically developing children was also included. Results revealed widespread support for the benefits of mainstreaming, particularly promoting the acceptance of children with disabilities in the community, preparing the child for the real world, encouraging learning to a greater extent, and providing opportunities for more interesting and creative activities. However, a substantial number of perceived drawbacks was also noted, especially in connection with the availability of special help, special services, and qualified personnel as well as concerns regarding rejection by peers. Findings related to drawbacks suggest parental views that might counteract perceived benefits and reduced confidence in mainstreamed programs. In general, mothers' perceptions of mainstreaming were similar across family demographics, child characteristics, and type of program placement. A major exception was children's behavior problems, in which mainstreaming was perceived to be associated with more drawbacks.

During the 1970s, a strong foundation was established for the emergence of early childhood programs that integrated children with and without disabilities (Guralnick, 1978). As a consequence of legal and legislative changes, the creation of successful integrated experimental models, responses to philosophical and ethical concerns related to separating children on the basis of differing abilities, and the initial positive findings with respect to the effects of integration on children's academic and social development, opportunities to participate in integrated programs at the early childhood level became available in a substantial proportion of communities during the decade of the 1980s (Guralnick, 1990). Yet much remains to be ac-

complished to bring about comprehensive, universally available integrated programs capable of meeting the needs of all children and families. In order to best foster this continuing but gradual shift towards inclusive programs at the early childhood level, an ecological perspective that recognizes the complex influences of systems-level factors is essential. Included among these influences are overarching societal values and assumptions, administrative and organizational forces, prospects for curriculum modification, the availability of staff training and related resources, the results of efficacy studies on social and nonsocial outcomes, and the attitudes, beliefs, and expectations of administrators, teachers, children, and parents

(Guralnick, 1982; Peck, Odom, & Bricker, 1993).

An understanding of the perspectives of parents of children with disabilities in relation to early childhood mainstreaming is especially critical, not only because of the central role of parents in their child's developmental and educational activities (Turnbull & Blacher-Dixon, 1980), but also because parents of children with disabilities have been at the forefront of all significant changes in the system of services. Available research based on interview, survey, and questionnaire data has revealed that parents of children with disabilities are, in fact, generally supportive of mainstreaming for children with and without disabilities. Numerous benefits of mainstreaming have consistently been cited by parents of children with disabilities, with particular emphasis on enhancing their child's social and emotional development, its value in preparing children for later community-based experiences, increased sensitivity to individual differences by children with and without disabilities, and the belief that a mainstreamed setting is an educationally effective one for their child. These findings are applicable to parents whose children were enrolled in specialized programs but were engaged in a planning process to integrate with community-based early childhood programs (Bailey & Winton, 1987; Reichart, Lynch, Anderson, Svobodny, DiCola, & Mercury, 1989), as well as to parents whose children were actively participating in mainstreamed settings (Bailey & Winton, 1987; Blacher & Turnbull, 1982; Turnbull, Winton, Blacher, & Salkind, 1982).

Moreover, comparisons of assessments obtained before and after 9 months of participation in mainstreamed programs (Bailey & Winton, 1987), as well as comparisons between parents' perspectives of children with disabilities who were currently enrolled in mainstreamed settings with those enrolled in specialized settings, revealed few differences

in relation to the benefits noted earlier (Turnbull & Winton, 1983). These results lend support to the view of a general positive orientation toward mainstreaming, held even by parents whose children are enrolled in specialized programs. Equally important, experience in mainstreamed settings does not materially alter that view.

Some concerns have been found with regard to the availability of instructional and related resources and the possibility of rejection or isolation of children with disabilities. Similarly, considerable variability in the responses of parents of children with disabilities has been obtained, especially in connection with perceived drawbacks. Yet because of the small sample sizes for many of the studies, often associated with model programs, and the extensive heterogeneity of family and child characteristics common to these samples, it has not been possible to identify factors such as the child's developmental status or family demographics that may contribute to this variability.

A related issue concerns the perceptions of parents of typically developing children. Interestingly, parents of typically developing children hold views that are highly similar to those of parents of children with disabilities. Positive perceptions of mainstreaming are most prominent, noting benefits for both children with and without disabilities (Bailey & Winton, 1987; Peck, Carlson, & Helmstetter, 1992; Reichart et al., 1989; Turnbull et al., 1982). Although perceived drawbacks were also similar, parents of children without disabilities actually had fewer concerns related to typically developing children following active participation in a mainstreamed program (Bailey & Winton, 1987). Green and Stoneman (1989) also found that parents of typically developing children enrolled in mainstreamed programs held more favorable views than those enrolled in regular early childhood programs. Overall, parents of typically developing children enrolled

in mainstreamed programs appear to hold positive views with minimal concerns (Peck et al., 1992), although considerable variability has also been observed (Green & Stoneman, 1989). In part, this variability may reflect the fact that parents may have had different references for the child with disabilities (i.e., type and severity of the disability), as the characteristics of these children were not usually specified (usually referred to as handicapped). Family demographics may have contributed to this variability as well.

One investigation did seek to determine whether associations existed between family demographics or the characteristics of the child to be mainstreamed and parents' (of typically developing children) comfort with mainstreaming (Green & Stoneman, 1989). For family demographics those investigators found few and only modest associations for mothers. Specifically, family income and maternal age were inversely related to positive attitudes toward mainstreaming, and more educated mothers tended not to believe that children with disabilities displayed more behavior problems than other children. Parents were also least concerned about mainstreaming children with sensory or physical disabilities, but expressed more concerns as the severity of the child's disability increased, as well as for children with behavioral or emotional problems. These findings suggest that establishing a reference group for parents of typically developing children, by specifying the nature of the child's disabilities to be mainstreamed, is an important factor to consider.

Accordingly, to achieve a more complete understanding of the perspectives of parents of children with disabilities, it is important to determine whether these views of the benefits and drawbacks of mainstreaming are held with equal strength by parents of children differing widely in developmental characteris-

tics. Of particular relevance is the type and severity of their child's disability, the ability to communicate, and the existence of associated behavior problems. Family factors such as socioeconomic status might also play mediating roles, as might children's current enrollment status in mainstreamed or specialized programs. An evaluation of these issues will require a large community-based sample. Similarly, it is important to determine if the characteristics of the children with disabilities who participate in a mainstreamed program influence the perceptions of parents of typically developing children. Associations with family demographic factors for parents of typically developing children are also of interest. These questions are especially relevant to a systems approach, as negative views (perceived drawbacks) in particular are certain to influence all aspects of the mainstreaming process (Guralnick, 1982). These and related issues are examined in the present investigation focusing on the benefits and drawbacks of mainstreaming as perceived by mothers of children with and without disabilities.

METHOD

Subjects

Children meeting criteria for classification as cognitively delayed, communication disordered, physically disabled, or at-risk (see below for definitions) were recruited through formal contact with local school districts and community agencies providing services to young children with disabilities in a large metropolitan community in the northwestern United States. Because we were interested in parents' perspectives in relation to preschool programs, only children enrolled in some form of regular integrated (see below), specialized, or combination of programs were selected. To be included in the sample, subjects were required to be between 48 and 71 months of age and meet inclusion criteria for one of the

three disability categories or the at-risk category. Children who were legally blind, had major uncorrected hearing loss, lived with the primary caregiver for less than 6 months, or currently lived in a home without a female caregiver were excluded from the study. No attempt was made to recruit children enrolled in programs serving those with severe or multiple disabilities. Non-English-speaking families were also excluded.

Records of children whose parents consented to participate in the study were carefully reviewed. In addition, for classification purposes only, children were administered individually the revised version of the Wechsler Preschool and Primary Scale of Intelligence (WPPSI-R; Wechsler, 1989). Full-Scale IQ scores as well as performance (PIQ) and verbal (VIQ) scores were obtained. The revised version of the Test for Auditory Comprehension of Language (TACL-R; Carrow-Woolfolk, 1985) was also individually administered. The TACL-R consists of scales for word classes and relations, grammatical morphemes, and elaborated sentences, but only the total score (standard score) was used for categorization purposes in this study.

On the basis of this information children were placed into one of the following four groups having special needs.

1. *Cognitive delay.* Children who obtained WPPSI-R Full-Scale IQ scores of 80 or below and did not meet criteria for children with physical disabilities. Children were excluded from this category if they obtained a PIQ or TACL-R greater than 90. Also classified here were children who received scores of 0 on at least three subtests for either the performance or verbal scales (Wechsler, 1989).

2. *Communication disorder.* Children who obtained a PIQ of 90 or greater or Full-Scale IQ score greater than 85 and completed a comprehensive speech and hearing assessment administered by qualified personnel resulting in a categorical diagnosis of commu-

nication disorder and a recommendation for regular therapy. In addition, to be classified as communication disordered for this study a child must have met one of the following criteria: (a) PIQ > VIQ differential of at least 15 points; (b) a TACL-R total score of 90 or less, or (c) a diagnosed articulation disorder.

3. *Physical disability.* Children with a clearly diagnosed physical impairment such as cerebral palsy or spina bifida.

4. *At risk.* Children who obtained a Full-Scale IQ score between 81 and 90 and did not meet criteria for any other classification. In addition, to be included in this category children must have been receiving early intervention services by their local school districts. Most common areas of concern were related to fine and gross motor delays or relatively minor speech and language difficulties.

Recruitment continued until a minimum of 250 families agreed to participate, including at least 25 families from the physical disability group (due to its low incidence) and the at-risk group (due to the limited number of at-risk children receiving services from school districts). From this larger sample, 222 subjects in the four special-needs groups returned the Mainstreaming Questionnaire (see below).

A comparison sample of a minimum of 60 similar-age typically developing children was recruited from daycare programs in the same geographic areas as the children with special needs (59 subjects returned the Mainstreaming Questionnaire). Children were included if they had Full-Scale WPPSI-R IQ scores between 90 and 130. To minimize the possibility that the typically developing group had as yet undetected disabilities, children were excluded if they achieved a VIQ, PIQ, or TACL-R less than 90 or received a total behavior problem score (see below) greater than the 90th percentile on the Child Behavior Checklist (Achenbach & Edelbrock, 1981). Because the

typical children were part of a separate but related study, this particular sample was selected to ensure that they did not have any siblings with disabilities nor were enrolled in nursery or preschool programs in which more than 15% of the children had an established disability. Consequently, it can be assumed that parents' perspectives obtained from the typically developing comparison sample were not based on extensive experience either with children with disabilities or integrated programs.

Child Characteristics and Family Demographics

In addition to the WPPSI-R and the TACL-R scores, other child characteristic measures were obtained for all children. First, to supplement the receptive language assessment of the TACL-R, the expressive components of the Preschool Language Scale were administered (Zimmerman, Steiner, & Pond, 1979). Because of the lack of standardization, only raw scores were used (range 0–48 for verbal ability and 0–23 for articulation). Second, trained interviewers administered the Vineland Adaptive Behavior Scales (Sparrow, Balla, & Cicchetti, 1984) Survey Form to mothers. Standard scores were obtained for each of the four domains (communication, daily living skills, socialization, and motor skills) as well as for the total adaptive behavior score. Third, the mother's assessment of her child's behavior problems was obtained from the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1981). Mothers rated the frequency of different behavior problems from a 118-item questionnaire using a 3-point scale. Only the broad-band internalizing and externalizing scales (*T* scores), in conjunction with a total behavior problem score, were used. Higher scores indicate greater perceived behavior problems.

Finally, responses to a parent questionnaire provided basic demographic information on

marital status, child's gender and ethnicity, maternal age, and the parents' employment status, occupation, and education. The Hollingshead Four-Factor Index of Social Status (Hollingshead, 1975) was used to calculate a measure of family status (range 8–66). Table 1 presents the number of subjects with returned Mainstreaming Questionnaires from each of the five groups, as well as child characteristic and demographic measures.

Placements of Children in Preschool Programs

Mothers of special-needs children were interviewed to obtain information on their child's current preschool program placement. Information on the involvement of typically developing children permitted a classification of the program into either an integrated (standard involvement or planned interactions with typical children) or a specialized program (program contains only children with special needs and no planned exchanges with typical children). Programs considered as mainstreamed, reverse-mainstreamed, and those containing planned integration experiences with typical children were all placed in the integration category for subsequent analyses (see Guralnick & Groom, 1988; Odom & McEvoy, 1988, for definitions). From the total of 222 children with special needs, 53 participated in integrated programs and the remainder in specialized programs. Information was also obtained from the mother on the program's staffing patterns, location, developmental approach, goals of the program, prior placement of the child, reasons for selection of the current program, and the frequency with which the mother observed her child in the program.

Mainstreaming Questionnaire

A variation of the scale developed by Bailey and Winton (1987) was used to evaluate mothers' perspectives of the benefits and draw-

TABLE 1
Sample Characteristics for Each of the Five Groups

Sample Characteristics	Groups									
	Cognitive Delay ^a (n = 97)		Communication Disorder (n = 73)		Physical Disability (n = 28)		At Risk (n = 24)		Typical (n = 59)	
	M	SD	M	SD	M	SD	M	SD	M	SD
<i>Demographics</i>										
Child's age ^b	57.82	7.10	58.71	5.79	60.32	6.06	59.17	6.71	56.25	3.80
Child's gender ^c	.73	.45	.77	.43	.43	.50	.71	.46	1.00	.00
Child's ethnicity ^d	.85	.36	.85	.32	.89	.32	.79	.41	1.00	.00
Mother's age ^e	34.93	6.05	34.34	4.92	34.04	6.22	35.63	7.26	34.17	4.28
Mother's education	14.21	1.88	13.86	1.72	14.30	1.73	13.54	2.55	15.08	1.87
Marital status ^f	.93	.26	.86	.35	.78	.42	.79	.41	.85	.36
Family social status ^g	43.98	13.19	43.62	13.42	38.98	13.79	40.63	14.66	48.04	10.97
<i>Child Characteristics</i>										
WPPSI-R ^h										
Full Scale IQ	63.32	10.79	96.34	11.10	88.00	24.20	85.83	2.50	112.49	9.48
Performance IQ	64.87	12.16	104.10	10.87	86.48	23.50	86.00	4.80	112.32	12.39
Verbal IQ	67.46	10.68	90.55	12.92	91.26	21.92	88.38	4.55	109.97	10.02
TACL-R ⁱ										
Total Scale	64.93	17.25	91.08	15.47	84.54	22.22	85.63	10.26	107.03	8.96
Word Class & Relations	65.38	30.59	91.92	15.95	83.14	31.88	88.88	9.76	107.68	10.80
Grammatical Morphemes	69.69	16.94	91.03	16.17	84.89	21.54	87.29	11.87	104.53	10.84
Elaborated Sentences	75.52	10.42	96.21	14.03	93.25	17.87	88.29	10.99	107.61	12.00
PLS ^j										
Verbal Ability	17.27	8.03	28.48	6.72	31.22	9.70	29.96	5.87	37.10	4.50
Articulation	10.91	6.11	14.23	4.28	16.22	6.94	15.50	3.91	21.00	2.84
VABS ^k										
Total Adaptive Behavior	66.30	10.86	85.41	15.35	71.04	17.17	76.04	11.10	96.46	10.27
Communication	69.81	12.19	83.10	11.98	85.32	18.57	78.29	11.20	97.20	8.11
Daily Living Skills	69.49	12.72	89.68	15.80	70.86	17.80	80.88	12.71	94.22	12.04
Socialization	80.58	11.73	93.36	15.54	89.96	18.02	86.92	14.66	100.00	9.62
Motor Skills	66.08	15.95	88.75	17.97	57.82	22.99	78.17	16.24	99.29	12.35
CBCL ^l										
Total Behavior Problems	57.68	11.42	56.97	12.23	53.67	6.23	59.29	8.91	47.31	7.34
Externalizing	54.46	12.37	54.51	13.17	49.41	8.37	56.42	9.23	48.68	8.34
Internalizing	57.75	10.27	58.13	10.13	55.70	6.75	60.08	8.68	47.14	7.97

^a Number of subjects may vary slightly for each measure due to incomplete data sets, particularly on the WPPSI-R for children with significant cognitive delays.

^b Calculated in months.

^c Proportion male.

^d Proportion Caucasian.

^e Calculated in years.

^f Proportion partnered.

^g Hollingshead Four-Factor Index of Social Status.

^h WPPSI-R = Wechsler Preschool and Primary Scale of Intelligence.

ⁱ TACL-R = Test of Auditory Comprehension-Revised.

^j PLS = Preschool Language Scale.

^k VABS = Vineland Adaptive Behavior Scales.

^l CBCL = Child Behavior Checklist.

backs of mainstreaming. This scale was based originally on interviews with mothers of children with special needs (Turnbull & Winton, 1983) and, as a result of subsequent research and clinical observations, was then put into its present questionnaire format. Additional but minor modifications for the present study primarily consisted of changes in terminology (from handicapped to special needs) and the elimination of one question that did not appear to be applicable to the entire sample (regarding self-help, eating, and toileting).

The scale consists of 27 statements divided into two major sections. The first section addresses "possible benefits" of mainstreaming and the second "possible drawbacks." Each section is further subdivided into benefits or drawbacks for children "with special needs" and children "without special needs." Consequently, the scale contained four distinct segments. Statements reflected a range of issues including those concerned with acceptance, self-esteem, effects on learning and development, understanding differences, effects on families, and the distribution and availability of resources (i.e., staff time and qualifications, availability of special services and equipment.)

Mothers were asked to rate each of the 27 statements on a 5-point Likert-type scale ranging from *definitely not a benefit* (or drawback) to *definitely a benefit* (or drawback). For the 13 statements on the possible benefits of mainstreaming in the first major section (8 statements focusing on benefits to children with special needs and 5 statements focusing on children without special needs), higher ratings (maximum of five) indicated agreement with the potential benefits. Similarly, for the 14 statements on the possible drawbacks in the second major section (9 statements focusing on children with special needs and 5 statements focusing on children without special needs), higher ratings (maximum of five) indicated agreement with the

potential drawbacks. The internal consistency of the questionnaire as used in this study was high, with Cronbach's alpha coefficients averaging greater than .80 across the four segments of the scale.

Procedure

Following agreement by the family to participate in the study, a packet containing questionnaires (but not the Mainstreaming Questionnaire) and consent forms was mailed. The questionnaires included requests for demographic information and the CBCL. This mailing also included other scales related to their child's peer relations that were part of a larger investigation of parental perspectives on children's peer-related social development, including implications for participation with typical children. Two separate interviews with the mothers were then arranged to administer the Vineland Adaptive Behavior Scales, to obtain additional information related to the larger study, and to collect completed questionnaires and consents.

During this period, research assistants trained and supervised on the various assessment instruments by licensed psychologists and a communication disorders specialist tested children individually, primarily at their preschool programs. Training staff periodically observed assessments during the course of the study, and each measure was rechecked for accuracy and correct use of tables before final entry for analysis.

The Mainstreaming Questionnaire was mailed to mothers of children with special needs 3 months following the second interview. The timing was designed to minimize possible confounds with other questionnaires or interviews concerning their child's peer-related social development in relation to typical children and integrated programs. For the typically developing sample, the questionnaire was mailed immediately, as mothers of

children in this group did not participate in interviews related to integration.

For mothers of children in the special-needs or at-risk categories, a cover letter described what was meant by mainstreaming and it asked mothers to assume the special needs of the child referred to in the questionnaire were similar to those of their own child. For the mothers of the typically developing sample, the letter contained the same statement about what was meant by mainstreaming. In addition, to provide a reference for these mothers, the letter also described general characteristics of the special-needs child in the questionnaire. Specifically, 27 mothers were told that the special needs child was generally delayed in development and was similar to children 1–2 years younger than their child, especially in their ability to think and solve problems (cognitive delay). Another group of 26 mothers was told that the child with special needs in the questionnaire had difficulty understanding speech or talking to others. They were further asked to assume language skills similar to a child 1–2 years younger than their child, but not having any more difficulty in thinking or problem-solving than children their own child's age (communication disorder). A third group of mothers ($n = 6$) was not given any reference for the term special needs.

RESULTS

Descriptive Analysis

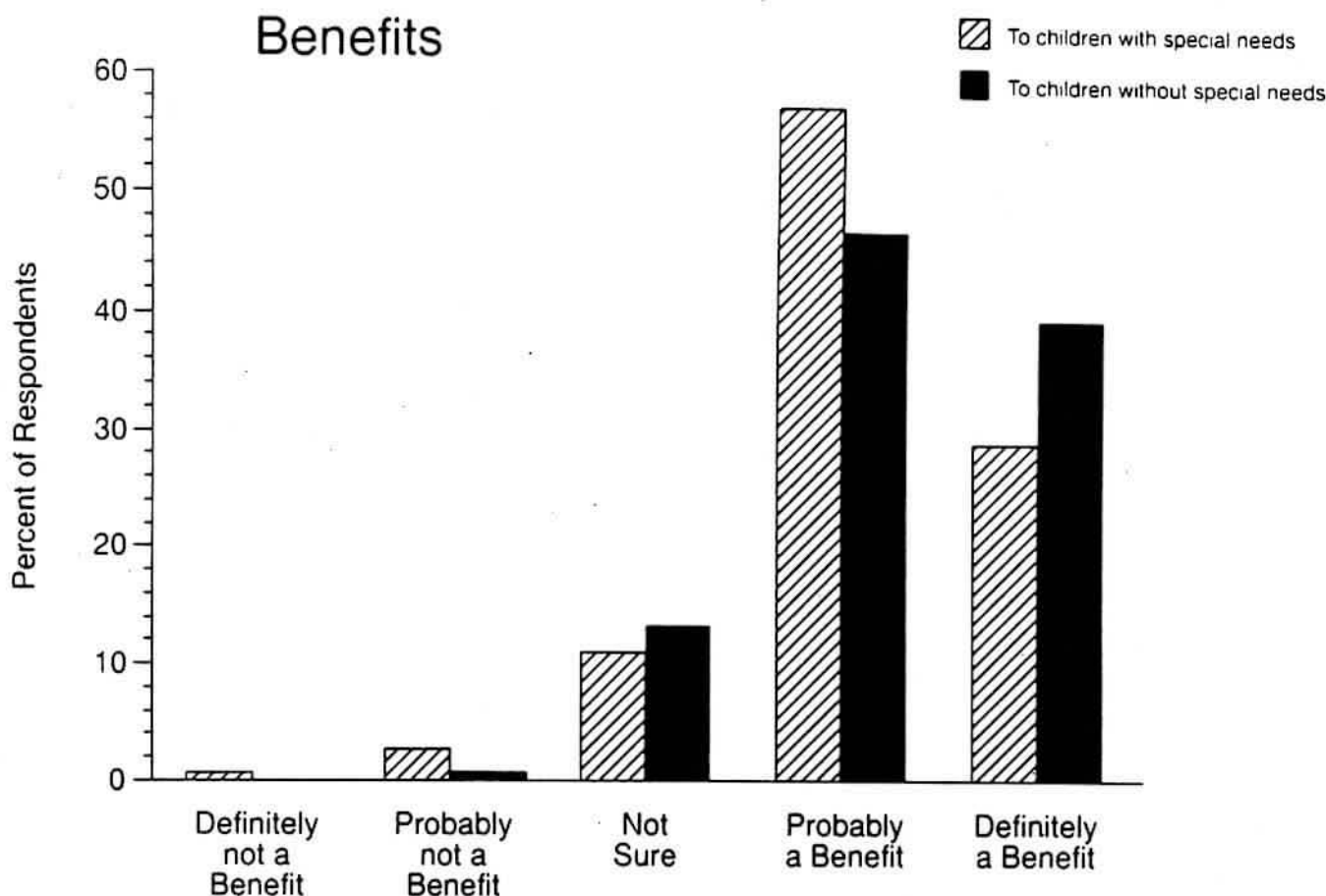
A descriptive analysis of the dataset was first carried out, combining Mainstreaming Questionnaire responses from mothers in all five groups ($N = 281$). As noted, both the perceived benefits and drawbacks sections of the questionnaire were subdivided into components focusing on children with special needs and those without special needs. Results indicated that mothers perceived that, overall, mainstreaming is likely to benefit children with

special needs. Mean rating for children with special needs was 4.06 ($SD = .63$). Highest rated questions included the ability of mainstreaming to promote the acceptance of special-needs children in the community ($M = 4.37$, $SD = .81$), preparing the child for the real world ($M = 4.42$, $SD = .79$), the opportunity to observe and learn from typical children ($M = 4.32$, $SD = .83$), and the opportunity to participate in diverse activities ($M = 4.24$, $SD = .93$). The lowest rated item related to the ability of mainstreaming to make children feel better about themselves ($M = 3.45$, $SD = 1.02$), with the average response falling between being not sure and indicating a possible benefit. For children without special needs, ratings were uniformly positive ($M = 4.23$, $SD = .65$), with mothers strongly believing that, "In mainstreaming, children without special needs are more likely to learn about differences in the way people grow and develop" ($M = 4.56$, $SD = .66$).

This pattern of ratings for the possible benefits of mainstreaming closely corresponded to those found by Bailey and Winton (1987) for their university-based daycare program. The results of this study suggest that these perceptions are also held by mothers whose children were enrolled in community-based programs. A modest degree of variability did exist, however. This is illustrated in Figure 1, which presents the percentage of mothers whose average ratings (rounded to the nearest whole-scale value) corresponded to the five scale values, separated for perceived benefits to children with and without disabilities. It is important to note that the statements addressing the possible benefits (or drawbacks) for children with and without disabilities are not directly comparable, although both do include concerns about sensitivity to individual differences, preparation for real-world experiences, and understanding the experiences of families. Nevertheless, the distribution of perceived benefits for each group provides an

Figure 1

Distribution of mothers' average ratings on the Mainstreaming Questionnaire (to nearest whole-scale value) in relation to the benefits of mainstreaming



important index of mothers' attitudes towards early childhood mainstreaming.

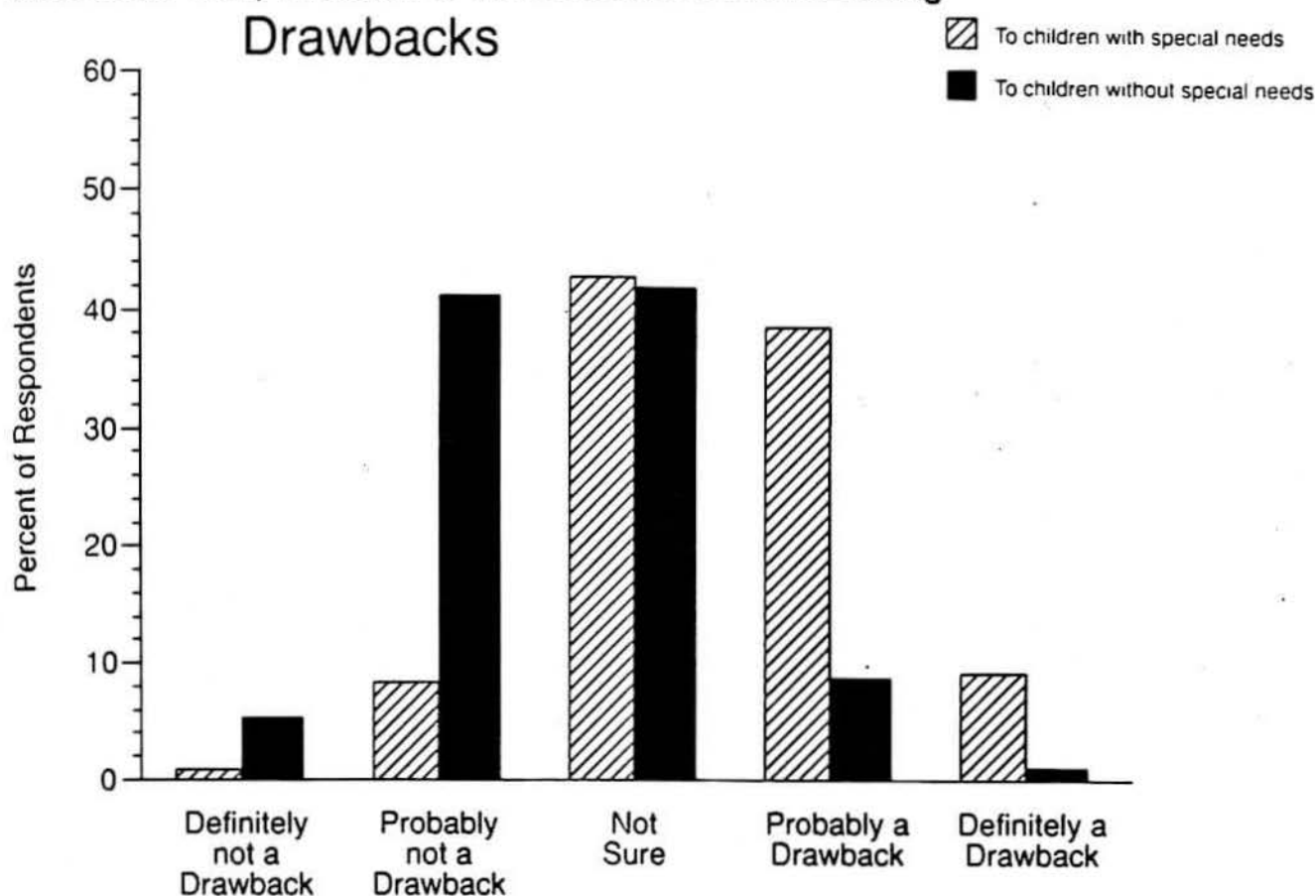
For the drawbacks section, mothers were generally cautious, particularly in reference to children with special needs (higher ratings indicate greater perceived drawbacks). Ratings for children with special needs averaged 3.48 ($SD = .73$) for the entire sample, which placed typical responses midway between uncertainty with regard to whether or not the statements were possible drawbacks (*not sure*) to *probably a drawback*. As found in previous research, the greatest concerns were related to possible difficulties in receiving special help and individualized instruction from teachers ($M = 3.90$, $SD = .95$) and obtaining special services ($M = 3.50$, $SD = 1.24$). Questions concerning the qualifications of the teachers

($M = 3.85$, $SD = 1.05$) were also noted. Drawbacks were also expressed in connection with possible rejection or ignoring by other children ($M = 3.54$, $SD = 1.09$) and the possible upset that families might experience from seeing this rejection ($M = 3.85$, $SD = 1.00$). In contrast, few concerns were expressed for children without special needs ($M = 2.56$, $SD = .74$), with some uncertainty noted that teachers might not be able to attend sufficiently to children without special needs ($M = 3.05$, $SD = 1.10$).

Once again, response patterns for the possible drawbacks for mainstreaming in this large community-based sample were similar to previous findings (e.g., Bailey & Winton, 1987). Figure 2 presents the distribution found for perceived drawbacks

Figure 2

Distribution of mothers' average ratings on the Mainstreaming Questionnaire (to nearest whole-scale value) in relation to the drawbacks of mainstreaming



for children with and without special needs. As can be seen, considerable variability was present, particularly in comparison to perceived benefits.

Comparisons Among Groups

For the following analyses, the primary question addressed was whether these perceptions varied across the four groups of children with special needs as well as the group of typically developing children. A preliminary analysis was first conducted to determine if differences existed among mothers of typically developing children who received different descriptions of the characteristics of the special-needs child described in the questionnaire (i.e., a child with developmental delay, communication disorder, or no description).

A MANOVA (Wilks' criterion) carried out for each of the four sections of the questionnaire revealed no significant differences ($p > .05$). Consequently, data from these groups of typically developing children were combined for all subsequent analyses.

An additional preliminary analysis examined demographic factors across the five groups using separate ANOVAS for the child's age, mother's age and education, and family social status, and using separate chi-square analyses for marital status and child's gender and ethnicity (see Table 1). These analyses revealed no significant differences with the exception of gender (due entirely to the typical group). However, since gender did not correlate significantly with ratings in any of the four sections of the questionnaire (mean $r =$

.01, $p > .05$), subsequent analyses did not employ gender as a covariate.

In the main analyses, separate MANOVAs were carried out across ratings within each of the four sections of the questionnaire. For the section on benefits to children with special needs, no overall effect was found ($p > .05$). For the section on benefits to children without special needs, a significant multivariate effect was obtained, $F(20, 903) = 1.83, p < .05$. A series of ANOVAs for the five items in this section indicated that this effect was due entirely to differences on one question: "In mainstreaming, families of children without special needs are more likely to understand what it is like for families who have a special-needs child," $F(4, 276) = 2.74, p < .05$. Specifically, mothers of typically developing children perceived this to be a greater benefit than did mothers in the cognitive delay or communication disorder group (Neuman-Keuls test).

Similarly, for the section on drawbacks for children with special needs, no significant multivariate effect was obtained. However, a significant MANOVA was obtained for the section on drawbacks to children without special needs, $F(20, 903) = 1.70, p < .05$. Univariate analyses revealed that this difference was due solely to the responses of mothers of children with physical disabilities to the statement regarding the possible lack of teacher attention provided to children without special needs as a consequence of mainstreaming, $F(4, 276) = 3.55, p < .05$. Specifically, mothers in this group believed that this drawback was *less* of a factor than did the other four groups (Neuman-Keuls test).

Accordingly, for 25 of the 27 statements on the four sections of the questionnaire, mothers' perceptions of the benefits and drawbacks of mainstreaming described in the previous section are not specifically related to the nature of their child's special needs. In addi-

tion, similar views are held by mothers of typically developing children.

Specialized versus Mainstreamed Programs

In this analysis, comparisons were made between the ratings of mothers whose special-needs children were enrolled in specialized compared to mainstreamed programs. To form equivalent groups, each of the 53 children enrolled in a mainstreamed program was matched with a child with similar family and child characteristics from the specialized group. To accomplish this, the following process was followed. First, children from the same special-needs group as the to-be-matched (mainstreamed) child were identified from those enrolled in specialized programs. A small subgroup was then formed based on key demographic and child characteristics within predetermined ranges. Specifically, a subgroup was formed on the basis of chronological age (± 6 months), family social status (± 10), Full-Scale IQ score (± 10), and Vineland Adaptive Behavior Scales total score (± 10). From this subgroup, one child was randomly selected. Occasionally, the range had to be expanded to achieve a match. Nevertheless, this process resulted in matched groups confirmed by two-tailed t -tests ($p > .01$) and chi-square tests (for dichotomous measures) carried out on all child characteristic and demographic measures. (To control for Type I errors, a more stringent alpha level was selected. A similar level was set for correlations and other analyses involving the large set of demographic and child characteristic variables.)

Multivariate analyses were then conducted comparing mothers' responses in the two groups to statements on each of four major sections of the Mainstreaming Questionnaire. Interestingly, no significant differences were found ($p > .05$). To reduce the possibility that this finding was a result of the matching pro-

cess, a second matched sample was located using similar procedures. Although some overlap in the two matched samples was unavoidable, results confirmed that of the first sample.

Comparisons between the specialized and mainstreamed programs were also carried out on mothers' responses to questions about their child's program, including staffing, developmental approach, goals of the program, and reasons for selecting a particular program. Analyses indicated no differences on any relevant measure between the mainstreamed and specialized groups ($p > .01$). In fact, these measures were similar across all four special-needs groups, irrespective of type of placement. Correlations between these program measures and the four sections of the Mainstreaming Questionnaire yielded only one significant relationship. Specifically, across all special-needs groups, the more often a parent observed her child's program, the more positive was her perception of the benefits of mainstreaming for children with special needs ($r = .19, p < .01$).

Relationship with Child Characteristic and Family Demographic Measures

To determine if any of the child characteristic or family demographic measures were associated with ratings on the Mainstreaming Questionnaire (means for each of the four sections), correlational analyses were carried out across subjects from all five groups. Only six statistically significant relationships were obtained, primarily associated with the drawbacks section for children without special needs. Specifically, negative correlations were obtained for mothers' educational level ($r = -.24, p < .001$) and family social status ($r = -.17, p < .01$), with drawbacks to children without special needs. In addition, scores on the externalizing factor of the CBCL correlated significantly with drawbacks to children with special needs ($r = .17, p < .01$) and

drawbacks to children without special needs ($r = .22, p < .001$). The total behavior problem score also correlated significantly with both sections of the drawbacks scale ($r = .16, p < .01$). A similar pattern of within-group correlations were obtained for each of the five groups, but these analyses did not consistently add any new information to the overall results.

Despite a consistent pattern of results, an alternative approach was taken to evaluate the association of demographic factors and child characteristics with mothers' perceptions for the four special-needs groups. For each of the four sections of the questionnaire (using mean ratings), upper and lower quartiles were established and the two groups were compared on all demographic and child characteristic variables. Separate t -tests ($p < .01$) revealed that, with respect to drawbacks for children with and without special needs for the CBCL, both total behavior problem and externalizing scores were rated higher by families in the upper quartile (higher drawbacks). No other consistent demographic or child characteristic differences were evident for any section of the questionnaire, although mothers who perceived fewer drawbacks for children without special needs (lowest quartile) had higher educational status than mothers who perceived there to be more drawbacks.

The relationship between children's behavior problems as reflected on the CBCL and mothers' ratings of the benefits and drawbacks of mainstreaming was pursued further. Special-needs children scoring in the clinical range of the CBCL (T score of 64 or above, 90th percentile) were identified ($n = 70$) and compared with the remainder of the sample ($n = 149$). To determine if these two groups were equivalent on demographic and child characteristics, separate t -tests were carried out on all measures (see Table 1). With the exception of the three CBCL scores (externalizing, internalizing, and total behavior prob-

lems), no significant differences were obtained ($p > .01$). Comparisons between these two groups on the Mainstreaming Questionnaire were then carried out. Multivariate effects were obtained for both drawbacks sections only, $F(9, 209) = 2.35, p < .05$ for children with special needs and $F(5, 213) = 2.73, p < .05$ for children without special needs.

In all instances, greater drawbacks were perceived by mothers of children in the clinical range of behavior problems. For children with special needs, univariate analyses revealed significant differences for the statements related to rejection by teachers, $F(1, 217) = 4.16, p < .05$, and to rejection by children, $F(1, 217) = 6.10, p < .01$. Significant differences were also found for two family-related statements. As expected, mothers of children in the clinical group were more concerned that families would be upset by the experience of seeing their child rejected or teased, $F(1, 217) = 14.45, p < .001$. In addition, differences emerged with respect to the possible failure of other families to share and understand their concerns, $F(1, 217) = 4.64, p < .05$.

Finally, for children in the clinical group, mothers' ratings of the possible drawbacks for children without special needs were considerably greater than for those children where scores on the CBCL were in the nonclinical range. In fact, the multivariate effect and all five univariate tests were significant: less teacher attention, $F(1, 217) = 5.47, p < .05$; learn negative behaviors, $F(1, 217) = 7.56, p < .01$; not get fair share of resources, $F(1, 217) = 6.82, p < .01$; families uncomfortable being around children with special needs, $F(1, 217) = 6.67, p < .01$; and families uncomfortable being around families of special-needs children, $F(1, 217) = 4.41, p < .05$.

DISCUSSION

The results of this study replicate and extend previous work on the benefits and drawbacks

of mainstreaming as perceived by mothers of preschool-age children. Based on a large community-based sample of families whose children met criteria for inclusion in one of four special-needs groups, mothers indicated widespread support for the benefits of mainstreaming. Overall, approximately 85% of mothers, on average, perceived the statements for children and families on the Mainstreaming Questionnaire to reflect probable or definite benefits to children with and without special needs. Particular benefits to children with special needs were noted in relation to promoting the acceptance of children with disabilities in the community, preparing the child for the real world, encouraging children with special needs to learn more, and providing opportunities to participate in a wider variety of interesting and creative activities. Perceived benefits to children without special needs were especially apparent in relation to learning about individual differences. Furthermore, these perspectives were shared not only by mothers whose children differed widely in terms of their special needs but also by mothers of typically developing children. Moreover, mothers whose children were enrolled currently in mainstreamed and specialized programs held identical views. Taken together, these results lend strong support to the generalized nature of these positive opinions regarding the benefits of mainstreamed programs.

The results related to the perceived drawbacks of mainstreaming were also similar to previous research (e.g., Bailey & Winton, 1987), but are more difficult to interpret. Specifically, focusing on drawbacks for children with special needs nearly half the mothers expressed serious concerns (see Figure 2). In addition there was considerable uncertainty in mothers' responses—much more so than for possible benefits of mainstreaming. Clearly, families distinguished between probable benefits and drawbacks, with correlations between the two being quite low (average $r =$

– .15). Whether these concerns expressed by mothers and their uncertainty in relation to perceived drawbacks constitute significant barriers to encouraging the development of mainstreamed settings or actually placing children in these programs are important questions for future study. It is quite possible to imagine how these perceived drawbacks would counteract perceived benefits and undermine parents' confidence in mainstreamed programs. In contrast, far fewer concerns were expressed for children without special needs, although considerable uncertainty was apparent for these children as well. It is important to recall that these views were held by parents of children in all four special-needs groups as well as by mothers of typically developing children.

It appears that early childhood mainstreaming elicits two general types of concerns. First, mothers are concerned about the quality of special help, special services, and qualified personnel. These are recurring themes that continue to be addressed by the service community (e.g., Kontos & File, 1993). The preponderance of evidence does suggest, however, that quality mainstreamed programs provide resources sufficient to prevent any developmental disadvantages from occurring as a consequence of participating in mainstreamed programs (see Buysse & Bailey, 1993; Guralnick, 1990). Second, concerns regarding the possible rejection of children with special needs by their peers in particular (and the upset experienced by families from witnessing that rejection) is one of the most difficult and most persistent issues in the field of mainstreaming. The research literature is relatively weak in connection with this critical matter. Although it is beyond the scope of this discussion, additional research on acceptance and rejection in mainstreamed programs will need to consider its multidimensional nature and developmental implications, differences that exist for children with varying

disabilities and related characteristics, and the importance of selecting appropriate comparison groups (see Guralnick, 1990). Nevertheless, concerns regarding rejection of children with special needs by peers may well underlie resistance to or lack of enthusiasm for fully inclusive programs. To examine this issue, future research should probe in considerable depth parental attitudes regarding their child's peer relations, friendships, and social-skills development in relation to mainstreamed and specialized programs.

As noted, mothers' perceptions of the benefits and drawbacks of mainstreaming were unrelated to their child's developmental status, current placement in a mainstreamed or specialized program, and to virtually all child characteristic and demographic factors measured in this investigation. Associations with family social status and the extent of externalizing behavior problems were obtained, but, for the most part, the explanations for the variability in the perceptions of mainstreaming must be sought elsewhere. However, mothers of children whose behavior problem scores placed them in the clinical range were considerably more concerned about the statements related to drawbacks of mainstreaming. Clearly, this subgroup of children poses unique attitudinal and probably practical challenges for mainstreamed programs.

Interestingly, the severity of a child's disability, overall or within the special-needs groups, did not alter the perceptions of mothers of children with disabilities with regard to either benefits or drawbacks of mainstreaming. In conjunction with the results for the different special-needs groups involved in this investigation, this is an important finding and speaks to the range of children for whom mainstreaming might be considered. In contrast, other researchers have found that mothers of typically developing children do hold different views in accordance with the severity of the child's perceived disability (Green &

Stoneman, 1989). The current investigation did not directly focus on this issue for mothers of typically developing children. Mothers were presented with only two types of children (as referents for children with cognitive delays and communication disorders), but did not distinguish between them in terms of the benefits or drawbacks of mainstreaming.

Finally, two limitations of the present research should be noted. First, all service variations of mainstreaming (integrated, reverse mainstreamed, etc.) were combined into one category. Consequently, variations among service models were not examined. Related research has in fact suggested that these various arrangements do yield different effects in terms of children's peer interactions (Guralnick & Groom, 1988), a circumstance which may also alter parental perceptions of benefits and drawbacks. Unfortunately, although increasing steadily, an insufficient number of children in this geographic area are participating in early education programs that include typically developing children to allow a systematic comparison at this time. Second, even though our sample was large, with sampling procedures that vigorously solicited families in educational and service programs, it is not possible to determine the true representativeness of our sample both for the four special-needs groups and the sample of typically developing children. Despite the consistency of our results with previous investigations, additional replications and extensions are in order.

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