

Continuing Effects of Early Intervention in Adult Life

Preliminary Findings of Turkish Early Enrichment Project
Second Follow-Up Study

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• TABLE OF CONTENTS •

Preface	7
History of The Mother Child Education Foundation	9
Introduction	11
The Present Study	13
Method	13
Participants	13
Materials and Procedure	14
Analyses	14
Results	16
Demographic information	16
Academic success	16
School attainment	16
Attending university	17
Reasons for leaving school	18
Vocabulary test performance	19
Socioeconomic success	20
Age of beginning gainful employment	20
Occupational status	21
Monthly household expenditure	22
Social participation	23
Summary and Discussion	25
Conclusions.....	26
References.....	27



• LIST OF TABLES •

Table 1. Design of the Study	13
Table 2. Percentage of Participants Interviewed in the Second Follow-Up	14

• LIST OF FIGURES •

Figure 1. School attainment of those who either had attended an educational child care center and/or whose mothers had training.....	16
Figure 2. School attainment by mother training and pre-school care environment	17
Figure 3. University attendance according to mother training.....	17
Figure 4. University attendance of those who either had attended an educational child care center (ED) and/or whose mothers had training (MT)	18
Figure 5. Reasons for leaving school according to pre-school care environment	19
Figure 6. Vocabulary test performance according to mother training.....	19
Figure 7. Age of beginning gainful employment	20
Figure 8. Age of beginning gainful employment, comparing those who either had attended an educational child care center (ED) and/or whose mothers had training (MT)	21
Figure 9. Occupational status by pre-school care groups	21
Figure 10. Occupational status of those who either had attended an educational child care center (ED) and/or whose mothers had training (MT)	22
Figure 11. Average monthly household expenditure	23
Figure 12. Computer ownership	24
Figure 13. Credit card ownership	24



• PREFACE •

It is now widely accepted that the first years of life are very significant. The environment provided to children, especially during the period from 0 to 6 years of age, has a lifelong impact. This is because brain development is extremely rapid during the early years, and children are ready to learn. Children who are raised in a disadvantaged environment during this time are unprepared when they begin school. It is extremely difficult to compensate for the damage caused by early deprivation at a later time.

These are the reasons why children in all developed countries benefit from preschool education. Yet, in Turkey, 85 of 100 children still do not receive preschool education of any kind. Preschool education is provided only to 15 percent of children, mostly from well-educated families. The inadequacy of preschool education services is apparent when this figure is compared to preschool education rates in developed countries, or even some countries less developed than Turkey.

Looking at the rates of children between the ages of 3 to 5 that have access to early childhood education prior to mandatory schooling, these rates reach 70 percent in Mexico, to which Turkey is often likened in terms of its economy; 34 percent in Morocco; 27 percent in Jordan; at least 50 percent in Western European countries; and close to 100 percent in all of member states of the European Union, which Turkey aspires to join.

In this report we present a three-phase scientific study, entitled the "Early Enrichment Project," which was initiated at the time these issues first came onto the agenda, and was carried out over 22 years. Armed with the awareness that preschool education is a basic human concern, and in search of a viable solution, a scientific study was carried out beginning in 1982 that aimed to investigate the impact of early childhood education. In the following years, long-term results were obtained via two separate follow-up studies.

Within the context of the initial study, training was provided to mothers and their 3- to 5-year-old children mainly from shantytown areas in Istanbul, and the short term effects of this training were examined. The study was carried out from 1982 to 1986; some of the mothers were provided with mother training that would support the multi-faceted development of their children, and the mothers then educated their own children. These training efforts were later named the "Mother Child Education Program." Within the context of the study, children that attended an educational preschool center were compared to children in custodial daycare or cared for at home. At the end of the fourth year, it was determined that children who had received early childhood education via either mother training or an institutional preschool education model, were more advanced in terms of intellectual development and scholastic achievement in comparison to children that did not receive any form of education.

In 1992, via a follow-up study, the children - who were now adolescents - and their mothers were contacted, and their situations were assessed. It was observed that the positive effects of early childhood education were still



ongoing. For instance, especially the children of the mothers that had attended the training were mostly still in school, and they were found to have a higher level of academic and cognitive achievement.

Finally in 2004, with the aim of assessing the long-term effects of the program, these children who were now adults were located once again, and the second follow-up study was conducted. Findings of the study carried out with these 25 to 27 year old young adults are extremely exciting. It was found, for instance, that children who had benefited from either home-based or center-based preschool education continued their schooling for longer, attended university at a higher rate, were employed at higher status jobs, and participated more in modern, social and economic life, when compared to children who had not.

This research study, which documents the very long-term effects of early childhood education, is one of two such studies ever conducted across the world (the other is the Perry Preschool Project conducted in the U.S.). Consequently, its findings are of utmost importance. It reveals that investment made in early education contributes greatly to human capacity or the human capital. The crucial necessity of increasing our extremely inadequate preschool education services in Turkey is made even clearer in the light of these scientific findings. The time has come to take strong and determined steps toward this aim, and initiate a preschool education campaign, saying, "7 is Too Late."

To reverse the dismal situation in Turkey regarding preschool education and ensure all children in the country benefit from preschool education services, ACEV, in collaboration with its partners, has initiated a preschool education advocacy campaign with the slogan "7 is Too Late." This present report is also especially important in that it reveals the first steps taken on the path leading to this campaign.



• HISTORY OF THE MOTHER CHILD EDUCATION PROGRAM •

The **Mother Child Education Program (MOCEP)** is a brilliant example of social transformation that resulted from a research study a group of academicians conducted in 1982, with low-income and low-education level families in Istanbul. The study, which began as the **Turkish Early Enrichment Project**, later served as the model to an education program that was implemented in a limited context, at workplaces and in neighborhoods in Istanbul with the support of various institutions. In 1991, with the support of the Finans Foundation, the project began to expand, and due to the need for a different structure following the decision to collaborate with the Ministry of National Education (MEB), the **Mother Child Education Foundation (ACEV)** was founded in 1993, with a mission to expand the program all across Turkey.

While the Mother Child Education Program was implemented only in Istanbul and Ankara during the time the foundation was being established, in 1995, as a result of the funds provided to the MEB by the World Bank, it was spread across Turkey. Until the present, and in collaboration with the Apprenticeship and Non-Formal Education General Directorate and the Social Services and Child Protection Agency, the program has reached 180,000 individuals; currently, mothers and children in 71 provinces are being offered support in the form of early childhood education.

In recent years, MOCEP has generated interest overseas as well. The program was at first implemented in Holland, Germany, France, and Belgium, as a result of the demand from institutions working with Turkish migrant families living in European countries. As a result of its successful implementation in these countries, the program was translated into Dutch in Holland and Belgium with the aim of reaching various migrant groups such as the Surinamese, Moroccan, and Eastern European populations in addition to Turkish migrant families. As a result of the demand from Bahrain in the year 2002, the program was translated into Arabic, and for the last three years, has been implemented in Bahrain and Jordan.

MOCEP has not only become widespread across Turkey, begun to be implemented abroad, and enabled the transfer of knowledge from Turkey both to the West, and to the East; it has also resulted in the development of various programs under ACEV's roof, geared toward a variety of target populations. The content, approach, and implementations of MOCEP inspired programs such as literacy training for women, father training, the education of mothers with children between the ages of 0 and 3, and education via television ("Will You Play with Me?").

The most striking aspect of the transformation story we have tried to summarize above is, without a doubt, that a scientific research study that was initiated 22 years ago progressed through various phases and enabled the development of one of the most effective non-governmental organizations in Turkey.



• INTRODUCTION •

Long-term longitudinal early intervention research is sparse even in the United States; it is non-existent in developing countries. The present report describes the single research project from a developing country, Turkey, which spans a period of 22 years. The main aspects of the three studies that comprise the longitudinal Turkish Early Enrichment Project (TEEP) are presented here, with more detailed coverage of the most recent study conducted in 2004. Information on the two earlier studies is already available elsewhere (Kagitcibasi, Sunar & Bekman, 2001).

TEEP aimed to examine the effects of the context of development or environment (educational preschool, custodial day care or home care) and a home based intervention program (mother training) on children and mothers. The project was conducted with mothers and children in low-income, low-education areas of Istanbul between 1982 and 1986, and a follow-up study was carried out in 1992. The present report summarizes the results of the second follow-up study of the effects of TEEP, carried out 12 years after the first follow-up and 19 years after the completion of the training program. Together with the original study, then, this is the third study conducted to explore the effects of early enrichment on overall development.

The first study spanned four years. During the first year extensive data gathering was carried out through observations and testing of two cohorts of young children (ages 3 and 5) and in-depth interviews with their mothers. The children spent their days in one of three different environments, an educational day-care, a custodial day-care, or at home. In the second and third years of the study mother training was provided to a randomly selected group of mothers in each of the three environmental groups of children. Reassessments and additional measures of overall development of children (including school records) were conducted in the fourth year of the project when the children had finished one to three years of primary school. This study investigated the separate and combined effects on children of the different environments and the mother training program in the short run.

The second study was a longer-range follow-up conducted 6 years after the completion of the original study (7 years after the mother training intervention). The children were in their early teens at the time, and the study focused mainly on how the project influenced these adolescents' cognitive development, school adjustment and family relations.

This third study, which is the second follow-up to the original study, aims to investigate the project's long term effects on the participants who are now in their mid-twenties and have entered adult life.



Summary of Previous Findings

The results of the first study demonstrated that both types of early education (mother training and educational preschool environment) had significant effects, particularly on cognitive outcomes. The children from educational nursery schools (ED) showed better performance on most of the measures, compared both to those from custodial day care centers (CUST) and to those who were cared for at home, not attending preschool or day care (HOME). At the same time, the mother training group (MT) was superior to the no mother training group (NMT) on most of the measures. Both the HOME group and the NMT group had equally favorable outcomes on many of the measures (See Bekman 1990, 1998; Kagitcibasi, 1991, 1992; Kagitcibasi, Sunar, & Bekman, 1988; Kagitcibasi, Sunar & Bekman 2001).

The findings of the first follow-up suggested that more of the gains from mother training were sustained compared with those from educational day care, specifically in terms of school attainment, school achievement, and academic orientation, as well as in socio-emotional development and social adjustment. This finding can be explained by the fact that the mother training program provided a beneficial change in the mother herself, which was reflected in her relation with her child as well as the general atmosphere of the home, which in turn helped to support the continued development of the child (see Bekman, 2003; Kagitcibasi 1996, 1997; Kagitcibasi, Sunar & Bekman 2001). However, few differences were found among the three pre-school care environmental groups.



• THE PRESENT STUDY •

The present second follow-up, carried out in 2004, aimed to investigate the longer-term effects of the early childhood intervention. The participants who were 3-5 years of age at the beginning of the original intervention were 25-27 years of age at the time of the present investigation. This study focused on the participants' academic attainment, socioeconomic success, family relationships, life satisfaction and social participation and adjustment.

METHOD

Participants:

Of the 217 participants in the first follow-up study, 133 were located and interviewed, for a response rate of 61%. Half of those interviewed were males. 34 of the participants had attended educational preschool centers (ED), 50 had attended custodial day care centers (CUST), and 49 had not received any kind of preschool education (HOME). 47 of the children were from families in which the mother was part of the training program (MT) and 85 were from no mother training families (NMT). The overall distribution of the conditions of the follow-up study was very similar to that of the first follow-up (see Table 1). The percentages of participants from each condition interviewed in the follow-up ranged between 54% - 68% (see Table 2).

Table 1
Design of the Study

	Number of subjects in each group			
	Educational day care	Custodial day care	Home care	Total
Mother training	13 (24)	21 (37)	13 (22)	47 (83)
No mother training	21 (31)	29 (50)	35 (53)	85 (134)
Unknown	-	-	1	1
Total	34 (55)	50 (87)	49 (75)	133 (217)

1st follow-up in parantheses.



Table 2
Percentage of Participants Interviewed in the Second Follow-Up

	% of participants			
	Educational day care	Custodial day care	Home care	Total
Mother training	54	57	59	57
No mother training	68	58	66	63
Total	62	57	65	61

Materials and procedure:

First, the mothers who had participated in the original study were located and interviewed. Children’s contact information was collected from the mothers and those who agreed to participate were interviewed individually. The interview protocol covered topics of demographic information, educational history, occupational status, attitudes toward schooling, education and children rearing, family life, social adjustment and a vocabulary test. Most of the questions were closed ended, having either a Likert-type or similar five-alternative answer format, and a few were open-ended.

Analyses:

In the analysis, long term effects of both the three childcare environments and the training program were investigated and compared. The analyses were conducted using 5 different groupings, categorized as shown below:

1. <u>mother training</u> or non mother training	MT and NMT
2. <u>type</u> of preschool environment	ED, CUST, HOME
3. <u>educational preschool</u> vs. other settings (custodial preschool and home)	ED vs. [CUST or HOME]
4. <u>center based</u> vs. home	[ED or CUST] vs. HOME
5. <u>educational intervention</u> (educational preschool and/ or mother training) vs. <u>no educational intervention</u> (mother training, custodial preschool or home-based training)	EI vs. NEI

The outcome variables were analyzed by one-way ANOVA for each of the groupings. Where applicable, two-way ANOVA was conducted using mother training and preschool environment as the factors to investigate whether the two conditions interacted in their effects. Post-hoc analyses were conducted to further investigate significant main effects and/or interaction effects. First-year IQ and physical conditions at home (measured in the first year of the original study) were co-varied out from analyses of educational attainment and vocabulary, in order to see the net effect of early enrichment without the possible confounding effect of group differences due to sampling. Categorical variables were tested by Chi-Square analysis.



As a check on the equivalence of participants of the follow-up study and those who could not be reached or did not want to participate, t-tests were conducted on the two groups' first year IQ scores, SES levels and whether or not they were still in school at the time of the first follow-up. The comparisons did not yield any significant differences between the groups, suggesting that the participants accurately represented the original sample.



• RESULTS •

Demographic Information

No differences were found among the condition groups in terms of the participants' marital status, age at marriage and age at the birth of the first child.

Academic Success

School attainment:

The participants had attended school for an average of 10.75 years. This indicates that a majority of the participants attended at least high school. At the time of the interview, 35% of the participants were still attending university or had already graduated.

Figure 1 shows that participants who experienced an educational intervention (EI) - that is those who either had attended an educational child care center and/or whose mothers had training - attended school longer than those who had neither (NEI) (mean 11.34 years and 10.13 years, respectively, $F_{(1, 127)} = 3.218$, $p = .07$).

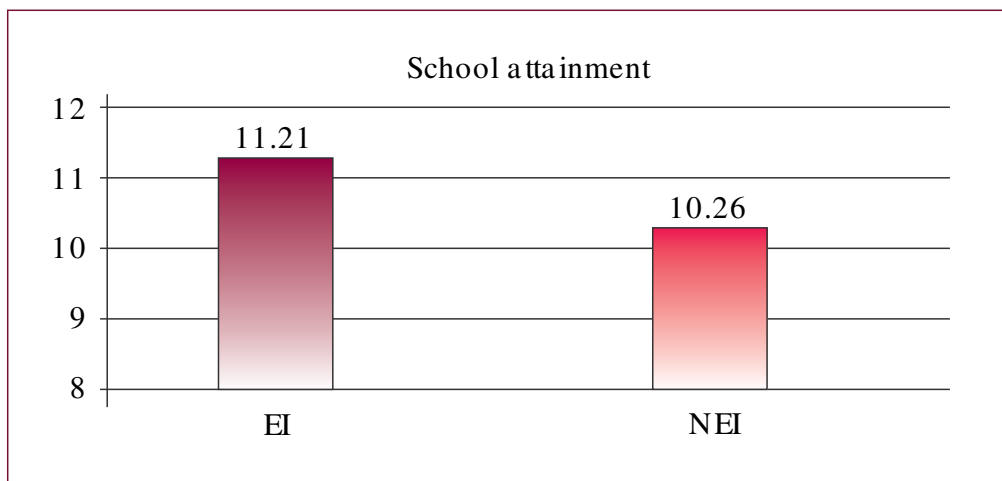


Figure 1. School attainment of those who either had attended an educational childcare center and/ or whose mothers had training, compared to others.

Additionally, as can be seen in Figure 2, mothers' participation in the training program had a greater effect on the schooling of participants who grew up in custodial care centers and home care environments [$F_{(1,125)} = 3.506$, $p = .063$]. This analysis indicates that if the children attended an educational care center, their mother's training did not have an impact on their future school performance. However, for those who attended a custodial care center or were raised at home, their mother's training did have a positive impact. In this group, participants whose mothers were in the training group had almost 1.5 years more schooling than the ones in the no-training groups after adjusting for initial variances due to IQ.

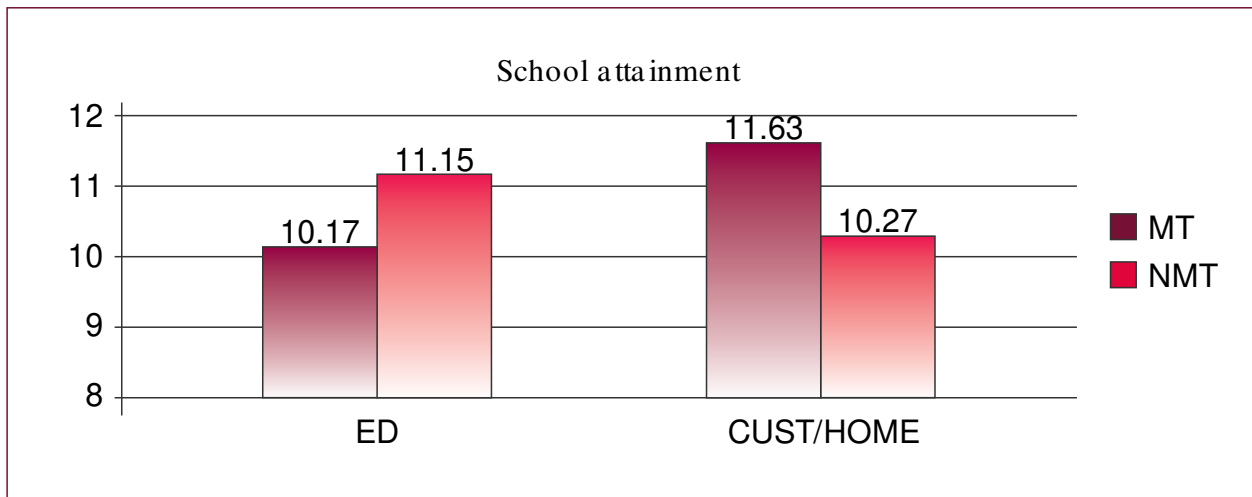


Figure 2. School attainment by mother training and pre-school care environment.

Attending University:

As a second measure of school attainment, groups were compared in terms of the students' university attendance. As shown in Figure 3, a higher percentage in the MT group attended university compared to the NMT group (44.7 % and 30.6 %, respectively, $\chi^2 = 2.62$, $df = 1$, $p = .10$).

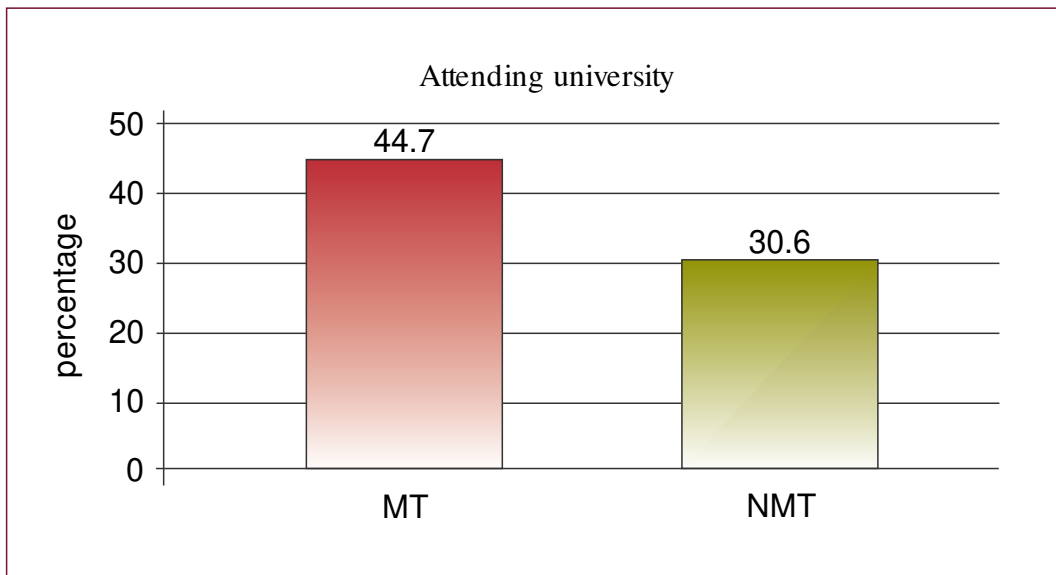


Figure 3. University attendance according to mother training.



Furthermore, when those in the MT group are combined with those who attended an educational care center, it is seen that 44.1% of the participants in the EI group attended university compared to 26.6% of the participants in the NEI group. $\chi^2 = 4.432$, $df = 1$, $p = .03$ (See Figure 4.)

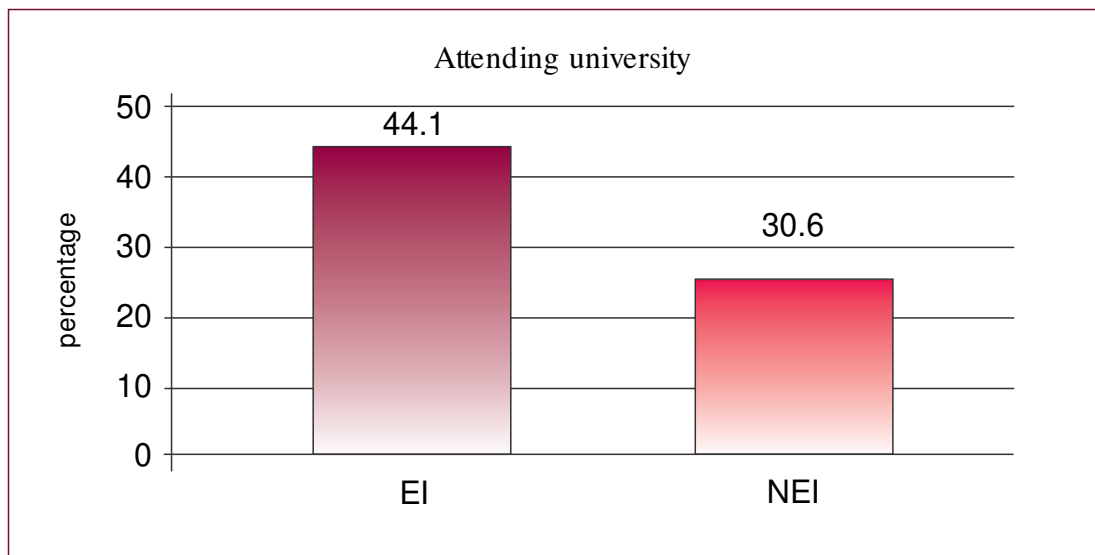


Figure 4. University attendance of those who either had attended an educational child care center and/or whose mothers had training (EI), compared to others (NEI).

Reasons for leaving school:

Participants who had discontinued their education at any point before university graduation were asked why they had left school. The responses fell into two main categories. The first category consisted of reasons beyond the person's control, such as financial limitations or health problems. The second category consisted of reasons having to do with personal preference, such as getting married or not liking school. Participants who had attended any type of preschool care center, whether educational or custodial in aim, were significantly more likely than those from the HOME group to give financial/health reasons, while those from the home group were significantly more likely to give reasons related to personal preference. (See Figure 5.) This indicates that those who attended an educational or a custodial preschool care center would have preferred to continue their education for more years if they had been able to.

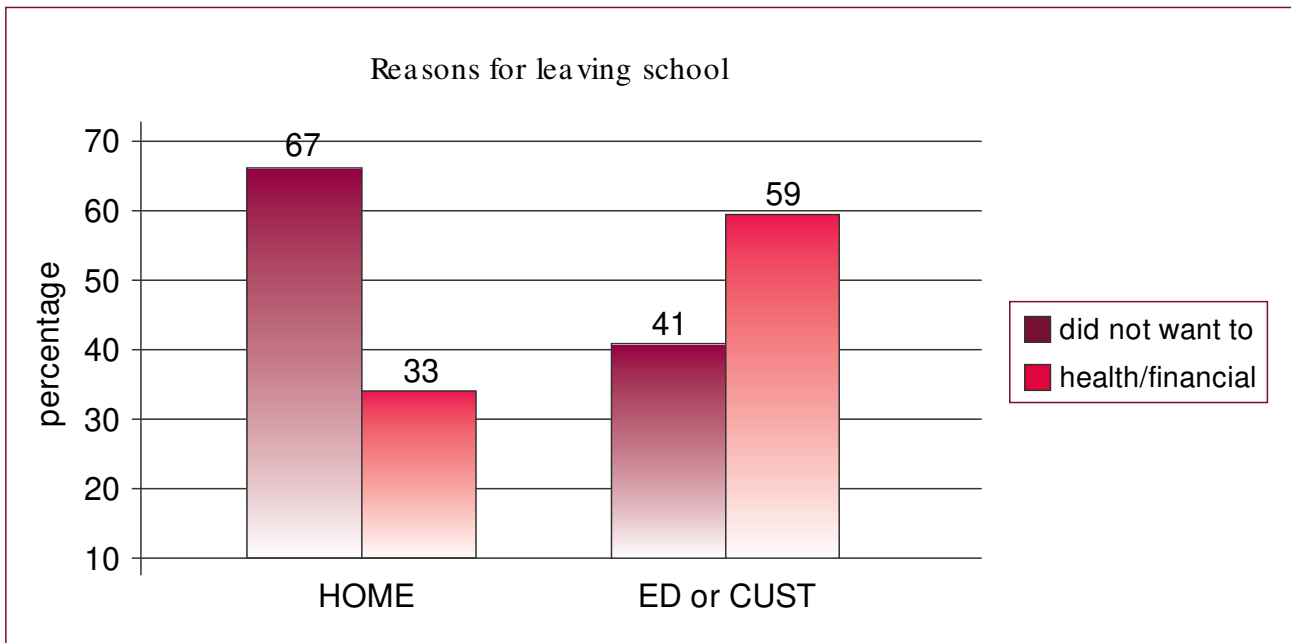


Figure 5. Reasons for leaving school according to pre-school care environment.

Vocabulary test performance

Participants whose mothers had attended the mother training program performed better in the vocabulary test than those whose mothers had not [$F_{(1, 98)} = 3.362, p = .09$] (See Figure 6). This finding suggests that mother training led to a verbally more stimulating environment for the children while they were growing up. Furthermore, it was found that those who had higher vocabulary test scores were more likely to attend school for more years and had jobs with higher occupational status.

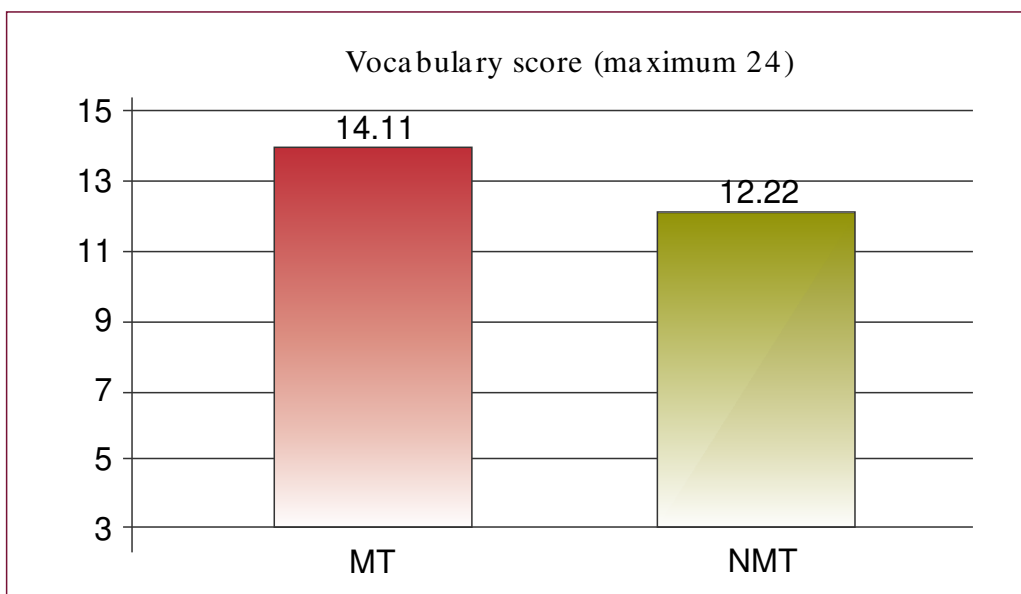


Figure 6. Vocabulary test performance according to mother training.



Socioeconomic Success

Age of beginning gainful employment:

One measure of socioeconomic success of the participants was the age at which they first started working to earn an income. It is important to see whether children from different condition groups started working at an earlier or a later age, since an early start to workforce participation is widely accepted as an indicator of less qualified jobs and lower life time earnings.

Figure 7 shows that both mother training and type of preschool environment made a difference in the age of beginning work. Participants in the MT group started working at a later age (17.58 years) than the NMT group (16.51 years) [$F_{(1,121)} = 2.66, p = .10$]. Likewise, the ED group started working at a later age (17.94 years) than both the CUST (16.84 years) and HOME groups (16.12 years) [$F_{(2,120)} = 2.505, p = .08$]. That is, children whose mothers had training and children who attended educational preschool care centers entered their first job at a later age. This appears to be related to the fact that children from both groups spent more years in school compared to the others. Accordingly, they may, therefore, be expected to have higher lifetime earnings.

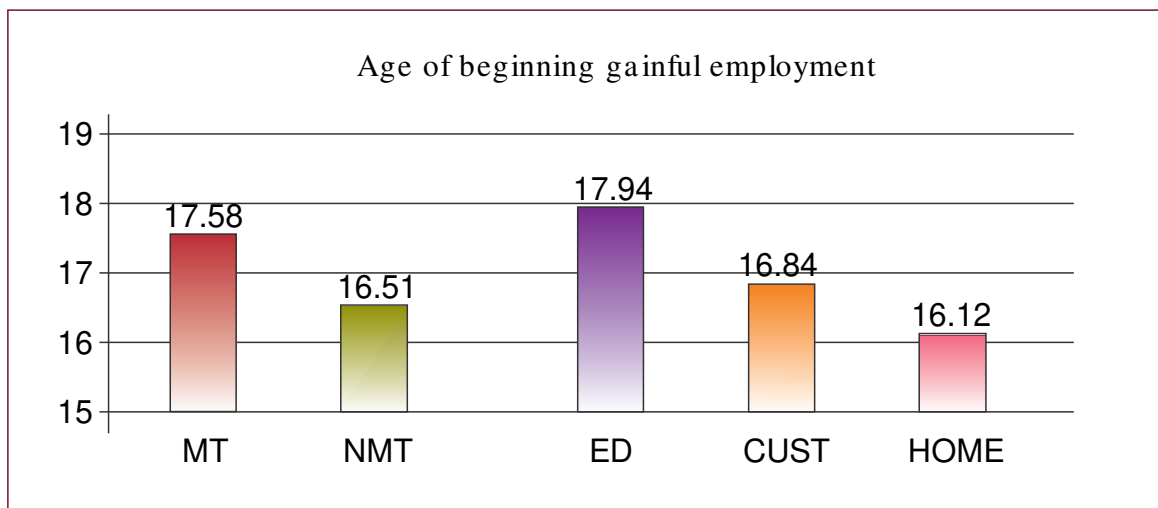


Figure 7. Age of beginning gainful employment.

When the groups who had some form of early education are combined (EI) and compared with those from the NEI groups, as shown in Figure 8, on average, those in the first group started working to earn an income approximately 1.5 years later than those in the other (17.53 years and 16.19 years respectively, [$F_{(1,121)} = 4.708, p = .03$]). Again, this may be regarded as an indicator of a more successful work life in the future, which will be discussed in the next section.

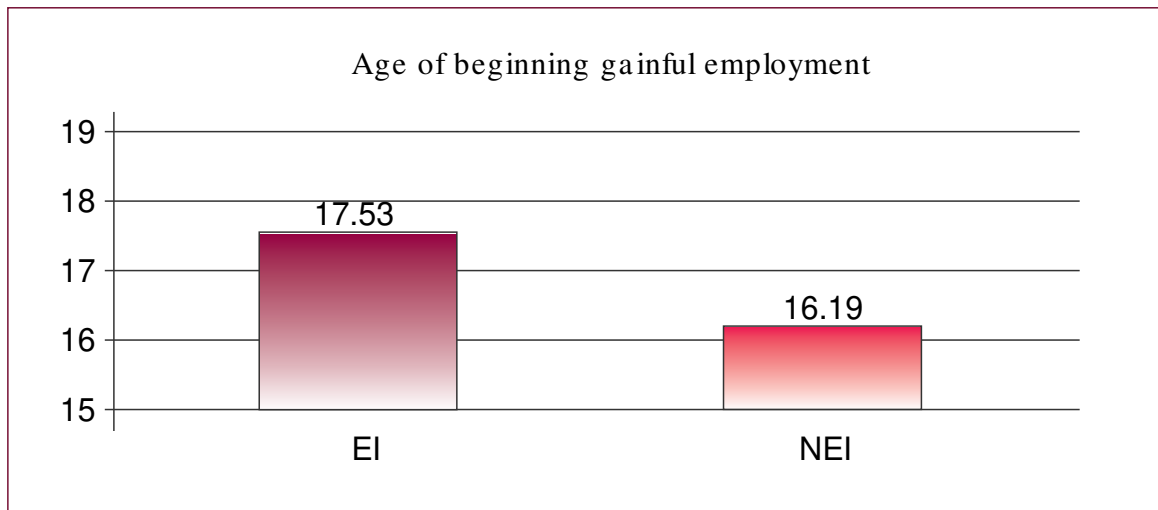


Figure 8. Age of beginning gainful employment, comparing those who either had attended an educational childcare center (ED) and/ or whose mothers had training (MT) with others.

Occupational status:

Participants' current jobs were coded on a scale from 1 (unemployed), 2 (low status) to 7 (high status). A comparison of condition groups indicated that those in the ED group had jobs of higher status than those in the HOME group [$F_{(2,128)} = 4.140, p = .018$] (see Figure 9). This finding was expected since the ED group had the highest years of school attainment (11.15 years) among all three preschool care environment groups (CUST = 10.78 years and HOME = 10.46 years).

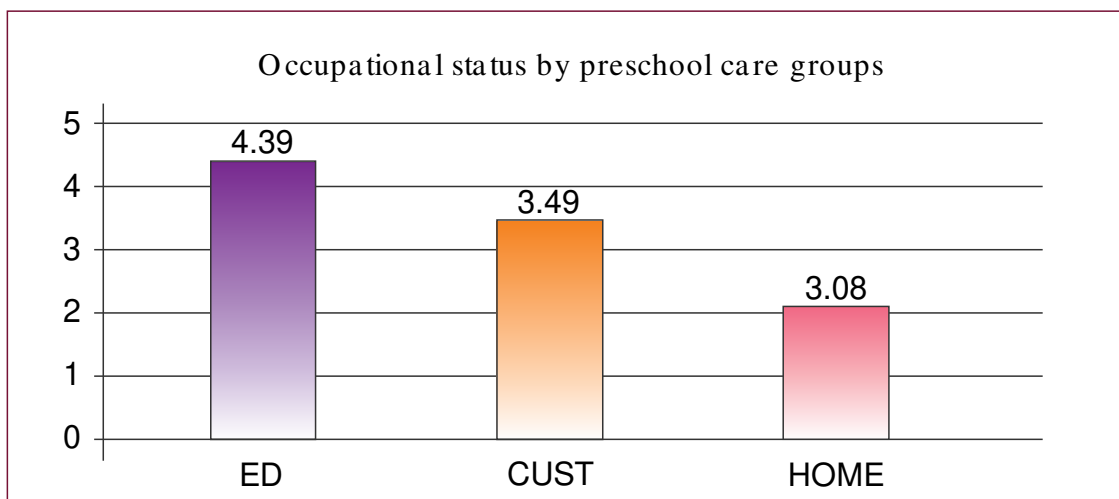


Figure 9. Occupational status by preschool care groups.



As shown in Figure 10, those who either had attended an educational child care center and/or whose mothers had training (EI) on average had jobs of higher status than those who had neither (NEI) [$F_{(1, 128)} = 4.130, p = .044$].

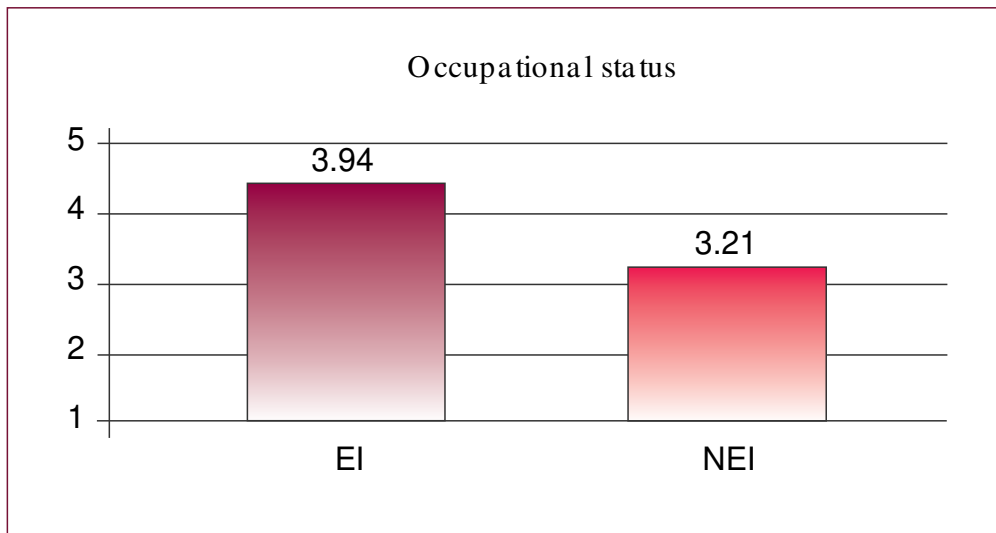


Figure 10. Occupational status of those who either had attended an educational childcare center (ED) and/ or whose mothers had training (MT), compared to others.

This finding confirms the findings reported earlier that children whose mothers did not have any training (NMT) and who attended custodial care centers or were cared for at home (CUST/HOME) had lower school attainment, started working to earn an income at an earlier age, and had jobs of lower quality compared to their peers whose mothers had training (MT) and/or who attended an educational child care center (ED).

Monthly household expenditure:

A final investigation of occupational success of the participants was made by contrasting their monthly household expenditure. We chose to study this variable rather than the participants' reported income because almost all participants reported this value whereas only 48% reported their monthly income.

The median monthly household expenditure of all the participants interviewed was reported as 800,000,000 TL (mean was 820,000,000 TL). The median is the value which divides the whole sample into two equal parts. That is, overall, 50% of the participants' average monthly household expenditure was above 800,000,000 TL and 50% below. The condition groups are compared in terms of the percentage of participants who reported expenditures higher than the overall sample median and those who reported expenditures below the median. Figure 11 summarizes the percentages of participants in each group who reported that their average monthly household expenditure was more than the overall median.

Even though there was not much difference between the MT and NMT groups, among the three preschool care environments, the ED group had the highest percentage of participants with higher monthly expenditure



average (55.9%), followed by the HOME group (49%), and the CUST group (46%). On the other hand, when a comparison is made between children who had attended educational care center (ED) and/or whose mothers had attended training (MT) versus who did not, those in the EI groups had more participants with monthly expenditure higher than the overall median (51.5% and 48.4%, respectively.)

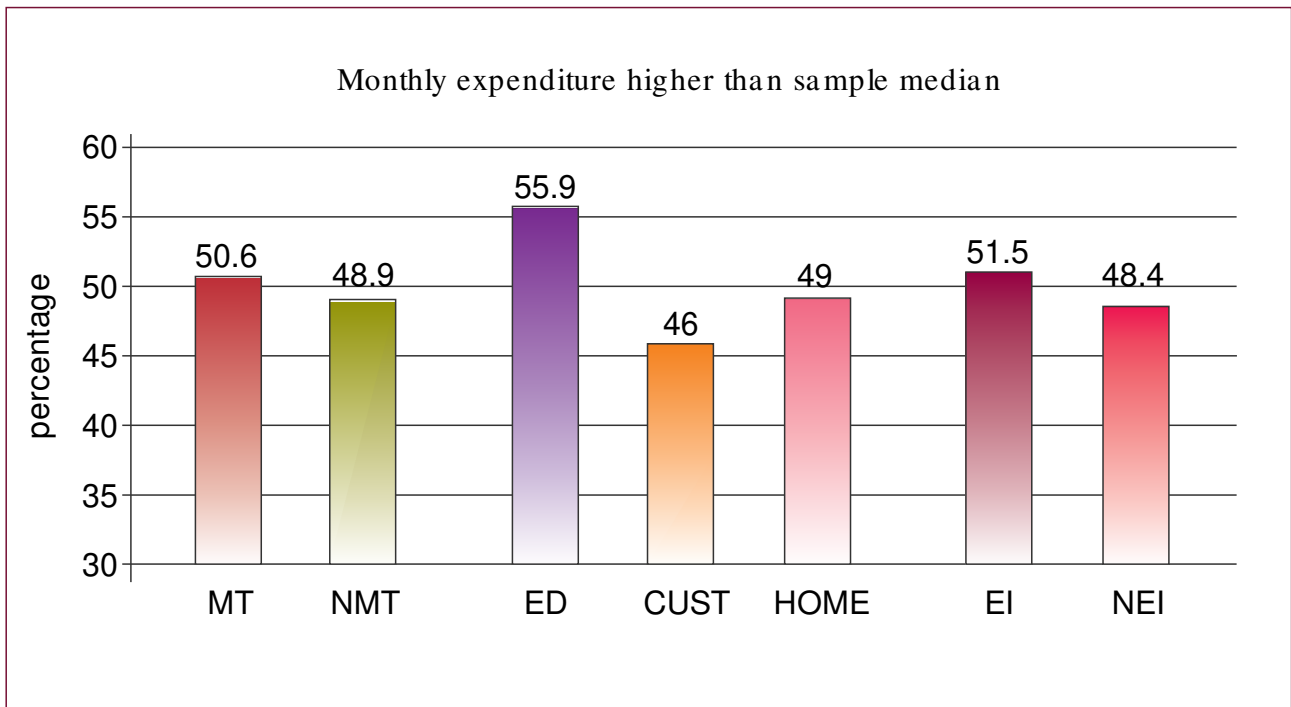


Figure 11. Average monthly household expenditure.

Social participation:

An analysis of participants who owned computers at home yielded the finding that a higher percentage of those who had either kind of early educational experience (EI) owned computers (44%) than those who did not (24%), $\chi^2 = 5.981$, $df = 1$, $p = .014$ (see Figure 12).

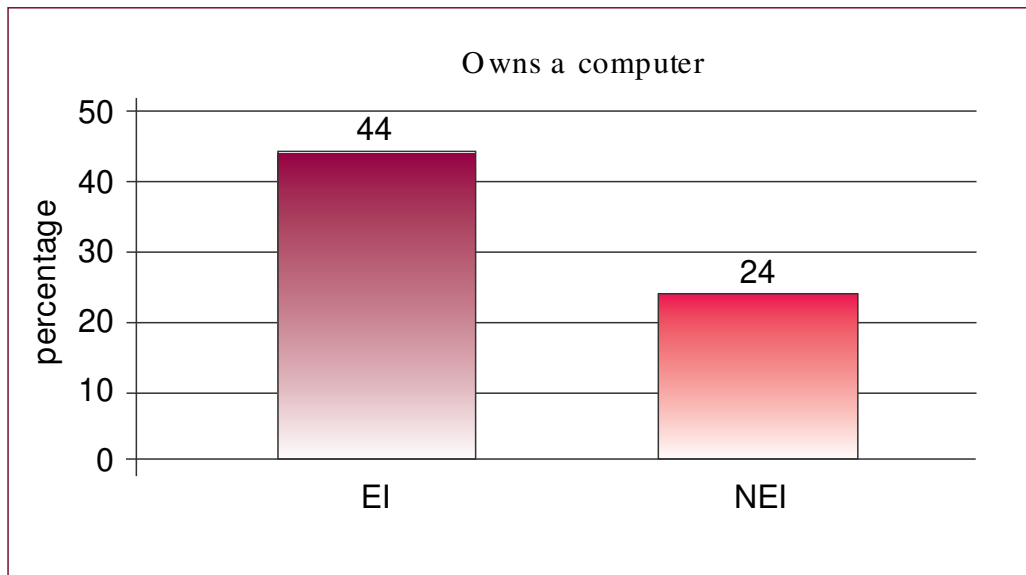


Figure 12. Computer ownership.

When their credit card ownership was examined, it was found that a higher percentage of those in the MT group had credit cards compared to those in the NMT group $\chi^2 = 3.955$, $df = 1$, $p = .047$ (see Figure 13).

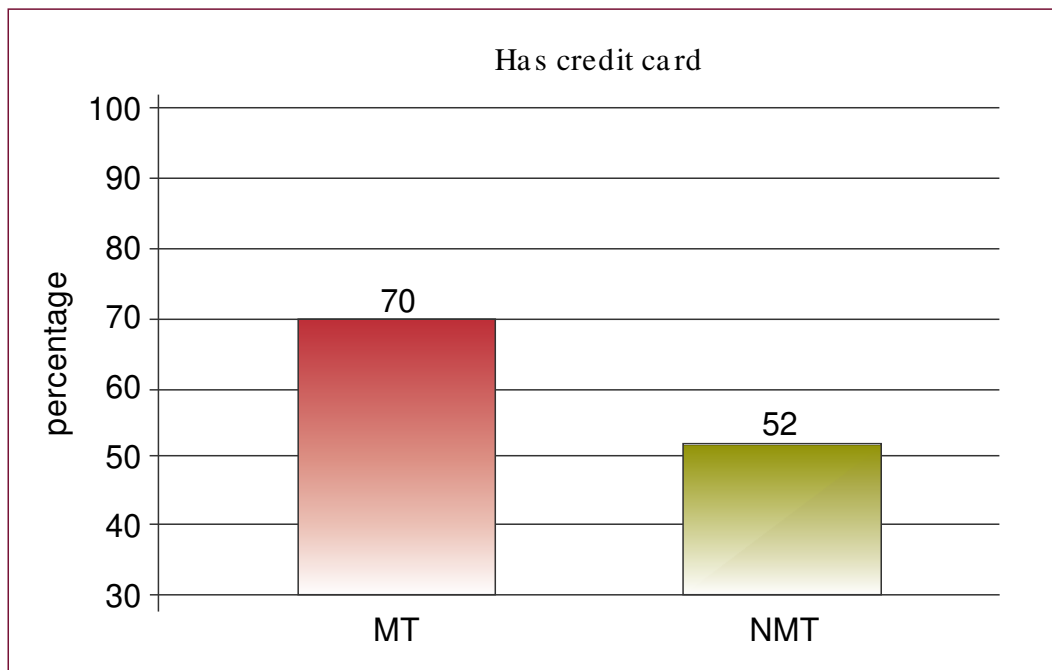


Figure 13. Credit card ownership.



• SUMMARY AND DISCUSSION •

The present study investigated the continuing effects into young adult life of different types of early intervention with children from low-income, low-education families in Istanbul, Turkey. Two types of intervention were investigated – center based and home based. The center based intervention was defined as attendance at either an educationally oriented nursery school or a daycare center with basically custodial aims; children in these two situations were compared with one another and with children of the same age and background who were raised at home without attending any type of preschool. The home based intervention was mother training, in which mothers were instructed in exercises and activities designed to stimulate their children’s cognitive development; this was compared with no training for mothers. Approximately half the mothers of children in each preschool environment condition were randomly assigned to receive training while the other half received no training.

The findings of this second follow-up study demonstrated that early enrichment, whether home-based or center-based, had positive long term consequences on children’s development into adulthood. Young adults who as children had attended an educationally-oriented nursery school, or whose mothers had participated in the training program, or both, had better school attainment, were more likely to have attended university, had better language skills, had jobs of higher status, were more likely to own computers, and were more likely to have credit cards, in comparison to those who had not received any form of early enrichment. Even custodial daycare showed some advantages over home care in deprived environments with regard to some outcomes.

When the separate effects of the two types of intervention are compared, there are some differences: Among participants in the mother training condition, compared to those whose mothers were not trained, a higher percentage had attended university, they had higher vocabulary scores, and they were more likely to own computers and use credit cards. In looking at the effects of type of care center, it was observed that those who had attended an educational nursery school had more years of schooling and had jobs of higher status than the others. These may possibly be seen as ‘delayed effects’ since the effects of educational day care were not very apparent in the first follow-up study.

When the two early childhood education models are combined by comparing participants who had been in the mother training condition, and/or had attended an educational care center with those whose mothers had not been trained and who had not attended nursery school, we can see that those who received one or both types of early enrichment benefited more than those who had neither. They had more years of schooling, were more likely to have attended university, started work at a later age, and had jobs of higher status. The pattern of results also shows that mother training was of more benefit to children who had attended a custodial child care center or who were raised at home compared to those who attended an educational preschool; that is, both educational nursery school and mother training appear to compensate for a deprived environment, but the full benefit can be derived from either one of them. This suggests that home based education should be made available to children from deprived environments who are not able to attend an educational preschool care center.

Comparing the two types of daycare centers, it is clear that early enrichment programs are more effective when they have educational aims. Non-educational programs have much weaker effects. Accordingly, when planning large-scale intervention programs, only those programs with an educational focus should be utilized.



• CONCLUSIONS •

Some clear conclusions may be drawn from the results of this study.

Early childhood enrichment can have far-reaching effects on the life chances of the individual, including:

- o language skills
- o years of education
- o age of entering the work force
- o occupational status
- o integration into modern life through means such as use of computers and credit cards

Both center-based and home-based intervention programs can have these desirable effects if high-quality education is offered.

Public policy should be directed to maximizing the life chances of all young children from deprived backgrounds, using whichever type of program can be offered in the most cost-effective manner.

What is possibly the most important result of the study is that early enrichment can have long lasting effects into adulthood. The 22 year TEEP is 'one of a kind' in demonstrating the long range benefits of early intervention and shedding light on the factors that make such intervention effective in producing a positive cycle of human development in a non-Western developing country. The institutional and programmatic expansions deriving from TEEP, especially over the last decade in Turkey and abroad, point to the global policy and program relevance of TEEP.



• REFERENCES •

- Bekman, S. (1990). Alternative to the available: Home-based vs. center-based programs. *Early Child Development and Care*, 58, 109–19.
- Bekman, S. (1998). Long-term effects of the Turkish Home-Based Early Enrichment Program. In U. Gielen & A. L. Comunian (Eds.), *Family and family therapy in international perspective* (pp. 401–407). Trieste, Italy: Legoprint-Lavis.
- Bekman, S. (2003). From research project to nationwide programme: The Mother-Child Education Programme of Turkey. In T. S. Saraswathi (Ed.), *Cross-cultural perspectives in human development theory, research and applications* (pp. 287–325). New Delhi, India: Sage.
- Kagıtcıbası, C. (1991). *The early enrichment project in Turkey. UNESCO-UNICEF-WFP Notes comments*. (No. 193). Paris: UNESCO.
- Kagıtcıbası, C. (1992). Research on parenting and child development in cross cultural perspective. In M. Rosenzweig (Ed.), *International psychological science* (pp. 137–160). Washington, DC: APA.
- Kagıtcıbası, C. (1996). *Family and human development across cultures: A view from the other side*. Hillsdale, NJ: Erlbaum.
- Kagıtcıbası, C. (1997). Parent education and child development. In M. E. Young (Ed.), *Early child development: Investing in our children's future* (pp. 243–272). New York: Elsevier.
- Kagıtcıbası, C., Sunar, D., & Bekman, S. (1988). *Comprehensive Preschool Education Project: Final Report*. IDRC Publications.
- Kagıtcıbası, C., Sunar, D., & Bekman, S. (2001). Long-term effects of early intervention: Turkish low-income mothers and children. *Applied Developmental Psychology*, 22, 333–361.



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