Out Of School Intervention Program To Offset Academic Difficulties and Prevent Early School Dropouts

Tirussew Teferra

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This study addresses issues surrounding grade one children with the lowest academic performance (repeaters). Four different groups (62 females and 41 males) of grade one children were selected from four academic years (1993-1997). The subjects were exposed to an intervention program known as More Intelligent and Sensitive Child (Klein et al., 1996). The treatment was to help children develop the necessary basic skills for learning and regain self-confidence in their capacity to learn and reduce the scale of repetition and school dropouts. A post intervention trend analysis of the academic performance of the subjects across the groups revealed notable academic gains (average score of  $\geq$  50%) by 76.69% of the subjects. Furthermore, the children who passed through the program demonstrated discernible changes in building up self-confidence and responsiveness.

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L. Contractor	Grade 1			Grade 2	1.1	Grade 3			
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Promotion	0.5506	0.5118	0.5369	0.8612	0.8306	0.8504	0.9165	0.8875	0.9056
Repetition	0.1634	0.2042	0.1779	0.0747	0.0992	0.0834	0.0522	0.0669	0.0577
Drop-out	0.2860	0.2839	0.2853	0.0640	0.0702	0.0662	0.0312	0.0456	0.067

### Table 1: Flow Rates in the First Three Years of Primary School

Source: MOE, 1997.

What is more, primary school enrolment in the country is low and goes down to 34.6% (MOE, 1997). The statistical report of the Ministry of Education for four consecutive years (1992/93, 1993/4, 1994/95, 1995/96) depicts the progress of the primary school participation rate in the following order: 19.7%, 22.8%, 29% and 34. 6% respectively (MOE, 1995, 1996; and 1997).

In spite of the low enrolment rate, the educational system is not able to retain a good number of children in the course of their primary education. The reasons behind this enormous wastage in early school years are not empirically well documented. However, studies in general indicate that children of the rural poor, unlike most upper and middle income children have responsibilities beyond doing well in school. They have errands to run animals to tend, and siblings to look after (Simmons's study (1980) (as cited in Ayalew, 1997). It can also be argued that absence of sound early childhood home and educational experience have to a greater extent contributed to the high repetition and drop-out rates in the primary schools, particularly for the urban poor. Whatever the case may be, the educational system should explore different enabling strategies, which can increase its retention power.

One of the most typical of all human traits is the capacity to be modified as a result of new learning. This capacity is characteristic of human beings through out the entire life cycle (Feuerstein, 1979,1980). Even adults or old people change following various life experiences. Yet, in early years of development children are most susceptible to environmental effects. They learn several generalized expectations that have the potential of affecting most of their later experiences.

Although it is possible to affect children's behavior even at a later stage, it is probably more pleasant, easier, and more economical in terms of time and effort to begin early in life, to prevent difficulties rather than engage in correcting them (Hegarty, 1994; Klein et al., 1996). The brain's ability to adapt with experience confirms that early stimulation sets the stage for how children will continue to learn and interact with others throughout life (Newberger, 1997).

Studies have shown a clear connection between the quality of parent-child togetherness and social-intellectual development. It is not only that but also the development of perception of meaning in the form of concepts, language and thoughts and understanding of the world around, the ability to analyze and solve problems, the perception and communication of experiences with relation to other people. There is also a clear connection between a child's ability to settle in a school and the school results, and the quality of the time he has spent together with his/her parents (Rye, 1997). The holistic development of children requires environments in which children feel secure, are stimulated, and have opportunities to explore, to question, to experiment, to play and to symbolize. If young children's psychosocial needs are neglected, the consequence may be an increasing number of children, youth and adults who cannot effectively participate in the socioeconomic development of society or who feel no need for it. This, among other things, may mean an increase in school repetition and dropout, poorly educated and unmotivated workforce as well as the escalation of delinquency and antisocial behavior (Hundeide, 1991; Bernard van Leer Foundation, 1994). Vygotsky's study (1978,1990) (as cited in Anastasiow & Nucci, 1994) a cognitive theorist gave particular social-cultural dimension or early emphasis to the development. The child matures as the brain matures, and through learning the child's skills gradually increase in complexity. While maturation plays a role this process does not occur in a social vacuum (Anastasiow & Nucci, 1994) The basic techniques that a sensitive care-giver uses to facilitate development responsiveness, vocalization are and

verbalization, non-punitive and non-responsive physical stimulation, psychological warmth and encouragement as Werner & Smith (1992) (cited in Anastasiow & Nucci, 1994) .As the infant becomes mobile, the caregiver provides a safe environment within which the child can explore and manipulate and play.

Interaction, in the social sense, is the exchange of actions between two people. On the other hand transactions occur when, in these interactions, one person influences the other who in turn influences the first person. This transactional perspective more accurately describes the process of encouraging development Sameroff & Fiese (1990 as cited in Anastasiow & Nucci, 1994). Psychological theories of affect do also emphasize the importance of transactions between brain development as affective system and the environment in which the infant develops a sense of self, as well as feelings of autonomy and competence (Emde as cited in Anastasiow and Nucci, 1994).

The mediating learning experience (MLE) theory (Feuerstein ,1979; Feuerstein ,Klein & Tannenbaum, 1980) which argues that when parents and others who understand a child's needs, interests, and capacities take an active role in making components of child's environment compatible with the child's current level of understanding , and in connecting current experiences to the past and the future, their mediation increases the child's capacity to learn from new experiences. The theory is basically understood as a bimodal perspective of cognitive development where both the direct exposure of the individual to stimuli as posited in the Piagetian theory of cognitive development, and the mediated learning experiences should coexist to ensure cognitive modifiability and flexibility of mind (Teka, 1998).

The More Intelligent and Sensitive Child (MISC) is the first empirical attempt to define, assess and modify those parent or caregiver behavior variables that constitute the necessary and sufficient conditions for a quality of parent- child interaction.

This intervention program is designed to affect children's "appetites" for such experiences as precise and clear perceptions, finding links and associations between things, planning, evaluating and reality testing (Klein, Williams & Fromberg, 1987). The intervention program was further enriched by pronouncing the need for embracing the affective component in the course of the mediational experience (Hundeide, 1989). Klein (1992) has identified basic elements that constitute a quality mediational transaction between a caregiver and a child of any age. She has empirically singled out and defined how to practically exercise the MISC program at home, institution or any setting wherever there is adult-child interaction. These elements compose the type of intervention used in this empirical investigation.

The basic assumption is that most school repeaters are children who come to school without cognitive and emotional maturity and who lack basic psychosocial and cognitive skills that are essential for the acquisition of literacy and interpersonal skills. Furthermore, as academically low achievers who may have come from unfavourable school and home environment, might have induced low self-esteem due to their academic performances in the respective subjects. With this assumption, promoting the quality of interaction through the use of the MISC program was considered instrumental for overcoming the learning and behavioural problems. The intention of the intervention program was to enable this group of children to regain self-confidence in their capacity to learn and build up preliterate skills in order to catch up schooling.

# Method

# Participants

The subjects of the study were first grade repeaters who indeed were among the high academic risk children who could be "potential early school dropouts". Their academic status was among the lowest 5% who were identified as the least achievers in their class. According to the roster in the school's record office of "Kechene Debre Selam" Primary School.

where this study was conducted, revealed that the subjects' average academic performance was less than 35%. Four groups were drawn from each academic year beginning from 1993/94 to 1996/1997. The treatment design was a baseline phase, followed by treatment phase and a comparison of the academic performances of the subjects in the two phases were compared. A qualitative approach was also employed to illuminate pattern of behavioural changes observed in the two phases.

## Materials

The program is primarily concerned with affecting children's need systems and creating dispositions that are essential for future learning that is, to focus on things; to seek meaning; to inquire about and associate the past, present, and future experiences; to seek success or approval; to evaluate one's own actions; and to plan before doing (Klein et al., 1996). The components used by the mediators in the course intervention include:

- Focusing (Intentionality and Reciprocity): the mediator should assure that the children focus on something she wishes to share and at the same time follow the feeling and initiation of the children. The mediator as far as possible need employ techniques to employ all modes of perceptual modalities.
- Mediation Of Meaning (Expressing Affect): relates to verbal or non-verbal emotional energy invested by the mediator during interaction with the children, and in attempt to excite
- children and convey the significance of the objects, people, relations, and environmental events.
- Transcendence (going beyond the immediate): the mediator should expand the child's understanding beyond the immediate environment, that is, awareness of the relationships between the different environmental phenomena, such as cause and effect; past, present and future; compare and contrast; and the necessary explanations.

- Mediating Feeling Of Competence (Rewarding): Mediators' verbal or non-verbal expression of satisfaction with children's behavior and explaining why they are satisfied.
- Regulation Of Behaviour (Reflexive thought) the mediators' attempt to help the children to plan or think before acting.

The elements of the MISC were integrated with the teaching of reading and writing in Amharic English and numeracy skills during the intervention period. Furthermore, a monthly meeting for a duration of 1-2 hours was held with the children's parents, mainly with mothers, to discuss and raise their awareness about the importance of mother-child or adult-child interaction for mediating their experience. They were also given the necessary basic training in the MISC program so that they can start practising it with their children at home and complement the intervention program.

## Procedure

**Mediators** - The intervention was carried out by two female mediators form the local community who had been given training and had practical experience in the implementation of the MISC program at a family level.

**Supervisor** - The investigator of the study who had made the detail plan of the intervention activities, type of sessions and time frame made the necessary supervision and follow-up to ensure the proper implementation of the intervention. Further more, several consultations with the mediators were conducted whenever the need arises.

**Subjects** - The number of the participants in one batch ranged from 16-21 depending on the number of repeaters. They were drawn from the school record office on the basis of their academic performance from 1993/94 to 1996/97 academic years. The academic performances of the students following the intervention program were recorded from the subsequent years. The first group was drawn from 1993/9 academic year. The second group was taken in the following

academic year, the third and the fourth groups in 1995/96 and their scores were analysed together, and groups five and six were screened in 1996/97 academic calendar and their performances were pooled together for analysis. This was done for the fact that they were taken in the same academic year.

**The treatment** - (MISC program) was conducted in 5 sessions per week with a minimum of 3 contact hours per day for three months. In this pilot project, there were four groups of children concurrently attending both the intervention program and their regular classes. The school was operating in two shift systems; that is, students were assigned either to the morning session or to the afternoon session. The intervention was conducted during their free session without interrupting their regular schedule.

**Mothers** - The mother's of the subjects of the study participated in the intervention program. Three designs were employed to train mothers in the MISC program. These involved individual meeting (home visit), group meeting and general meeting. The individual meeting was held with each parent at home the group meeting consisted of 5 to 7 mothers in the neighbourhood and the general meeting involved every body and was held in the school premise. The respective meetings had sessions ranging from 2-3 hours and were held every month for three months. Demonstrations, discussions and role-play were the main approaches used to train mothers.

# The Data

### Demographics

As shown in Table 2, female children constituted the substantial number of the subjects indicating that they are the most vulnerable for repetition and dropping-out from their education in the early years of schooling.

Sex				Group	S		
	1	2	3	4	5	6	Total
Male	10	9	11	6		5	41
Female	6	11	8	9	17	11	62
Total	16	20	19	15	17	16	103

# Table 2: Sex Distribution by Group

The age of the subjects ranged from 7 to 12, which indicates the existence of variation on the age of entering primary school. However, the vast majority (75%) started school at the age of seven. The parents were asked about the early childhood educational background experiences of their children. Results obtained from the responses of the sixty four parents (80%) revealed that their children had attended church education; five (6.25%) parents reported that their children had attended kindergarten, and eleven (13.75%) said that their children had no preschool education.

## **Distinct Characteristics Observed**

At the inception of the program, the mediators (persons trained for implementing the MISC program) were informed to closely observe and register any behavioral, emotional, sensory and physical oddities that were shown up by the children. One can assume that these phenomena being undetected by teachers might have adversely affected the academic performance of the subjects in one way or another. Table 3 highlights some of the conspicuous features observed.

Disorders	Number	Specific Behavioral Difficulties
Hearing	2	Unable to fully grasp what was discussed in class
Vision	4	Should sit near the chalkboard, hardly read black print
Motor	1	Right limbs paralyzed, difficulty in sitting and balance
Emotion	5	Impulsive, restless, misdemeanors and cannot concentrate
Motivation	1	Apathetic for learning, prefers playing
Social	1	Shy and silent, socially aloof, avoided any social contact
Mental	3	Displayed chronic headaches, often off from school

## Demographics

Data collected through questionnaire from the parents of the subjects regarding their bio-data are presented in the following section. Table 4 discloses that the educational levels of the parents were generally found to be below the upper limit of elementary school. As shown in Table 4, a gender perspective inspection on the educational pattern of the parents reveals that the males are better than the females.

Educational level	Nur	nber	Perc	cent	Total		
	Mother	Father	Mother	Father	No.	%	
No Education	17	5	16.5	4.8	22	21.3	
Church/Adult Educ.	30	29.	29.1	28.1	59	28.6	
1-6 Grades	36	35	23.3	29.1	64	34.0	
7-8 Grades	11	16	10.6	15.3	27	13.1	
9 - 12 Grades	5	15	4.8	14.5	20	14.9	
Above Grade 12	and and	1	1	.9	1	0.9	
No Response	4	2	3.8	1.94	6	5.8	
Total	103	103	100	100	206	100	

Tak	ole 4	4: Highest	Educational	Levels	Completed b	y Parents
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Examining the monthly income of the parents was anothely interest of this study. As it is indicated in Table 5, most of then I are living at a subsistence level with a monthly income of less than or equal to 100.00 Birr (1 USD≈ 7.26 Birr).

Income per month (1USD≈7.26)	Number	Percent
Below 50.00 Birr	26	25.24
51.00 - 100.00 Birr	36	34.95
101.00 - 150.00 Birr	15	14.75
151.00 - 200.00 Birr	8	7.76
Above 200.00 Birr	5	4.85
Not willing to report	13	12.62
Total	103	100.00

#### Table 5: Monthly Income of the Parents

Furthermore, the occupational profile of the parents indicated that 85% of the mothers were found to be housewives, and 12.50% were engaged in "low status occupations" such as pottery, daily labor, spinning, and the like. On the other hand, 75% reported that they were engaged in weaving, guarding, daily labor, and so forth. Only 22.5% fathers had middle status occupations such as health assistants, drivers, postmen, mechanics, etc. It can be observed that the amount of monthly income, occupational status as well as the educational level of the parents is more or less similar.

The data on the number of children in each family indicat that there were almost six (5.96) children, on the average, with a standard deviation of 2.66. It was found out that 81.25% (65 parents) had at least 6 children. As per their reporte, on the average, those children who were involved in this study were the fourth ( $\bar{X} = 4.30$ , and standard deviation = 2.48) born among their siblings. It is assumed that as the size of the family increases, the necessary care, affection and follow-up required for each child might decline and also carries the risk of aggravating the economic hardships of the family.

# Results

To obtain basic data on Parental Conceptions and State of Children's development, they were asked if they had ever told their children any stories (or tales). Twenty six (45%) parents said "yes," and the remaining, i.e., 44 (55%) responded "no." In connection to this, they were asked "at what age level do you think it is appropriate to start telling stories to children?" The great majority (75 or 93.75%) of them considered the age of 3 years as appropriate time to begin telling stories to children, while 4 (5%) of them took the age of 2 years, and one (1.25%) parent said the time that could be most appropriate is one.

Following this, parents were asked questions that reflect their conceptions of children's motor and cognitive development. The first question was "Do you think that effort exerted to help the child to sit, walk, and speak could facilitate (or enhance) his/her development?" As a group, they responded that providing help to the child could have average effect (X = 3.09, and SD = 0.64) on his/her development. If this obtained mean differed significantly from the expected mean ( $\overline{X} = 3.00$ ), a t-test was employed. A significant result was not obtained (t = 1.26, p>0.05, df = 79, t critical = 1.99).

Another question presented to the mothers was "To what extent do you think that it is possible to improve the child's cognitive capacities?" They, as a group, maintained that it is possible to improve children's cognitive capacities but to a certain extent ( $\bar{X} = 3.06$ , SD = 0.86). The obtained t- statistic used to test if the value procured from the parents' responses, i.e.,  $\bar{X} = 3.06$ , differed significantly from the expected mean ( $\bar{X} = 3.00$ ) discerned no significant variation (t = 0.62, p>0.05). This showed that parental help and encouragement, as the parents conceived it, has average effect on the child's cognitive, intellectual, and motor development.

The parents have also been asked to provide reasons that accounted for the academic failures of their children. Many of the parents (55 of them or 68.75%) attributed the causes of

failures to the children themselves. The reasons most notably provided were lack of concern for education, low academic ability, not studying hard and low ability to memorize what has been learned. Very few believed that children's engagement in household errands were the causes for their low academic performance. That is, very little is attributed to the environmental factors as a possible cause for school failure.

# **Condition of Children's Schooling**

Parents were asked to give some information about their children's experiences after they had enrolled in elementary school. The first question was if children were often absent from school. Twenty two (27.5%) of them responded affirmatively, and 58(72.5%) reported that their children were not absent from the school in the academic year in which they were asked.

Those parents who said that their children were absent for some time gave the following reasons: health problem of the child (50% of the parents), requiring the child to do household errands and other activities (20%), inability to cover school expenses (23%), unwillingness of the child to go to school (2%), familial problems (3%) and unspecified (2%).

The parents were also asked if their children had ever been physically punished by their teachers. Forty-five (56.25%) said "yes," 34 (42.20%) said, "no" and 1(1.25%) parent did not give any response. A good number (70) (87.5%) of the parents themselves reported they used corporal punishment at home to correct misconduct and to discipline children.

Further more, a question that was posed to parents was, "Have you ever been called to the school because of the low academic performance of your child?" 52(65%) said "yes," and 28(35%) said "no." The authorities who called on the parents were homeroom teachers (51 of them or 98.08%) and an assistant director (1 parent or 1.92%). On their meeting, the parents were advised that since their children were

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academically poor (43 or 82.69% of the parents) they should provide their children with help and encourage them to study. Two parents were notified that their children were difficult and misdemeanors who could not interact smoothly with their peer groups in playing games and other social activities. They were advised to help their children to improve (or modify) their conduct. There were also parents who were advised to send their children to school regularly. In line with this, the parents were asked what they felt when they heard or discovered their children's failure. Except 18(22.5%) parents who did not give any response, almost all other respondents (62 of them or 77.5%) revealed similar reactions. They felt anger, resentment, and disappointment.

Lastly, a question was posed about the out-of-school activities of the children. They reported that mainly playing took much of their time. However, some parents stated that their children helped them in accomplishing household chores and other income generating activities. They served their parents as errands, herders, spinners, and in fetching firewood as well as in looking after their young siblings.

**Post Intervention Findings:** Trend Analysis of Academic Performance of the Children.

Results collected from four groups of children taken consecutively for the last 4 years (from 1991/92 to 1995/96) were analyzed in the following section.

As shown in Figure 1, all the four groups have shown notable gains in their academic performances. It portrayed that a good number of the subjects performed higher than 50% which was generally accepted as a passing criterion by the Ministry of Education. The results they had prior to the intervention program (baseline phase) were much lower (ranging from 35% to 25%) than the specified criterion and which was the cause for their repetition. Apparently, the academic improvement observed after the treatment phase in most of the four groups could be by in large attributed to the intervention program.



The group attainments depicted were further distributed and analyzed to unravel individual performances (see Table 6). An inspection of Table 6 portrays that among the subjects, while a substantial number (76.69%) successfully completed their studies, very few (3.88%) repeated and 19.4 2% dropped-out. Again it seems possible to conclude that the intervention program has helped a good number of children to raise their motivation and develop their learning competencies to pursue their education.

Group	Intact group	Passed		Rep	eated	Dropped -out		
ALL STREET	No.	No.	%	No.	%	N	0. %	
One	16	7	43.75	7	43.75	2	12.50	
Two	20	15	75.00	3	15.00	2	10.00	
Three	19	13	68.42	6	31.57	- 5.00	- 30	
Four	15	13	86.66	.2	13.33	-		
Five + Six	33	31	93.90	2	6.06	-	went a fi	
Total	103	79	76.69	20	19.42	4	3.88	

Table 6: Students' Academic Status after the Intervention Program

On the other hand, those who dropped-out as well as those who did not show any progress after the intervention might have been affected by other factors which were beyond the scope of the intervention program. Among the possible factors personal, familial, environmental and economic conditions may operate against the educational adjustment. The parents highlighted the following as some of the causes transfers to other schools, economic hardships of the parents to support the education of the children, health problems and the like. Whatever the case it may be, the MISC program, which is made easy to comprehend and light to implement, had proved to be considerably useful for most subjects.

A comparative of study of the students' average passing criterion pre- and post assessment result also revealed considerable academic gains by most of the subjects after the intervention program (Table 7).

Group	Academic Year	No. of Students	2	50%	<	50%*	D	ropout
One	1993/94	16	12	(75%)	3	(19%)	1	(6%)
	1994/95	12	9	(75%)	2	(17%)	1	(8%)
	1995/96	9	8	(89%)	1	(11%)		-
	1996/97	8	7	(88%)	1	(13%)		-
Two	1994/95	20	17	(85%)	2	(10%)	1	(5%)
	1995/96	17 .	15	(88%)	1	(6%)	1	(6%)
	1996/97	15	-15	(100%)		1		-
Three + Four	1995/96	34	30	(88%)	5	(15%)		-
	1996/97	30	27	(90%)	.3	(10%)		-
Five + Six	1996/97	33	31	(94%)	2	(6.%)		-

Table 7: Comparison of Students<sup>1</sup> Performances with the Average Passing Criterion (≥ 50%) after the Intervention Program

Last but not least, the mothers who participated in the intervention program demonstrated a change on their perception and understanding of a child as well as their role in influencing the child's development. This was clearly observed in the interest and motivation of the parents: to listen to the child, to talk to the child, play to the child, to share affection with the child, to explain to the child and to regulate child's behavior. As a result, the extent and intensity of mother-child

interaction at home has remarkably increased complementing the mediator-child interaction session at school.

# **Concluding Remarks**

It was found that most subjects came from low educational background and low-income families. Further more, these children did not come to school with interactive skills and socioemotional sensitivity and lacked the basic skills that are essential for the acquisition of literacy skills. What is more, among these children, 16.5 % were found to have some type of sensory, behavioural, cognitive and motor impairments. These are confounded factors, which might have contributed to the low academic achievements of the subjects. In order to offset these multiple impediments, that is, personal and environmental factors operating against the educational adjustment of children, early intervention program is not only necessary but also indispensable. The term early intervention has been broadly used to describe efforts designed to prevent or ameliorate developmental or behavioural problems resulting from environmental or biological influences or the combination of the two (Dunst, Snyder & Mankinen, 1985). In this context; early intervention is considered as a set of actions that have the intent or effect of altering the course of, coming between, or interrupting future activities or process. That is, any effort or program geared towards empowering children and parents through building up their competencies, and fostering sensitive and interactive emotional climate is an aspect of early intervention program (Haggerty, Sherrod, Gramezy & Rutter, 1996). New brain development research has revealed that particularly during the first three years of life, brain connections develop quickly in response to outside stimulation. Thus, when we snuggle a baby or talk to him in a singsong, undulating rhythm, we are contributing to the growth of his brain (Newberger, 1997). The inability to develop a set of protective resources early in life not only produces early dysfunction, but additionally provides the basis for both enhanced lifetime exposure to stress, vulnerability and dysfunction (Haggerty et al. ,1996). .

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A large body of research has been conducted to investigate the effectiveness of early psychosocial interventions. Some were done on preschoolers others were conducted on school age children. Different compensatory educational programs have been initiated to overcome some cognitive deficiencies of those children who have been found with certain learning difficulties or who have no chance of actualizing their potentials either due to environmental impoverishment or other factors. As Hetherington and Park (1986) summarized findings of different researches, it was pointed out that researchers set various strategies to those children who need such cognitive intervention programs. Some of them were preventive and were aimed at preventing declines in school performances of the children, and others were remedial which tried to "reconstruct" the cognitive capacities of children who already screened as academically poor. In addition, other programs emphasized the teaching of specific skills effective in uplifting the academic performances of the students. And still other groups of researchers focused on "the aspects of hot cognition and tried to alter emotions, self-concepts, attributions, and achievement motivation."

In general it was indicated that regardless of the nature or the type of those early intervention programs, all were found effective in enhancing the academic performances of children, a: least short- term gains (Hetherington & Parke, 1986). Furthermore, Lazar & Darlington (1982), cited in Hetherington and Parke (1986), conducted longitudinal studies on the effectiveness of early intervention programs and reported longterm effects of the programs. It was found that children who participated in such programs were less likely to dropout of the school and repeat in their classes than those children who had similar background with similar experience. Besides, the children have developed self-efficacy perceptions, and selfconfidence during adolescence and more of them went to colleges (Hetherington & Parke, 1986). Albeit these findings, there are other studies that reveal the importance of family interactions. Reviewing the literature on this issue, Estrada and others (1987) showed that the quality of the interaction of the

child in the family constellation has many influences on the child's school-related cognitive functioning. Goldberg (1977) and Watson (1972), both cited by Estrada and others(1987), posited that when infants start to discover, explore, or manipulate their environment, the parents may provide them support and encouragement. Thus, this early experience of the children would lead to dependency on the parents for social and intellectual stimulation as well as for their physical needs. Generally, "the nature and consequences of these initial transactions depend on the responsiveness of the mother/ caregiver" (Estrada, et al., 1987). Likewise, Hetherington & Parke (1986) have underlined the preponderance of parental involvement in such intervention programs. Similarly Belsky (1981) addressed that studies made done on early parental influences on children's cognitive and affective development reported consistent results.

The MISC program developed by Klein (1989), is part of the theoretical framework of cognitive modifiability (Feurestein, 1979). It is basically, a psychosocial intervention focusing on enhancing the quality of early caregiver-child interaction in particular and the child's transaction with his/her environment in general. The nature of the child's primary relationships with family and friends represents one of the crucial "proximal processes" that underlie what Bronfenbrenner calls the "engines of development" (cited in Haggerty et al., 1996). In course of quality of interaction the child builds up selfconfidence as well as self-efficacy which are the basis for adequate functioning (Bandura, 1982). Unlike other intervention programs that are singular or uni-dimensional focusing on the child only, this intervention program has attempted to promote the quality of the transactions of the subjects with the mothers (parents), mediators as well as the peers in the intervention program. In spite of all the thwarting factors (low educational level of parents, low income & personal factors, that is, cognitive, sensory, physical and behavioral impairments), the out of school program has brought a noticeable change on academic achievement of substantial number of the subjects (73.78%). What is more,

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as per the observations of the teachers, mediators, and the reports of the parents' the children who passed through the program showed progress in interactive and communicative skills, responsiveness, inquisition and self-confidence. Studies indicate that there is a link between positive self-esteem. Low self-esteem is often cited as the ultimate source of poor academic achievement and self-destructive behavior (Bowlby, 1992; Dulgokinski & Allen, 1996; Apter, 1997). The intervention program has succeeded to build-up the self-esteem and selfefficacy of the subjects, which were by in large, damaged by the unfavorable school as well as home environment. On the other hand, relatively low wastage (repetition 3.88% and dropout 21.35%) was observed among the subjects. The cause for the repetition and dropout for this group of children may be to a larger extent attributed to the economic hardships encountered by their families. According to the report of the parents, some were called upon to give support for the family either in generating income or taking part in the household errands, others were unable to cover the direct costs of schooling. Furthermore, the adverse effect of the various impairments detected on some of the target groups cannot be ruled out.

It is therefore suggested that MISC can be effectively used as an intervention program for reducing the scale of early school repeaters and dropouts which at present is a major problem not only in Ethiopia but also in sub-Saharan Africa. The discontinuation of school as a result of economic hardships which again seems to be common in most developing countries, need to be addressed by the concerted efforts of the family, the community, the government as well as nongovernmental organizations. Furthermore, the need for introducing early detection, assessment and intervention for sensory, cognitive, behavioral and motor impairments is of utmost importance to curb the escalation of the problems and their subsequent adverse consequences on school achievement as well as in the other spheres of social life.

Lastly, in order to prevent the incidence of repetition (low academic performance) and dropout in the early years of primary education, early childhood education and early family based programs need to expand at a national level and be given the necessary follow-up.

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