re-visited: a tracer study 10 years later

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ABSTRACT

Does an early childhood program have an influence on its participants that is detectable 10 years later? The answer is yes. This research managed to detect differences between children of Ethiopian origin who had immigrated to Israel. It also managed to generalize and conceptualize these differences and provide an explanation of them: The program began a process of individuation that reinforced itself over the years. The research process succeeded in doing so through the use of a combination of research logic (abduction) and a research method (projective techniques), a combination especially effective where the researcher had no advance hypotheses and no well-defined research variables.

KEYWORDS abduction, early childhood, immigration, projective tools, tracer study

introduction

the aim of research

In writing this article I had two goals in mind. The first was to present the important findings of a tracer study (Cohen, 2004) of an early childhood program. The second was to present the methodology of this challenging research.

What is the impact of an early childhood program? A tracer study presents both an opportunity and a challenge. The opportunity is to trace children ten years after they participated in an early childhood program and to document any influences and changes that have occurred. The question is clear: Is there
a detectable influence of an early childhood program on its participants ten or more years later? The specific program discussed in this article is a Parents Cooperative Kindergarten conducted for parents and children of Ethiopian origin. The research population consisted of children who participated in the program between 1988 and 1990. The research was conducted during 2000–2001.1

In order to answer the question I had to overcome three main challenges:

1) To conduct a study within a population of wide cultural variety: the population of Ethiopian origin. I knew the community quite well and had worked with it for 16 years at the time, so I knew how difficult it was to research. (Weil, 1995a). The main difficulty is getting detailed answers to direct questions, a fact that makes interviews difficult to conduct. This is in addition to the fact that this population has been researched and evaluated to an extent that people are reluctant to be interviewed yet again.

2) To trace changes ten years after the children participated in the program. Ten years between early childhood and adolescence is a long time. Many intervening factors have had a chance to play a role in the child's existence. How can we detect influences ten years later?

3) The research variables were not known in advance. Without research variables it is impossible to know what to look for: The focus was a simple kindergarten program that aimed at influencing the children's ‘well-being' and it aspired to give them ‘tools' to become part of the host society. What were these tools? What did they look like? What was I supposed to look for? I had no satisfactory answers. At this preliminary stage of the research, I couldn't get satisfactory answers from the former staff because the answers they gave me were very general. They had broad general knowledge about child rearing, which they used in the kindergarten, but they couldn't identify specific things or concrete targets aside from providing a quality kindergarten and giving the parents a notion of what a kindergarten was. They didn't conceptualize their work in terms of specific traits or activities, and I couldn't give them the exact variables. No one could tell in advance what areas of the children's lives the kindergarten would be influenced the most and why.

context: beta israel – the Ethiopian Jewish community

The emigration of the Ethiopian Jews to Israel during the 1980s was traumatic. Prior to 1977 only a trickle of Ethiopian Jews had made it to Israel on their own. During the seven years between 1977 and 1984, about 6000 arrived by air and sea through clandestine operations. In the early 1980s, a massive wave – the first of many – of about 10,000 set out on foot to cross the
hundreds of miles of desert across Ethiopia to the Sudan. Two of every five perished in the burning desert sands or at the hands of robbers and bandits. In the Sudan, they waited as refugees for months, sometimes years, suffering from hunger and disease, and concealing their religion.

In November 1984, the Israeli government brought 6300 of these refugees from the Sudan to Israel in a large-scale clandestine operation code-named ‘Operation Moses’. In 1991, ‘Operation Solomon’ brought most of the rest to Israel. Fifteen thousand people were brought to Israel in one night. At present (in mid-2003), there are approximately 90,000 Jews of Ethiopian origin in Israel, and new immigrants still arriving.

There are very big differences between mainstream Israeli culture and the culture of the Ethiopian-Jewish community. The Israeli host society is characterized by: urbanization; a complex division of labor; high literacy rate; mass social processes; and the prominence of secondary task-specific relationships and dominance of individual achievement and achieved status as opposed to the low level of urbanization, unity of social roles, diffuse primary relationships and ascribed status in Ethiopian society (Ben-Porat, 1993; Eisenstadt, 1966; Levin-Rozalis, 2000a). Social and cultural communication in Israel is conducted mainly through the mass media, such as printed publications, radio, television and the Internet rather than interpersonal face-to-face interactions (Bodovski and David, 1996; Flum, 1998; Katz and Gurevitch, 1976; Weil, 1995a, 1995b).

In Israel, the emphasis is on industrial and technological occupations; even food production is highly mechanized and computer-run, rather than based on traditional manual labor and household agriculture. The power of bureaucracy has increased enormously (Anteby, 1995, 1997; Ben-Porat, 1993; Herman, 1996; Rosen, 1987), social differentiation is on the rise and traditional and national identification is decreasing. (These differences are summarized in Table 1.)

The arrival of the Ethiopian community in Israel required tremendous interventions to help the members of the community function within the host society and to avoid a situation in which the newcomers would become marginal.

Many of the new immigrants settled in Beer-Sheva, where the Almaya project was established in 1985 to provide a series of programs for young children, their families and the community. One of these was the Parents Cooperative Kindergarten, a daily program for young children aged 18 months to four years. This was run by paraprofessional women counselors from the Ethiopian community, with parents (usually mothers) attending on a rota basis. As in most Almaya programs, the children participating in this program were sent to the program by welfare workers in the neighborhood (which means they were from families who needed assistance).
Kindergarten is a concept that is nonexistent in Ethiopia, so it was necessary to familiarize both the children and their parents with its structure, content and accepted work methods. The basic objectives were to provide tools to aid successful integration into Israeli society, to introduce mothers to the kindergarten environment and to provide the children with the accepted concepts, behavior and thinking of the host society.

The present study traced 36 former participants of the Parent Kindergarten Program to see whether the influence of the program on participating children and parents would still be evident ten years later. These children were from the two Beer-Sheva neighborhoods where the program was implemented.

**methodology**

**the logic of abductive research**

I felt like a detective. I had neither theory nor hypotheses to guide me. The kindergarten was pretty much the same as other kindergartens and the
coordinators and counselors reacted to situations as they arose. They worked the way anyone in a kindergarten works. They couldn't supply me with specific answers.

I decided to use abductive research, as formulated by Charles Sanders Peirce (1931–5, 1955). Peirce claimed that we could not ignore the process of discovery in science, leaving it to the history of science or psychology. The process of discovery that intends to provide an explanation of a new or surprising fact is subject to logical categories and logical criteria such as the process of proof. He called the logical process of discovery 'abduction' (Burks, 1943; Peirce, 1931–5), which can be suitable in situations where more common research logic, in other words, deduction and induction, fails.

There are three paths of research logic that connect theory and data: deductive logic, inductive logic and abductive logic.

In deductive logic, there is a valid logical connection between the hypotheses and a previous theoretical assumption. The hypothesis is an *explanandum*, meaning that it is explained by deductive premises derived from a theory. There is nothing new in the hypothesis, nor is anything new permitted. The a priori theoretical assumptions are the *explanans*, which explain the hypothesis. No matter what else may be true in the world, or what other information may be discovered, the validity of the connection between the *explanans* (a priori premises) and the *explanandum* (hypothesis) is not affected. This method of formulating hypotheses holds good for research that examines a theory or tries to refute it. It assures the researcher that there will be no deviation from the application of the theory in question. According to this, phenomena that appear in the field are not subject to deductive logic at all; the field is merely the court in which the a priori hypotheses can be examined (Copi, 1961; Copi and Burgess-Jackson, 1995).

With no theory, deductive research cannot be used. In the present research there was nothing from which to derive research questions. I had no proper way to define research variables. ‘Well-being’ and ‘tools’ were concepts too broad to detect, and they could have many different meanings.

In inductive logic, hypotheses are formed according to empirical generalization, in other words, repetitive or recurrent phenomena that are observed in the field (900 white swans). In an attempt to formulate a general law of probability, these hypotheses examine the probability that these phenomena will be repeated (the 901 swan will be white too). In order to do this, we must know the characteristics being investigated in the group we are focusing on and the a priori conditions (for example, that a coin has two sides and that when it is tossed it will land on one of them [Copi, 1961]).

Inductive research was not a possibility, either, because I had no generalized findings (or any findings for that matter) from which to draw conclusions.
Thus, part of the solution to the challenges of this study was to use the third research logic: abductive logic (Levin-Rozalis, 2000b). The principles of abduction are based on the notion that there are no a priori hypotheses, no presuppositions, no theorizing in advance. Each event is scrutinized and its importance is examined individually (Shank and Cunningham, 1996). Hypotheses are then formed about the event: Is it connected to other events and if so, how? Perhaps it is an isolated event and if so, what is its meaning?

Abduction is a process of drawing conclusions that includes preferring one hypothesis over others which can explain the facts, when there is no basis in previous knowledge that could justify this preference or any checking done . . . (Peirce, 1955: 151; emphasis added)

It is worth noting that the hypothesis mentioned by Peirce does not arise from any theory, but from the facts. That is to say, in encountering any situation, at the stage where we do not have sufficient satisfactory evidence about the facts and we have not yet carried out any examinations that might support any hypothesis, we nevertheless prefer it. We do so at a stage where our only criterion is the standing that the hypothesis has according to the laws of logic: the explanations we form for these new events are ‘hypotheses on probation’. A cyclical process of checking and rechecking against our observations takes place, widening and modifying the explanation through this process (Levin-Rozalis, 2000b). Peirce called this process ‘retroduction’, a deductive process that instead of moving from the theory (explanant) to the hypothesis (explanandum) to the Field moves from the facts to the hypothesis and again to the facts. Each such cycle creates a more generalized and abstract hypothesis.

Richard Fox defines the use of the process of abduction thus:

Abduction is inference to the best explanation. It is a form of problem solving used in a diverse number of problems, from diagnosis to story understanding, to theory formation and evaluation, to legal reasoning, to, possibly, perception. (1998: 1)

The research described here is field-dependent in the sense that the field being studied dictated the questions, the variables, the population, the terminology (in part), the timetable and the possible instruments of research. It did not deal with generalized and abstract variables, but with immediate and specific facts. And facts needed explanations that would organize them into a sensible structure – some kind of conceptual or theoretical framework (Chen and Rossi, 1992; Turner, 1986).

Deductive logic and inductive logic both ran counter to the logic of the present study, where the process would have to move towards the hypothesis and not from it. It called for abduction logic and the retroductive procedure.
I had logic upon which to base my research, but what facts was I supposed to investigate? I still didn't know the exact variables I was looking for. I had a general idea that if there was something to discover, it would be about increased well-being and the ability to cope with everyday life. But these were only ideas. I couldn't tell in advance what dimensions of well-being were influenced, if they were at all, or what aspects of well-being were changed, even if I had had a relevant definition of well-being, which I did not. What were the 'tools' the children had acquired? I didn't know. I decided to look for the deeply held attitudes and motivations that were not always verbalized and for those concepts and perceptions that these children, now adolescents, might not even be aware of. In order to do this, I decided to use projective psychological techniques.

Projective techniques have long been used in the field of psychology to investigate feelings, opinions and motivations for action. They enable researchers to delve beyond people's surface cognition or rational explanations of their attitudes or behavior. They provide a qualitative research tool that minimizes researcher bias and offers more useful insights into people's perceptions. Projective techniques are especially useful for investigating topics people cannot talk about honestly for one reason or another. They can reveal ideas a person has trouble articulating because the subject is too abstract or intangible (Garb, 1998; Gleser and Stein, 1999; Lahad, 1997).

I thought that projective techniques could be the solution to all three of my problems. As indirect questions, they had the potential to overcome the difficulties of interviewing people of Ethiopian origin; to combat the fear that changes that appeared would be too faint to trace; and of course, to compensate for the fact that I didn't know what I was looking for. Since projective tools are not direct, yet are able to reveal deep content, they might have the ability to reveal any changes that might actually exist.

Projective techniques are normally used during individual or small-group interviews. They incorporate a number of different research methods. Among the most commonly used are the Word Association Test (WAT), Sentence Completion Test (SCT), Thematic Apperception Test (TAT) and Third Person Techniques (Garb, 1998; Gleser and Stein, 1999; Lahad, 1997). While there has been some debate about the accuracy and effectiveness of these tools in psychotherapy (Lillenfeld, 1999; Lillenfeld et al., 2000), these techniques thrive in areas such as marketing and advertising. Businesses find projective tools very effective in revealing their consumers' true opinions and beliefs. Advertisers have used projective techniques to understand consumers' reactions to potential new products, and for the past 15 years, social marketers
have also used these techniques as part of participatory community assessments (Kumar et al., 1999; Livingston, 2003; Zikmund, 1997).

benchmarks

Although the study under discussion was qualitative and involved a process of discovery, it was also examined an assumption in the form of H0, H1 (H0, that no detectible changes would be found and H1, that there were detectible changes). Not having a baseline, I had no way of knowing whether the data uncovered would be unique to the group investigated. I had to have a comparison group and chose two:

1) children of Ethiopian origin similar in age and other qualities to the research population; and
2) children of non-Ethiopian origin in a middle-class neighborhood in Arad (a town near Beer-Sheva).

research course

As mentioned above, this research was based on an abductive process, where the findings revealed in the field raised questions and an attempt was made to answer them, taking into account the whole range of observations and findings. Such answers were in fact 'hypotheses on probation'. In other words, they were assumptions that required examination until such time that further observation and findings, in the course of the research, could either confirm or refute them (Levin-Rozalis, 2000b).

For this study, four teams were set up to interview the different research populations:

1) Child interviews, which included children from both neighborhoods who made up both the group of former participants in the Parents Kindergarten and the comparison group;
2) Parent interviews, which included the parents of the children of both groups (former participants and comparison groups from both neighborhoods);
3) Teacher interviews, which were conducted with the teachers of the children of both groups (former participants and comparison groups from both neighborhoods);
4) Arad group interviews, which included the children of non-Ethiopian origin in Arad.
The child interviews were based on three projective questions. All the children were given three open-ended questions in order to let them reveal their own perceptions in their own way and in their own words. Our experience was that people of Ethiopian origin, irrespective of age, are not talkative. They tend to be very taciturn in any kind of conversation with strangers, let alone in an interview setting. If the children’s responses to the questions were too brief, the interviewer encouraged them to elaborate by using follow-up questions, based on their first answers.

The first question was not strictly projective but indirect. The children were asked about their daily routine:

Tell me about your daily routine.

The other two questions were:

Tell me about a family.

Tell a story about the character in the picture.

I chose these questions because I thought they could serve as a trigger to elicit responses in areas in which there was a greater likelihood of discovering the influences I was looking for. These questions covered all aspects of the child’s life: his/her perception of family (that might provide a hint about the relationships and processes in his/her own family) and her/his daily routine (which can provide direct information on what the child was involved in and, indirectly, her/his perceptions of those things). I hoped the story about the picture would reveal perceptions of school on the one hand (see below) and Ethiopian identity and the perception of it, on the other.

tell me about your daily routine

This question was the first to be asked because it is allegedly simpler and more concrete, less threatening to the children and easier to relate to. As a matter of fact, this question provided us with a lot of information about the children's activities, priorities, opinions and relationships in reference to most aspects of the child's life. It also provided a look at the significant and formative spheres of the child's life.

After completing their initial answer, the children were asked to give detailed responses to follow-up questions on two issues:

School – What is school like? What happens there?

Homework – What is homework? What do you have to do?

These two questions were added because school and learning were areas of great interest in this research, assuming that the school sphere can serve as a
good indicator of the children's integration and the tools they had gained that would help them best to succeed in society.

The analysis was conducted by comparing the Parents Kindergarten group with the comparison group in each neighborhood.

In the analysis, we examined the frequency of parameters and themes that were raised, in part, spontaneously by the children themselves and, in part, from the follow-up questions. This included the place that each parameter took in the overall picture, the feelings and opinions accompanying each parameter, relationships with other children, adults, in school, within the family and so on.

We also examined the quality of answers (detailed or not, the order of things and so on).

tell me about a family

This question enabled us to discover the importance of the family in the child's world and the children's place in their family.

In the analysis, we examined the quality of the story they told (rich and complete, fragmented and dull); the frequency of parameters and themes that were raised spontaneously by the children, and their content; the emotions that were evident in the story; where the story occurred; the characters in the story and their relationships; imaginary or real family, extended or nuclear family and other kinds of data provided by the stories.

tell me a story about the character in the picture

Two pictures were used for this part of the interview in order to facilitate identification with the character – one was of a boy, which was presented to the boys being interviewed, and one was of a girl, which was shown to the girls. The pictures depicted a young child of Ethiopian origin with a school bag on his/her back. This picture raised immediate associations with school and enabled us to learn about the children's inner world and their relationship with their school surroundings.

For this question, the children seemed to need more guidance, and the interviewer accepted relatively short answers. In cases of extremely brief answers, the children were encouraged to develop the story with follow-up questions, such as: What happened to this boy/girl? What does he/she feel?

procedure

The Parent Kindergarten group was the first to be interviewed. Information about the children was obtained from Almaya's records, and the interview was
preceded by a telephone conversation in which the purpose of the study was explained to each child, the child's consent to participate in the study was obtained and a meeting at his/her home was arranged. The children were prepared for the interview in advance and it was conducted in their home environment, and in some instances, in the presence of a parent or relative. Some of the parents were highly involved in the course of the conversation, supervising their children's answers, or adding answers of their own. In some cases, the interview was defined as 'familial', since the parents and children jointly constructed all the responses.

The comparison group was the second to be interviewed. There was no prior information, such as an address or telephone number, available on the children in this group. We asked the children from the 'kindergarten group' to give us names of friends 'similar to you' and if they were not on the list of former participants, we tried to contact them and to arrange an interview. It was difficult to find many of the children at home. This in itself is an important finding. Many of these children spent the afternoon at the shopping center and in the 'neighborhood' – the area at the entrance to the housing project. So the interviewer approached groups of children that were playing, hanging out, or on their way home from school and asked them to participate in a survey or study being conducted on behalf of the university. The purpose of the study was explained, and if the child agreed, the parents were reached by phone to get their consent, and the interview was conducted then and there, in a relatively quiet spot in the vicinity. In the course of the interview, there was no possibility of gaining an impression of the parents, their involvement, or their relationship with their children.

The Arad children were interviewed last, after we completed all the interviews with the children of Ethiopian origin, the teachers' interviews and most of the parents' interviews. The Arad children all attended advanced academic classes in English at Alon Junior High School, which is considered a good school in Arad.

Although these interviews were identical to those of the two Ethiopian origin groups, they were conducted by a different interviewer.

the analytical process

There were several steps in the analysis. The first took place after all the interviews had been completed: the team for each set of interviews (child interviews, parent interviews, teacher interviews and Arad group interviews) analysed the raw material according to content.

In this first stage, the responses were divided into content units, with each unit comprising a significant statement, a phrase, or even a part of a sentence (for example, the sentence ‘the boy looks sad; he's ashamed' was split into two
separate content units: the feeling of sadness and the feeling of shame). Each interviewer in each group was given a number and each fragment bears the number of the interview from which it was taken.

In the second stage, the content units were assembled into categories based on similarities in the content they reflected.

In the third stage, we separated the sentences by groups (former participants and comparison group) and examined the prevalence of the different categories in each group.

In addition, some of the raw material was also analysed for quality of response (minimalistic compared to comprehensive, an entire story about the picture, etc.).

After each of the teams had individually analysed their material, the responses were cross-referenced with the findings from the other research tools to construct the full report.

Finally, the raw material was analysed employing content analysis, which enriched and gave life to the categories.

some ethical comments

Addressing ethical issues in social research typically requires taking into account considerations beyond those of ethical theories. In qualitative settings, the relationship between researcher and subject requires substantial exchanges and interactions and thus demands a special kind of normative attention (Schwandt, 2001). The ethicist William May claimed that such special ethical obligations might better be understood in terms of a covenantal ethic: ‘The duties of field workers . . . to respect confidences, to communicate to them the aims of the research, to protect anonymity, to safeguard rights, interests, sensitivities . . . to share the results of research . . . ’ (1980: 367–8).

In addition to bearing such considerations in mind and in practice, we did our best to receive informed consent on the basis of complete knowledge about the purposes of the research and its course, with no pressure whatsoever on the research subjects (Dushnik and Sabar, 2001). We simply explained that we wanted to examine the influences of participating or not participating in early childhood programs. Assuming that parents who were unfamiliar with research techniques might not fully understand our explanation about research procedure, we did not protest when the parents were present at the interview or even when they interfered in its course. We preferred the danger of research bias to ethical problems.

In most cases, the consent of both parents and children was gained. However, there were some children in the comparison group whose parents could not be reached and for whom we did not obtain parental consent for their children to be interviewed.
All the children and parents who had participated in the research were invited to a small party at the end of data analysis and were given the results. Taking into account the ‘consequences of publication’ (May, 1980), we didn’t tell the children to which group they belonged.

The abductive process

The abductive process begins with the initial findings. While looking at the findings, it is possible to raise ‘hypotheses on probation’ - which means preliminary assumptions or questions to be checked further in order to be supported or refuted.

The analysis of the children's interviews revealed numerous consistent differences between the comparison group and the children who participated in the Parent Kindergarten. Table 2 shows partial findings that indicate differences that appeared in the thematic analysis of all three questions. The themes appeared spontaneously in the children's answers.

The responses from the Parent Kindergarten group tended to be comprehensive; responses that were picturesque and colorful, varied and detailed. In this kind of response, to the family question for example, the child talked about relationships, atmosphere, plans and personal details about family members at different times and in a variety of activities:

[A family is] a good thing – they support us during difficult and good times. Not a good thing – they bother you a lot, fight. That includes me. Verbally – not physically.

My sister is like a dragon that guards a tower. You go into her room and she eats you. You see just a crumb and she starts screaming, kick-boxing.

Then we start to play up to father or mother. Get good grades and then they are on your side, and tell my brothers what to do and I play.

My brother, Benny, he has a style of his own. He has a house, but he's outside all day long. He comes back from school, throws down his school bag, and goes out the whole day. But sometimes he hangs and folds the laundry. My sister gets annoyed easily and is annoying, and stingy, [but] when she has something, she gives it. Sometimes she's good to us; we play together.

There were no such comprehensive responses in the comparison group. Their responses tended to be more formulaic, shorter and simpler: ‘A family is like people who do things together’, 'My siblings, my parents'. Similarly, this group also gave more minimalistic responses that added relatively little to the description of the nuclear family and the relationships within it; for example, ‘We are four siblings, two brothers and two sisters’.

The Parent Kindergarten children seemed to have a more developed emotional range than the comparison group children. With regard to emotions
aroused in connection with the family, for example, the comparison group children mentioned only two possible emotions (love and worry), whereas the Parent Kindergarten children described eight different emotions (anger, laughter, love, irritation, to feel like myself, worry, loneliness, embarrassment).

**Table 2** The main differences in the thematic analysis between the two groups in absolute figures (significant differences are marked with *, Cramer’s V is between 0 (no relationship) to 1 (strong relationship) between groups).

<table>
<thead>
<tr>
<th>Topics</th>
<th>Parent Kindergarten</th>
<th>Comparison</th>
<th>Chi-square</th>
<th>p-value</th>
<th>Cramer’s V (relationship strength)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associated with organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studying at home</td>
<td>24</td>
<td>15</td>
<td>4.064 *</td>
<td>0.044 *</td>
<td>0.239 *</td>
</tr>
<tr>
<td>Purpose of homework: understanding and getting ahead</td>
<td>6</td>
<td>0</td>
<td>6.372 *</td>
<td>0.012 *</td>
<td>0.300 *</td>
</tr>
<tr>
<td>Detailing every family member</td>
<td>20</td>
<td>12</td>
<td>3.963 *</td>
<td>0.047 *</td>
<td>0.233 *</td>
</tr>
<tr>
<td>Reference to time</td>
<td>17</td>
<td>10</td>
<td>2.619</td>
<td>0.106</td>
<td>irrelevant</td>
</tr>
<tr>
<td>Associated with activeness and initiative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing (constructed games)</td>
<td>28</td>
<td>17</td>
<td>6.522 *</td>
<td>0.011 *</td>
<td>0.303 *</td>
</tr>
<tr>
<td>Hanging around</td>
<td>2</td>
<td>8</td>
<td>4.390 *</td>
<td>0.036 *</td>
<td>0.249 *</td>
</tr>
<tr>
<td>Active association</td>
<td>4</td>
<td>0</td>
<td>4.121 *</td>
<td>0.042 *</td>
<td>0.241 *</td>
</tr>
<tr>
<td>Active conflict</td>
<td>5</td>
<td>1</td>
<td>2.792</td>
<td>0.095</td>
<td>irrelevant</td>
</tr>
<tr>
<td>Activeness in lessons</td>
<td>5</td>
<td>0</td>
<td>5.229 *</td>
<td>0.022 *</td>
<td>0.271 *</td>
</tr>
<tr>
<td>Associated with perception of school and studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studying at home</td>
<td>24</td>
<td>15</td>
<td>4.064 *</td>
<td>0.044 *</td>
<td>0.239 *</td>
</tr>
<tr>
<td>Playing at school</td>
<td>13</td>
<td>4</td>
<td>5.937 *</td>
<td>0.015 *</td>
<td>0.289 *</td>
</tr>
<tr>
<td>Purpose of homework: understanding and getting ahead</td>
<td>6</td>
<td>0</td>
<td>6.372 *</td>
<td>0.012 *</td>
<td>0.300 *</td>
</tr>
<tr>
<td>Purpose of homework: obedience</td>
<td>1</td>
<td>8</td>
<td>6.464 *</td>
<td>0.011 *</td>
<td>0.302 *</td>
</tr>
<tr>
<td>Enjoy recesses at school</td>
<td>21</td>
<td>5</td>
<td>14.835 *</td>
<td>0.000 *</td>
<td>0.457 *</td>
</tr>
<tr>
<td>Character is happy to study</td>
<td>10</td>
<td>5</td>
<td>6.151 *</td>
<td>0.013 *</td>
<td>0.294 *</td>
</tr>
<tr>
<td>Associated with home and family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coming home from school</td>
<td>30</td>
<td>23</td>
<td>2.911</td>
<td>0.088</td>
<td>irrelevant</td>
</tr>
<tr>
<td>Reference to parents in the story</td>
<td>10</td>
<td>2</td>
<td>4.045 *</td>
<td>0.044 *</td>
<td>0.223 *</td>
</tr>
<tr>
<td>Activity of the entire family at home</td>
<td>7</td>
<td>4</td>
<td>0.871</td>
<td>0.351</td>
<td>irrelevant</td>
</tr>
<tr>
<td>Associated with the Ethiopian community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linking the story to the Ethiopian community</td>
<td>16</td>
<td>10</td>
<td>1.926</td>
<td>0.165</td>
<td>irrelevant</td>
</tr>
<tr>
<td>Associated with emotions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotions in the story</td>
<td>8</td>
<td>2</td>
<td>3.997 *</td>
<td>0.046 *</td>
<td>0.237 *</td>
</tr>
<tr>
<td>Emotions in the family</td>
<td>18</td>
<td>9</td>
<td>4.441 *</td>
<td>0.035 *</td>
<td>0.250 *</td>
</tr>
</tbody>
</table>
The Parent Kindergarten children tended to be better organized and more active than the children in the comparison group. They were more aware of the importance of organizing their day by time than were the comparison group children: ‘I go to school at eight o’clock. I come back from school at 3:30’, ‘I watch TV at four o’clock’.

In general, the Parent Kindergarten children had a richer use of leisure time than children who had not attended the Parent Kindergarten; they were more active and more focused on specific activities: ‘I go outside and play soccer; afterwards I play with other children’. The variety of the games they played was also broader than in the comparison group: ‘I play soccer here, or I ride my bike’ Although the comparison group children also spent their afternoons with friends, they described less active and less organized activities: ‘I go out with friends’, ‘I hang around and things like that’.

In general, the home and family played a more important role in the routines of the Parent Kindergarten children than in those of the comparison group. For example, the simple mention of returning home from school (‘I study until one o’clock, go home, have a glass of water’, ‘I get to school and then afterwards I go home’, ‘I come home from school’), indicates the child’s perception of home as a place of origin – from which one comes and to which one returns. More of the Parent Kindergarten children mentioned home in this way.

One of the most striking differences between the Parent Kindergarten and the comparison groups was found in their attitudes toward school and studies. The Parent Kindergarten children were not threatened by their studies and they perceived school in a positive light (‘It’s interesting in school’, ‘How do we study? Great’), as a place to meet friends, have a good time and play. They perceived the lesson as an event in which they took an active part: ‘We study with the teacher, ask questions’, ‘If I don’t understand, I ask. Some teachers don’t understand; we correct them’.

In contrast, the comparison group children perceived the purpose of studying at home as obeying the teachers and complying with school authorities – school is a place where one studies. While able to play at school and have a good time, they were less likely than the Parent Kindergarten children to enjoy school, and therefore tended to express helplessness and negative feelings toward school: ‘It’s a bit difficult for me to study; it’s hard to concentrate’, ‘I’m a good student; no, just kidding, I’m so-so’, ‘Studying is boring’, ‘School is irritating’.

**first retroductive step**

In sum, the child interviews indicated differences in the children’s attitudes toward school and learning: the Parent Kindergarten group showed a greater
appreciation of school and learning than did the comparison group. They also expressed more positive feelings toward school, both academically and socially, than the comparison group. These children showed better organizational skills and relation to time, stronger links to family and community, and a wider range of emotions.

From these initial findings, I had a feeling of deeper and more coherent differences that were more than just differences in attitude. I had my first assumption – the first ‘hypothesis on probation’: There are some personality differences between the two groups. I wanted to support or refute this notion with the teachers' interviews.

teacher interviews

The teachers' interviews were the second step. Forty-six teachers were interviewed regarding 67 children from the sixth to the 11th grades in 17 different primary and secondary schools, rabbinical colleges (yeshivas) and boarding schools. There were teachers of 35 children from the Parent Kindergarten and 32 from the comparison group. Teachers of four children could not be located, possibly because their contact details were inaccurate. Neither the teacher nor the interviewer knew which group the child belonged to.

research tools and procedure

First, permission to interview the teachers was obtained from the district director of the Ministry of Education, then from the school principals. Consent was also obtained from the children's parents. Some of the interviews were conducted face-to-face, while others were conducted by telephone at the teacher's convenience.

The teacher interviews were conducted after we had obtained preliminary findings, so the first question the teachers were asked was, ‘Tell me about this child.’ I wanted to see what the main things the teachers would have to say about each child were, what characteristics they would choose to describe; I wanted to get a general description, a general impression of each child.

The interviews were divided into three general subjects:

1) Scholastic: verbal ability and scholastic achievements, participation in class and preparation of homework, attendance, and bringing appropriate equipment and materials to class;
2) Social: forming social relationships, issues of violence;
3) Relationship with parents: nature of the relationship, parents' attendance at meetings, and family situation.
The teachers were asked to indicate if the child attended classes regularly, if she/he had books and equipment for school, did the homework regularly, and was involved in class discussions. They were asked what the strongest and weakest areas of learning were for each child and how the child compared to others in regard to social skills, learning skills and so on. The questions were open-ended and the teacher was free to respond by relating anything that came to mind about the child. In the course of the interview, various additional subjects were raised by the teachers, such as motivation to study; integration; the need for different structures and additional support; instability; special abilities, etc.

Teachers were asked to grade the children, according to their scholastic abilities, in reading, writing, reading comprehension, verbal expression, and level of conceptualization and abstract thinking. Since teachers are not allowed to disclose their students' marks to outsiders, the interviewer prepared several scales for them to use in grading the children from 1 = very weak to 6 = excellent (general academic standing, level of reading, level of writing and so on).

Social skills were evaluated through questions about the children's friends, the ethnic origin of their friends, and the children's behavior. The teachers were also asked about the parents' involvement with the school and what the child's family situation was like.

**Main findings from teacher interviews**

From the teachers' perspective in the classroom, it appeared that more children in the comparison group were passive in class and required more encouragement and urging to be active than the Parent Kindergarten children (see Table 3).

The active children in the Parent Kindergarten group were involved in class and in their social circle, showed initiative, were active and interested in what was going on around them, organized parties and performed tasks well.

There were more Parent Kindergarten children at both extremes: children who were very active in all spheres, both in class and socially, and children who were passive in all spheres. However, the teachers' descriptions regarding the comparison group children's passivity were more extreme ('The child is not heard in class at all', 'Silent like a fish', 'She was hardly noticeable during the annual class outing'), to the extent that the teachers found it difficult to assess these children's verbal abilities.

With regard to social dominance, Parent Kindergarten children were found to be more socially involved and popular and were described as more socially dominant and as social leaders. Although this question was not asked explicitly in the interview, the teachers spontaneously mentioned special
abilities or a remarkable quality, such as a talent for drawing and art, drama, music, a remarkable sense of humor, or leadership qualities. In the comparison group, such statements were made about only three children, who excelled in sports.

In general, the wealth of description for the Parent Kindergarten group was greater and more diverse, with more content-related issues raised about this group in the teacher interviews.

This difference may indicate that the Parent Kindergarten children were more noticeable in the classroom and attracted the teacher's attention, positively or negatively. The teachers mentioned that Parent Kindergarten children more often required additional support, such as personal attention, warmth and encouragement, reinforcement classes, a personal tutor, boarding school or a smaller class. The interviewer gained a strong impression that the teachers sought help for these children and feared that their needs were not being addressed.

By the same token, it is possible that the teachers' perceptions of the comparison group children, who showed low scholastic achievement and abilities, were simply a case of the teachers' low expectations from these children; in other words, there was no gap between the teacher's perception of the child and the child performance. This explanation also supports the

### Table 3: Distribution of Findings from the Teachers' Interviews

<table>
<thead>
<tr>
<th>Topics</th>
<th>Parent Kindergarten N = 35</th>
<th>Comparison N = 32</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scholastic sphere</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High scholastic abilities</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Low scholastic abilities</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>High scholastic achievements</td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td>Low scholastic achievements</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Good verbal abilities</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>Average score on scale (1 = very low, 6 = excellent)</td>
<td>3.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Require additional support</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td><strong>Activeness in class and socially</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very active in all spheres</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Very passive in all spheres</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Popular</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Isolated</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Special talent</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Independent opinions</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Place of parents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents with influence</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Parents without influence</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Involved parents</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Parents initiate contact with the school</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>
overall picture of fewer comparison group children being in supportive frameworks, despite their acute need for such frameworks, according to their teachers.

More comparison group parents had very poor contact with the teacher, did not attend parent meetings at all, and were not well informed about their children’s situation at school. The reasons stated by the teachers for this lack of contact were language difficulties, lack of awareness, or a feeling that they had no ability to help.

second retroductive step

The findings from the teacher interviews supported – and amplified – my first ‘hypothesis on probation’. The differences were not just of attitude. I began with the finding that in spite of the fact that the teachers perceived the Parent Kindergarten children as better students in many respects, they also thought these children needed additional help. It seems as if the teachers were more sensitive to the needs of these children; they also mentioned more special talents for children in this group. In addition, during the interview, when the teacher was asked to describe the child, many of the teachers were unable to do so for the comparison group, and in some cases it was difficult for them to even recall who the child was.

It was also evident that the parents’ patterns of behavior in the two groups were different.

This led to my second ‘hypothesis on probation’: Could it be that the children who attended the Parent Kindergarten had gained some individualistic qualities that were different from those of their friends? And perhaps these qualities were reinforced by their parents’ behavior?

parent interviews

We were able to interview only half of the planned sample of parents, resulting in interviews with only 28 parents (of 31 children: 15 former Parent Kindergarten participants and 16 from the comparison group). There was a concern that the similarities between the parents who agreed to be interviewed would be greater than any differences related to the program.

Most of the information was obtained from one or both parents, but it should be noted that in a very few cases the information was provided by older siblings. The interviews were generally arranged with the mother, so in most cases the interviewees were the mothers. In three cases the interviewees were the fathers, and in four cases both parents were interviewed. Three of the interviewed families were single-parent families as a result of either divorce or the death of the husband.
The interview questions were defined after we obtained the results of the children and teacher interviews. I wanted to see whether the parents perceived their children the way I had begun to see them.

From past experience, I knew that questions for a population of Ethiopian origin had to be related to concrete experiences as much as possible, and even then the answers would be very short. So the interviews were made up of seven guiding questions, with follow-up questions to encourage the interviewees to expand on the subject:

1) Tell me a little about your son/daughter (age, grade, school, etc.).
2) Tell me about any special programs attended by your son/daughter.
3) How would you assess these programs?
4) In what subjects/spheres is your child more successful, more outstanding?
5) Describe your child's relationship with his/her parents, brothers, the extended family.
6) How do you see your child's future and what would you want for him/her?
7) In your opinion, how can your child be helped to attain this?

The parent interviews were conducted over several months and produced a relatively small yield.

Obtaining the parents' agreement to be interviewed was very difficult, with almost half of them refusing, including those who willingly agreed that we interview their children. With some of the parents who did not directly refuse, it was simply impossible to set up a meeting. The lack of responsiveness stems possibly from the vast amount of research that has been conducted recently on the Ethiopian community in Beer-Sheva.

Because of the parents' language difficulties, seven of the interviews were conducted with one of the siblings translating. A small number of interviews were attended by the children about whom the parents were interviewed. The degree of openness throughout the interviews was relatively low and the responses obtained were concise in the extreme and cryptic.

Unfortunately, despite the interviews being interesting in themselves, the small number of parents in each group did not allow us to make statements of certainty about the differences between the groups in most areas. Here I shall present only those areas in which the differences between the groups were sufficient to support a reasonable argument.
The parents in the Parent Kindergarten group expressed more concrete and directed aspirations regarding their children's future ('I hope he will go to the university', ' . . . be a lawyer') than the comparison group parents, who spoke in more general terms: 'A good life,' 'He should be happy.' The parents from the Parent Kindergarten group mentioned the child's future family more: 'I hope he finds a good bride, a warm home.'

The parents from the comparison group had a greater tendency to leave the responsibility for the child's future in the child's own hands than did the parents from the Parent Kindergarten group, who saw it more as their responsibility as parents.

The Parent Kindergarten parents were able to mention more hobbies and qualities of their children than could the parents in the comparison group.

The Parent Kindergarten parents mentioned their children's 'good behavior' far less than the comparison group parents. This finding could have a number of explanations. I tend to believe that the child's behavior was experienced differently, or accorded a different value, by the two groups of parents. Obedience and politeness among young people and children is important in the Ethiopian community and the 'bad behavior' of the youngsters in the host society is an important issue. It appeared that while the comparison group parents seemed to perceive the child's behavior as an important part of her/his description and personality, the Parent Kindergarten parents did not. The Parent Kindergarten parents seem to have accepted that polite behavior is not a central value according to which they should measure their child. Combined with the rest of the sparse findings, it appears that Parent Kindergarten parents perceived their child in a more detailed and individual way.

third retroductive step

My first hypothesis in probation claiming that the differences between the two groups of children are much deeper than just differences in attitudes was confirmed further.

The Ethiopian and Israeli cultures have very different perceptions of human beings and their place in society. In Ethiopian culture, the human being is a member of a group and a community, which are bound by a communal-traditional culture that reinforces 'togetherness' and does not encourage individuality. Despite the changes that have taken place in their society since the community emigrated to Israel – primarily the break-up of the community structure and extended family – the underlying forces that preserve the cohesiveness and structure of the community are still very strong (Levin-Rozalis, 2000a).

This kind of cohesiveness is very different from that found in the Israeli host society. Although Israeli society is extremely varied and is made up of
different communities, one of the dominant values is individualism, a perception that supports the development of the individual in the direction of maximum self-actualization.

Unlike other children of Ethiopian origin of their age, the Parent Kindergarten children we studied displayed a distinct sense of self and a clear tendency toward individualism. The children perceived themselves as independent entities, and this perception was evident in a higher awareness of themselves, their ability to express emotions or a need for help, and their ability to develop hobbies and talents that were theirs alone. The people around them reacted accordingly. The teachers of the Parent Kindergarten children viewed these children more clearly and less superficially than they viewed their peers. The Parent Kindergarten children were perceived as more dominant – children whose needs were clear – and there was a greater tendency to recommend – and integrate them into – the support programs they needed. The parents, too, identified unique elements in the children, such as hobbies or ambitions for the future, and seemed to perceive them as being more responsible and independent.

These differences should not be seen as a dichotomous division between the individual and the community, but rather as a shift in this axis. The Parent Kindergarten children were still less individualistic than Israeli children of the same age who are not of Ethiopian origin, or immigrant children from the former Soviet Union who came from a society that is more similar to the Israeli host society from the standpoint of self-perception and individualism (Levin-Rozalis and Shafran, 2003).

At the same time, the Parent Kindergarten children seemed to feel that they belonged to the Ethiopian community. They neither denied nor ‘forgot to mention’ their connection with the community, apparently seeing themselves as part of a large, supportive body, which for them constituted a kind of family. This could also mean that the content of their Ethiopian tradition and heritage was far more accessible to them.

**fourth retroductive step**

What was it in the Parent Kindergarten that caused these differences in the children’s self-perception? Can we really claim that the kindergarten experience the children had ten years before caused these differences? In order to check this ‘hypothesis on probation’ (the Parent Kindergarten was the cause for the differences we found), I took my findings to the initiator and coordinator of the program and to one of the teachers and asked them to tell me what they did in practice that could be related to individuality, emotional expression and other qualities found in the children. I also asked the same question to one of the present Parent Kindergarten teachers.
Now I was able to get more accurate answers. Instead of repeating the
general goals of the kindergarten, I got more precise answers relating to the
questions at stake. In the discussion with the program’s initiator and teacher,
they said that as part of their work in the kindergarten, they address emotions
and provide warmth, but above all, they work with the children on identifying
and coping with their emotions. This is done, for example, by transparently
saying to the child: ‘You’re angry because Danny took the toy; let’s look for
another one’, or ‘You’re sad because your mommy hasn’t come yet; let’s play
and the time will pass faster’.

Freedom of choice was another important aspect of the program. One of the
interviewees reported that in every activity in the kindergarten, the child had
a choice. The activities were structured and organized, but at the same time,
the children were given freedom of choice. At mealtimes, the children had a
choice of what to eat (rice or potatoes, for example). The teachers had to build
organized activities with a beginning, middle and end, but the children were
never obliged to take part in the activity. They could choose whether they
wanted to take part in the group activity or a creative activity, or if they want
to play, for example, in the dolls’ corner. It is important to note that the
program supervisors worked intensively with the counselors (women of
Ethiopian origin trained for work in the kindergarten) on this issue: not to
force the children to do something simply because the group had a planned
activity. This underscores the wide gap between the Ethiopian perception of
the group acting together, where the individual does not have the ability to
choose, and the Israeli reality for which the children are being prepared.

In the kindergarten itself, the counselors talked to the mothers about their
child’s experience in kindergarten activities, emphasizing each child’s unique
character as matter of course. The children were given more attention and the
parents saw the results later at home. Interviews with Parent Kindergarten
teachers and coordinators at the time of the research showed that the parents
recognized the uniqueness of children who have participated in the Parent
Kindergarten. The parents said that the kindergarten child was more
developed than their other children, brought home paintings and drawings,
and sang songs learned in kindergarten. Sometimes the mother came home
from the kindergarten with her own impressions and experiences shared with
her child and, in her view, this also set the child apart. The children’s ability
to develop a distinct perception of self was the result of a combination of two
factors: the child’s own experience in the kindergarten and the parents
learning to see the child’s uniqueness, which enhances the process.

conclusions

The detection process came to an end and I was able to give a reasonable
answer to the question put to me: Does an early childhood program have an influence on its participants that can be detected ten years later? The answer is yes. The research process managed to detect differences between children who attended the Parent Kindergarten and those who did not. It also managed to generalize and conceptualize these differences and provide an explanation of them: the Parent Kindergarten began a process that reinforced itself. The main thing the children learned is to individuate themselves. At the same time their parents learned to see them differently, these two processes reinforced each other, and in due time created the same phenomenon with the teachers. These qualities were more pronounced in these children than in other children of Ethiopian origin; their parents tended to be involved more than other parents, so the teachers gave them more attention that reinforced their individuation and ability to express themselves. The program was the engine that propelled this process has continued to this very day.

The research process succeeded in doing so through the use of a combination of research logic (abduction) and a research method (projective techniques). This combination was especially effective in this case, where I had no advance hypotheses; I had only a general idea of what I was looking for, and the ‘things’ I was looking for, if they existed, would be quite difficult to detect.

As I mentioned earlier, the assumptions were too general to support the creation of operational hypotheses. There was no organized, systemized conceptual knowledge on the ways the Parent Kindergarten influenced its participants. There was no way of knowing what aspects of former participants, if any, would show detectible changes. I had no real thread to follow. The projective techniques described here enabled me to begin the abductive research process and continue it to the end by bypassing the main difficulties: the difficulty in obtaining rich answers from people of Ethiopian origin, which made it difficult for me to conduct simple interviews with the children; the difficulty in any population of answering a question about the influence of their kindergarten experience on their present attitudes or traits; the fact that these influences, if they exist after ten years, are no doubt very faint and difficult to detect; and finally, the fact that I was not able to ask any direct questions because, not having any way of knowing what exactly I was looking for, I had no way of phrasing such questions.

Last but not least is the fact that early childhood intervention has the potential to influence children’s lives years later. Furthermore, such intervention generates a cyclical process of influences with the environment, a process that reinforces itself over the years.

notes
1. The research was initiated and funded by the Bernard van-Leer Foundation in The Hague. For a full report of this research see Levin-Rozalis and Shafir, 2003.
2. Neither the findings from the Arad group nor the complete findings of the study will be presented in this article. For the detailed findings see Levin-Rozalis and Shafran, 2003.

3. It is important to note that the word family was intentionally not made specific. Thus, the question allowed for a wide range of possible answers and stories about the concept of family, including imaginary families.

4. The complete findings are not given here. There were also differences between the two neighborhoods. For the detailed findings, see Levin-Rozalis and Shafran, 2003.

references


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