

## COPING RESOURCES OF MOTHERS OF INTEGRATED AND NON-INTEGRATED PRE-SCHOOLERS WITH DEVELOPMENTAL DISABILITIES

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### Introduction

During recent years a consensus has been developed among researchers and special educators that pre-school integrated programmes may increase the degree of social integration between disabled and non-disabled children (Rimmerman, 1991; Blacher-Dixon, *et al.*, 1981). Raver (1980) presented a similar opinion regarding the success of integrated pre-school settings but what has remained less obvious are the identification of the precise ingredients necessary for successful pre-school mainstreaming. An important component in any pre-school programme is parental involvement (Blacher-Dixon *et al.*, 1981). This component, given major importance in relation to others, is still in need of further study, especially regarding parental perspective (Cavllaro and Porter, 1980; Rimmerman *et al.*, 1990; Winton, 1980).

Despite the recognition of the importance of parental involvement in these

programmes, there has been comparatively little research in regard to their effect upon the parent (Rimmerman *et al.*, 1990; Rimmerman, 1983; Wang and Ellett, 1982). The following questions need further explorations: Do mothers, whose children with developmental disabilities participate in an integrated pre-school programme derive any social or psychological benefit from their child's interaction with non-disabled children? Do they cope favourably with the burden of care compared to mothers whose children participate in a non-integrated programme?

The rationale behind these questions stems from a few assumptions: first, the belief that the mother's perception of her child is a function of the child's progress, since the mother views her child as an integral part of herself (Rimmerman *et al.*, 1990); second, the opportunities the mother has of rearing her child in a non-stigmatized setting may increase her self-esteem (Rosenberg

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and Robinson, 1985); and third, mothers' involvement with parents of non-disabled children may improve her own adjustment (Rimmerman *et al.*, 1990; Blacher-Dixon *et al.*, 1981).

The purpose of the study is to investigate and to compare systematically the effects of two types of pre-school programmes (integrated and non-integrated) on changes in mothers' coping resources and self-esteem. While these programmes are similar with respect to the parallel activities provided for the children, they are distinctly different regarding their emphasis on children's and mothers' exposure to normalized and integrated activities. In this study we hypothesize that mothers whose children participate in an integrated setting will have (after exposure to the programme) higher coping resources than their counterpart-mothers whose children participate in a non-integrated pre-school programme

## Method

The participants were all the mothers ( $n = 68$ ) who registered their children with developmental disabilities in integrated or non-integrated programmes in the Tel Aviv region during April-May of 1992. Before registration, all children were evaluated by three educational psychologists who verified that each child had a mild or moderate mental handicap. All the mothers were asked by the director of children's services in the municipality to participate in the study. Sixty-six mothers responded positively. Among them were 26

mothers who chose an integrated pre-school programme and 40 mothers who chose a non-integrated pre-school programme. Since it was necessary to compare children and mothers according to demographic and background data (child's age, mother's age and mother's level of education) 22 mothers of each group were finally matched. The mothers of each group were evaluated twice in regard to their coping resources and self-esteem: at baseline, before their children started the programmes and after four months of participation in the pre-school programme. For the relative matching of the two groups, see TABLE I.

Most of the mothers were in their late 20s, married with a mean formal education of above high school and approximately five mean years of motherhood. Their children had a mean age of 40 to 41 months upon admission to the pre-school programme. They were evaluated as being mildly mentally handicapped or moderately so, 72.73% and 27.27% respectively.

The instrumentation includes two scales: The Questionnaire on Resources and Stress (QRS-F) designed by Friedrich *et al.* (1984), and the Self-esteem subscale of the Interpersonal Support Evaluation List (ISEL) developed by Cohen *et al.* (1985).

The Questionnaire on Resources and Stress (QRS-F) is a 52-item questionnaire specifically designed to measure stress in families with children who are developmentally disabled. Scores are obtained on four separate sub-scales: parent and family problems, parental pessimism, parental perception of the child's characteristics (problems) and

**TABLE I**  
**Mothers' characteristics (n = 44)**

Attributes	Categories	Integrated Group (n = 22)	Non-integrated Group (n = 22)
Mean Age of Mothers	-	29.4 years	28.2 years
Marital Status	Married Separated	22 mothers -	21 mothers 1 mother
Mean Years of Education	-	13.6 years	13.4 years
Mean Years of Parenthood	-	4.6 years	5.1 years
Mean Children's Age	-	40 months	41 months
Level of Child's Retardation	Mild Moderate	17 children 5 children	17 children 5 children

parental perception of the child's physical incapacitation. The KR-20 reliability coefficient of this instrument was .951, a highly acceptable value.

The Self-esteem sub-scale of the Interpersonal Support Evaluation List (ISEL) consists of 10 items concerning the individual's perception of himself/herself compared with others. The Self-esteem validity score was obtained by correlating it with Rosenberg Self-esteem Scale ( $Rho = .74, p < .001$ ). Reported test-retest internal reliabilities were found to range from .62 to .81 (Rimmerman *et al.*, 1990).

## Results

The study predicted that over the four-month period, the mothers of the pre-schoolers in the integrated group

would exhibit more coping resources and higher self-esteem than the mothers of the non-integrated pre-schoolers. At the outset of the study (at baseline), mothers in both groups evinced similar coping resources and self-esteem. This result was established by t-tests, which yielded no significant differences between the groups in any of the Coping Resources measures (on the QRS-F Scale) and Self-esteem. After four months of participation, however, the t-tests indicated that mothers of the integrated pre-school group expressed significantly more coping resources and self-esteem than the non-integrated group.

This striking finding was obtained through analysis of the direction of score change for both groups. Bearing in mind that "favourable" refers to changes on the Questionnaire of Resources and

Stress (QRS-F) and Self-esteem in the hypothesized direction, apparently the integrated group scores changed in the predicted direction on all measures, whereas the same hypothesized change occurred for only three out of five variables in the non-integrated group. Sign tests were used to analyze the data. They showed that the number of favourable change scores was highly significant for the integrated group ( $p < .004$ ), but only at the significant level of  $p < .38$  for the comparison group.

In testing the hypothesized direction of change we found that mothers of the integrated group were significantly lower (see TABLE II) on the change score on pessimism and child's charac-

teristics but not on parental perception of family problems and perceptions of child's physical incapacitation. Mothers of children in the integrated pre-school programme had higher self-esteem levels compared to mothers of the non-integrated group.

## Discussion

Mothers whose children with developmental disabilities were exposed to an integrated pre-school programme had positive gains in respect to their perception of their child and themselves. They were more optimistic about the child's future and his/her progress and

**TABLE II**  
Parents of integrated and non-integrated pre-schoolers change scores and comparison of changes between integrated and non-integrated

Scale	Hypothesized Direction of Change	Change Score		t-value
		Integrated (n = 22)	Non-Integrated (n = 22)	
QRS-F				
Parents and Family Problems	reduced	.46	.48	.25
Parental Pessimism	reduced	-.62	.13	8.53*
Parental Perception of Child Problems	reduced	-.24	.28	5.74*
Parental Perception of Child's Physical Burden	reduced	-.18	.08	1.16*
ISEL				
Self-esteem	increased	.31	-.11	5.78*

DF = 21 for the integrated group; DF = 21 for the comparison group (the non-integrated). Pooled variance estimate is used to report t-value.

\* one-tailed probability  $p < .001$

their own self-esteem in comparison to mothers whose children participated in a non-integrated programme.

A possible explanation is the hope the parents derive from the contact they have with parents of non-disabled children and their functioning in a non-stigmatized setting (Rimmerman, 1983). As these parents become more optimistic they can see some positive characteristics in their children and in themselves which produces positive change in self-esteem.

However, further investigation is necessary to determine why parents of the integrated group of pre-schoolers do not evince any positive gains in respect to the two resources: parental and family problems and parental perception of the child's physical incapacitation. It is quite possible that parental involvement and contact with parents of non-handicapped children within the integrated setting, are not associated necessarily with solving family problems or the burden of care (Meltzer, 1978). The assumption is that such problems are linked to the family life cycle irrespective of the child's pre-school programme (Rimmerman *et al.*, 1990).

The research suggests that the parent's placement of their children in an integrated pre-school programme was an expression of hope toward their children and themselves. However, parents still had fewer coping resources regarding their caregiving role and the daily burden of care. It is advisable to provide these parents with family support services that may maintain their involvement in the integrated pre-school programme (Rimmerman *et al.*, 1990).

A common explanation for parental application to a non-integrated pre-school programme is the lack of their awareness about their child's special integration needs (Rimmerman, 1991). Besides the recommendation for family support services these parents can benefit from information given prior to the registration to pre-school programmes. Such information may include explanation about mainstreaming, advice about integrated and non-integrated pre-school programmes, and brief counselling regarding parental placement decision.

Future research on the impact of mainstreaming on parental coping resources and self-esteem may address several issues: (a) what is the relationship between parental commitment to normalization (and social integration) of their children with developmental disabilities and their coping resources (Rimmerman *et al.*, 1990); (b) do parents derive any social or psychological benefit from interacting with the parents of the non-handicapped pre-schoolers; (c) what kind of involvement activities in pre-school programmes for the child with developmental disabilities are the most beneficial in the long run.

## Summary

An explorative study was undertaken to investigate and systematically compare the effects of two types of pre-school, integrated and non-integrated, on mothers' coping resources and self-esteem. Mothers whose children with developmental disabilities were

enrolled in integrated pre-school programmes, evinced significant positive changes in pessimism, maternal perception of their child's characteristics, and self-esteem, in comparison to mothers whose children participated in non-integrated pre-school programmes. Findings are interpreted in relation to practice.

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