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Sixty Years after the Magic Carpet Ride: The Long-Run Effect of the Early Childhood Environment on Social and Economic Outcomes

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ABSTRACT

This paper estimates the effect of the childhood environment on a large array of social and economic outcomes lasting almost 60 years, for both the affected cohorts and for their children. To do this, we exploit a natural experiment provided by the 1949 Magic Carpet operation, where over 50,000 Yemenite immigrants were airlifted to Israel. The Yemenites, who lacked any formal schooling or knowledge of a western-style culture or bureaucracy, believed that they were being "redeemed," and put their trust in the Israeli authorities to make decisions about where they should go and what they should do. As a result, they were scattered across the country in essentially a random fashion, and as we show, the environmental conditions faced by immigrant children were not correlated with other factors that affected the long-term outcomes of individuals. We construct three summary measures of the childhood environment: 1) whether the home had running water, sanitation and electricity; 2) whether the locality of residence was in an urban environment with a good economic infrastructure; and 3) whether the locality of residence was a Yemenite enclave. We find that children who were placed in a better environment (i.e. with better sanitary and infrastructure conditions) were more likely to obtain higher education, marry at an older age, have fewer children, and work at age 55. They were also more likely to be assimilated into Israeli society, to be less religious, and have more worldly tastes in music and food. The estimated effects are much more pronounced for women than for men. We find weaker and somewhat mixed effects on health outcomes, and no effect on political views. We do find an effect on the next generation – children who lived in a better environment grew up to have children who achieved higher educational attainment.

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I. Introduction

The long-term social and economic effects of an individual's early childhood conditions are of major interest to social scientists. Yet drawing causal inference about this relationship is complicated by the possibility of unmeasured individual or family-level attributes that influence both an individual's outcomes in life and the conditions of his or her childhood environment. In this paper, we exploit the airlift of Yemenite immigrants in 1949, known as "Operation Magic Carpet," as a natural experiment to overcome this identification problem. As a result, we provide rare evidence on the very long run effect of the early childhood environment on an array of social and economic outcomes, including the educational attainment of the next generation.

In September 1949, a rescue operation began to airlift the entire Yemenite Jewish community to Israel. By the end of the operation in early 1950, approximately 50,000 Yemenite Jews had been flown to the new state.[1] The immigrants were uprooted from their traditional way of life, and suddenly found themselves in a modern society and culture which they did not understand very well. Upon their arrival, the Yemenites were dispersed throughout the country into makeshift absorptions camps. After about six months to a year, most of the immigrants were moved to other predominantly new settlements throughout the country, while others stayed in their original camps, some of which later evolved into established communities or cities. Conditions in the camps were sparse – they often slept in tents with no running water, bathrooms, and electricity.

During this time period, Israel had just won its War of Independence, and struggled to absorb immigrants from all over the world – Holocaust survivors from Europe and refugees fleeing Arab and Muslim countries. For security reasons, the new immigrants were often strategically placed in areas across the country where the population needed to be bolstered. The Yemenites, who received rigorous religious training but lacked any formal schooling or knowledge of a western-style culture or bureaucracy, believed that they were being "redeemed," and put their trust in the Israeli authorities to make decisions about where they should go and what they should do. As a result, they were scattered across the country in a manner which was largely irrespective of their background characteristics – which was not difficult to do since they all lacked formal schooling and arrived essentially without any belongings or wealth.

[1] The airlift itself was performed by adventurous pilots from the US and Britain, who fought in World War II and subsequently established a company specializing in flying dangerous missions around the globe (the Berlin Airlift, airlifting Jews from Shanghai during the Chinese Civil War, etc). The airlift of the Yemenite Jews is commonly known as "Operation Magic Carpet," even though its official name was "Operation On The Wings of Eagles."

This quasi-random allocation of immigrants to locations presents a unique opportunity to estimate the long-run effect of the environment on the social and economic conditions of the individual. In general, studying this issue is complicated by the fact that individuals are not randomly sorted into locations. Therefore, any correlation between the conditions of their childhood environment and later outcomes cannot be interpreted as a causal relationship. To establish causality, one needs to find a situation where individuals do not sort themselves into locations according to their income and other personal characteristics which affect their outcomes directly. The historical episode of the Yemenite immigration would appear to satisfy this criterion -- due to their homogenous background, lack of understanding of spoken Hebrew, complete culture shock, and reliance on Israeli bureaucrats to tell them where to live and what to do. Furthermore, the overall chaotic and precarious situation of the entire country was reflected in the absorption process of the Yemenite immigrants. As a result, this episode is a rare opportunity to study the long-run effect of the childhood environment on various social and economic outcomes.

To exploit the unique episode represented by Operation Magic Carpet, panel data on the Yemenite immigrants is needed in order to link the conditions of their initial placement with their outcomes later on in life. This information does not exist in any Israeli data set. To overcome this obstacle, during the summer of 2006, we conducted a survey of the entire population of immigrants who were born in Yemen between 1945 and 1950, and arrived in Israel during 1949-50. The sample was restricted to immigrants who arrived as children, since our focus is to estimate the effect of the early childhood environment.[2] Each respondent answered a series of questions regarding: (i) their family background in Yemen; (ii) the location of residence and living conditions upon arrival to Israel, and for up to two moves afterwards; (iii) a variety of social and economic outcomes over the course of their lives (employment, income, marriage, fertility, health, cultural tastes, and their children's educational outcomes). In 2006, the individuals in our sample were between 56 and 61 years old, so the outcomes that we are studying are very much "long term outcomes."

From the information gathered in our survey, we construct three summary measures of the childhood environment: 1) whether the home had running water, sanitation and electricity; 2) whether the locality of residence was in an urban environment (which typically had a more advanced economic infrastructure than remote towns and villages); and 3) whether the locality of residence was a Yemenite enclave. After linking information about the individual's early

[2] Also, many of the immigrants who arrived at older ages are no longer alive.

childhood environment with their later outcomes, we find that children of families that were placed in a more modern environment (i.e., in a place with good sanitary and physical infrastructure conditions) accumulated more human capital, got married at an older age, had fewer children, and were more likely to be employed at the age of 55. In addition, they were less likely to be religious, and were more likely to have worldly tastes in music and food. However, we find no effect on political views and only weak evidence on the long-term health outcomes of individuals. We find most of the significant effects are due to the effect on females rather than males. In addition, we find an effect on the next generation. That is, children who lived in a more modern environment grew up to have children who were better educated.

We obtain similar results when we use the two alternative measures of the childhood environment (growing up in a city, or not in an ethnic enclave). However, when we try to separate the impact of all three measures, the effects seem to operate through predictable channels: it is the sanitary and infrastructure conditions (which should probably be viewed as a catch-all measure of the quality of the environment) that appear to have affected economic outcomes. On the other hand, assimilation outcomes (such as inter-ethnic marriage and cultural preferences) are mostly affected by whether the individual grew up in a Yemenite enclave.

These findings can be considered causal effects if the Yemenites were indeed sorted randomly into their childhood locations. The data are generally supportive of the idea that the Yemenites were sorted initially into locations in a manner uncorrelated with their income, education (which everyone lacked), and ability. However, over time, the data show that some effort was probably made to enable immigrants with an agricultural background to live in remote farming communities versus cities in Israel. But, there are several reasons why we believe the results are not due to sorting on the basis of the family's agricultural background: (1) the size of this selection process appears to be modest and there does not appear to be any sorting on a variety of other important background variables; (2) the families of boys and girls were sorted similarly, so if sorting is producing our results, we should obtain similar results for boys versus girls, but we do not; (3) there does not appear to be any sorting within the sample that had an agricultural background versus those that did not, and the results are similar within each group as well; (4) the results are similar with and without controlling for a variety of background variables; and (5) although there is modest sorting on having an agricultural background, this background characteristic does not significantly affect long-term outcomes, so there was no sorting on variables which are important determinants of outcomes later on in life. Taken as a whole, the

modest sorting that we see into childhood locations does not appear to explain the pattern of results, and therefore, it is reasonable to interpret the estimated effects in a causal manner.

There is a well-documented correlation between neighborhood characteristics and individual outcomes, even after controlling for a wide range of background characteristics (Brooks-Gunn et al. 1993).[3] However, it is difficult to rule out that the correlation is spurious, and that it is driven by sorting of high-ability families into better neighborhoods. A number of recent papers have tried to overcome the identification problem by exploiting experimental settings in which residential location was randomly assigned. This literature includes Oreopoulos (2003) and several papers on the "Moving to Opportunity" (MTO) program.[4] Oreopoulos examines the long-run labor market outcomes of adults who were assigned, during their youth, to public housing projects in Toronto which differed substantially in neighborhood quality. He finds that neighborhood quality plays little role in determining a youth's eventual earnings, unemployment likelihood, and welfare participation. The MTO literature exploits the random assignment of housing vouchers as a source of exogenous variation in the quality of the neighborhood. This exogenous variation is used to examine a variety of social and economic outcomes. For example, Kling, Liebman, and Katz (2007) found that being in a safer neighborhood had beneficial effects on education, risky behavior, and health for girls, but not for boys. Gould, Lavy and Paserman (2004), adopt an approach similar to the one in the current paper, by estimating the effects of the initial environment on the schooling outcomes of Ethiopian immigrants who arrived in Israel in the context of Operation Solomon in May 1991. They find that attending a high-quality elementary school has a large positive effect on high school matriculation outcomes.

In contrast to these studies, this paper examines outcomes that span almost 60 years. Oreopoulos (2003) examines the effect of the neighborhood on labor market outcomes thirty years later. This study is the closest to ours in terms of the long-term nature of the outcomes, but the time horizon is only half of our study, and we examine an array of social and economic outcomes, not just labor market activity.[5] Our focus on very long-run outcomes (up to 60 years later), including the effect on the next generation, is one of the key distinguishing features of the paper.

[3] See also Jencks and Mayer (1990), for a survey of the early literature.

[4] For example, see Katz, Kling, and Liebman (2001); Ludwig, Duncan, and Hirschfield (2001); Goering and Feins (2003); Kling, Ludwig, and Katz (2005); Sanbonmatsu, Kling, Duncan, and Brooks-Gunn (2006); and Kling, Liebman, and Katz (2007).

By looking at how the early childhood environment affects outcomes of individuals later on in life, this paper contributes also to the debate over whether investments in the early stages of a child's development have long-term payoffs. Heckman (2000) argues that early investments in human capital for children have a larger payoff than interventions at a later stage, which aim to close the gap between troubled students and regular students. Some evidence for this claim has been found by Krueger and Whitmore (2001), Currie (2001), Currie and Thomas (2001), and Garces, Thomas, and Currie (2002).[6] But, our paper is the first to examine the impact of an early intervention over the life cycle of the individual.

The remainder of the paper is organized as follows. The next section describes the Magic Carpet operation and its historical background. Section III describes the survey and the data that we collected, while section IV describes the empirical strategy. Section V tests for whether the data accord with the random placement of Yemenite children into different environments in the early 1950's. Section VI presents the empirical estimates of the effect of the early childhood environment on a variety of social and economic outcomes. Section VII presents additional evidence on the effect of the early childhood environment using Israeli 1961 Census data. Section VII discusses the results and Section IX provides concluding remarks.

II. Operation Magic Carpet and its Historical Background[7]

There are many legends about the origins of the Yemenite Jews. Some claim that they descended from a group of Israelites that rebelled against Moses during the Exodus from Egypt. Another theory is that they descended from merchants that were sent to the region by the Queen of Sheba, or that they fled from Jerusalem before the destruction of the Second Temple. According to most sources, however, there was a Jewish community in Yemen from at least the time of the Second Temple. Once there, they enjoyed times of relative prosperity until the rise of Islam in the 7th Century, when a variety of restrictions and bans were imposed on Jews, including seclusion in ghettos and special taxes. The Jews of Yemen often worked in occupations avoided by Muslims, including trades such as blacksmiths, tool makers, pottery, tailoring, and carpentry.

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[5] Our focus is on the long-term effect of neighborhood conditions rather than the contemporaneous effect of neighborhood characteristics on labor market outcomes (Weinberg, Reagan, and Yankow, 2004).

[6] Our analysis is also related to the literature on the role of the environment and peer effects in the creation of human capital. This literature examines whether students benefit from being in contact with better students (Arnott and Rowse (1987), Sacerdote (2001), Zimmerman (2003)) or immigrant students (Gould, Lavy, and Paserman (forthcoming)), or whether neighborhoods affected student outcomes (Jacob (2003) and Goux and Maurin, (2007)). This issue has also guided other researchers, who have looked at whether desegregation policies in the United States (such as bussing) help or hurt the achievements of blacks and whites ((Hoxby (2000); Angrist and Lang (2002); Hanushek, Kain, and Rivkin (2002)).

[7] This section relies on Barer (1952) and Sachar (1979).

Formal schooling was not available, but Yemenite boys received a rigorous education in biblical texts.

The harsh conditions in Yemen, combined with news about the Zionist resettlement of Palestine, spurred a "messianic" movement to emigrate to the Holy Land at the end of the19th Century. These initial immigrants settled in agricultural communities in Jerusalem and Jaffa. Although they were quite poor, they sent money and letters back to their relatives in Yemen, encouraging them to emigrate as well. There was a steady, low stream of immigration from Yemen in the early part of the 20th Century, but during the 1930's and 1940's Jews were forbidden from leaving by the local authorities due to political considerations.

The drought of 1942-43 and the impending war between the Arabs and Jews in Palestine led to a dramatic deterioration in the conditions of the Jews in Yemen. These conditions spurred many Yemenite Jews to flee to Aden, which was under British rule at the time. Under a cloud of secrecy, a limited number of flights were allowed to take them to Israel. Thus, "Operation Magic Carpet" secretly began in late 1948 and lasted for a few months. After the armistice agreement between Egypt and Israel was signed in February 1949, the ruler of Yemen agreed in April 1949 to let the Jews leave for Israel, on the condition that they teach their trades to their Arab neighbors and leave their property behind. In May, news of this decree and the free transport to Israel spread through Yemen. At the time, there were roughly 40,000 Jews in Yemen, and they responded by trekking on foot to Aden, a journey that lasted weeks and sometimes months under treacherous conditions. In Aden, they waited in a makeshift refugee camp to be flown to Israel. The actual airlift was carried out by American and British pilots who ran a renegade airline, Alaska Airlines, which specialized in dangerous missions after World War II.

The awe of the immigrants with respect to the operation is described aptly by one of the pilots involved in the mission:

> *It's difficult to put into words, but it gives me a strange feeling to see these Jews . . . They wander about on foot for weeks till they reach the camp near Aden. They arrive hungry and sick and naked . . . But you'll find every man carrying his Bible, and every other man clinging to a huge holy parchment scroll clasped in front of him. That camp is just a piece of desert with almost nothing on it, just a few tents and straw mats, but they behave as if they had just stepped into Paradise. Then we pile them into those planes and they're terribly confused, but they keep mum. When they climb out at Lydda (the airport in Israel), you feel they're so excited they ought to throw themselves on the ground and kick, yet what do they do? They move about with shining eyes and don't say a word. They look to me like people going awake through a dream.*[8]

[8] Barer (1952).

The pilots also testified to the Yemenites' submissive demeanor:

> *"They look like prophets stepping out of the bible . . . their average weight was seventy or eighty pounds, and up to a hundred and forty of them could be put on a plane normally carrying less than half that number. It was a strange experience for them to travel by air – not only were they unfamiliar with airplanes, but the steep metal ladders used for climbing aboard planes had to be replaced with wooden ramps with shallow steps to enable them to go aboard. However, they behaved admirably and gave little trouble."*[9]

Despite perilous conditions flying over enemy territory, about 50,000 Yemenite Jews arrived in Israel without a single loss of life by the summer of 1950. They landed, however, into a chaotic environment as Israel was struggling to absorb immigrants from Europe, Africa, and other Arab countries. The Jewish population in Israel was 650,000 in 1948, and this number would more than double in the next few years. Upon arrival, the Yemenites were taken to absorption camps, consisting of tents with no running water, kitchens, bathrooms, and other sanitation facilities. There were four main absorption camps which were spread out all over the country: Ein Shemer, Beit Lid, Rosh Ha'ayin, and Atlit. Some of the immigrants stayed in the camps for up to a year, but most were moved to other arrangements after a month or two. The second placement was usually in a small agricultural community ("*moshav*"), or a somewhat more permanent type of camp in which immigrants were required to work for their sustainment ("*ma'abara*"). These camps consisted of canvas huts or aluminum houses, but often lacked running water, bathrooms, and other sanitation facilities.

During this period, the Israeli government strategically placed immigrants in settlements throughout the country and steered the immigrants into low-skill agricultural jobs for ideological reasons. Many Yemenites were placed in their own communities, but many were mixed with immigrants from all over the world. Rosh Ha'ayin, which was one of the biggest immigrant camps built exclusively for Yemenites, later turned into a permanent immigrant camp ("ma'abara"). Today, it is a thriving city in Israel, still heavily populated by Yemenite immigrants and their descendants.

Without knowing modern Hebrew and generally lacking any understanding of the workings of a modern society and bureaucracy, the Yemenites placed their fate at the mercy of the Israeli government. Perhaps it is also part of their nature, but they believed they were being redeemed, and did as they were told. However, tensions did arise as many Yemenites complained

[9] Robert Maguire and Hank Mullineaux, quoted in Barer (1952).

about being forced into a secular environment. Zameret (2001) reports that about two-thirds of them were sent to agricultural communities associated with the secular Mapai party, while only a third were sent to places associated with the religious parties. The fact that many were sent to secular agricultural communities demonstrates how powerless they were to determine where to live.

Gradually, the Yemenites moved into more permanent housing, or the camp itself transformed into a modern community. Over the years, the adults tended to work in low-skill jobs in manufacturing, agriculture, skilled trades, and cleaning jobs. To this day, Yemenite immigrants and their children complain that they were not treated as well as immigrants from Europe. Indeed, Yemenites have not been immune to discrimination by Israelis of European origin.[10] However, despite being very well integrated into all aspects of society, they still represent a distinctive sector in Israeli society – often living in predominantly Yemenite communities and marrying within their group.

III. The Survey and Data

In order to study the effect of the initial childhood environment on long-term social and economic outcomes, we need three types of information about each Yemenite immigrant: (1) the immigrant's family background in Yemen; (2) where the immigrant was placed upon arrival in Israel and in subsequent years; and (3) the immigrant's social and economic outcomes over the course of almost 60 years. This information does not exist in any existing data set, since governmental surveys do not ask about the person's family background in Yemen and the person's living situation in Israel over 55 years ago. Therefore, we conducted our own survey to obtain this information.

From the Ministry of Interior, we received a list of names and addresses of the entire population of people born in Yemen between 1945 and 1950, and were still alive as of January 2006.[11] We restricted the age range to include only people who immigrated as young children, since the focus of the study is to examine the effect of the early childhood environment. At the

[10] A major source of resentment revolves around the case of the missing Yemenite infants. According to some allegations, hundreds of Yemenite babies who were reported to have died or to have disappeared after their parents came to Israel were actually kidnapped and given or sold for adoption to European-born Israelis and American Jews. A number of Government Commission of Inquiries have investigated these allegations, and confirmed that some cases of missing babies cannot be accounted for, but the actual extent of the phenomenon is still controversial.

[11] In our request to the Ministry of the Interior, we were limited to two dimensions along which to cut the data: year of birth and country of birth. Therefore, our sample included some people who migrated before 1948 or after 1950. These observations were not used in our analysis.

time that the survey was conducted in the summer of 2006, these immigrants were between the ages of 56 and 61.

The list received by the Ministry of Interior included 5,776 individuals. We contracted with a private company (Taldor) to administer a telephone survey to this population. Taldor was able to locate valid telephone numbers for 4,160 individuals on the list. All of the subjects were sent a letter in advance, which explained the purpose of the research and indicated that they would soon be contacted by phone by Taldor. 795 subjects either refused or were unable to answer the survey. Out of the remaining 3,365 respondents, 374 were discarded because they did not match our requirements in terms of place of birth (Yemen), year of birth (between 1945 and 1950), and year of immigration (between 1948 and 1951).[12] This left us with a sample of 2,991 completed surveys. This represents more than 50% of the original list, and a nearly 80% response rate among people whom we were able to contact. Since one of the key variables for our analysis is the childhood environment, we also called back 264 individuals for whom it was difficult to establish the locality in which they grew up based on the original survey. In the end, we were able to establish the childhood environment for 2,927 individuals. The survey questionnaire included more than 130 questions, and usually took between 20 and 30 minutes to complete.[13]

It is important to keep in mind that although we contacted the immigrants themselves, we asked many questions which concern details about the time before they were born (their family background in Yemen) or when they were very young. Therefore, they most likely responded to these questions according to what they were told from their parents as they grew up.[14] For this reason, we often asked multiple questions in order to elicit similar types of information. Since many people could answer some questions and not others, the sample size varies across questions, depending on what they remember or recall being told. We now describe the specific information that we collected concerning the three general areas listed above.

Family Background Information

[12] Of the discarded observations, 158 stated that they were not born in Yemen. Most of the remaining discarded observations did not meet the year of immigration requirement. A small number of observations were discarded because their reported year of birth fell out of the 1945-1950 range, in contradiction with the official birth date available in the Ministry of the Interior data.

[13] We first ran a pilot survey in June 2006 with approximately 100 subjects. We then made some minor modifications to the survey questionnaire, and conducted the full-scale survey between August and October 2006.

[14] The letters sent in advance created a "buzz" among this population, and it is possible that some of the information for our questionnaire was obtained from older siblings who were not part of our sample. We received numerous phone calls from Yemenites who were eager to share their personal stories or to volunteer their help.

For our empirical strategy, we need to know the extent to which the quality of one's childhood environment was correlated with family background characteristics. A typical measure used to capture the family background is the educational attainment of the person's parents. However, modern education was non-existent in Yemen at the time. As a result, we built the questionnaire to acquire information about other relevant variables indicating the person's socio-economic status: the occupation of the head of the household, whether the family owned animals or a farm, whether the family was considered rich or poor, whether the family employed workers, whether the head of the family was a religious or political leader, whether they came from a big city or remote village, and whether they had relatives already in Israel. Descriptive statistics for the key background variables are presented in Table 1.

Table 1 indicates that the head of the household for most immigrants was a craftsman (58 percent) or a merchant (25 percent). A sizable minority came from a major city in Yemen (44 percent) and had relatives already in Israel (40 percent), although we do not know when those relatives arrived. Only two percent came from a female-headed household, while roughly a quarter came from families where the head was a religious or community leader. Thirty percent came from families which were considered "rich," while only 16 percent were considered poor. It is important to note that Table 1 shows that the means across all of the background variables are very similar for boys and girls, which is a result that will be important for us later.

Although some of these variables reflect subjective assessments, there are distinct patterns in the data which support the notion that these variables are accurately reflecting the socio-economic background of Yemenite immigrants. In Appendix Table 1, we regress the variable for whether the person described his or her household as "rich" on several of the other characteristics individually. The table also contains a similar regression where the dependent variable is for being "poor" in Yemen. The results display a consistent pattern: being rich in Yemen is strongly positively correlated with the head being a merchant (not a craftsman or farm worker), living in a city, owning a farm and animals, employing workers, having relatives already in Israel, and being a community or religious leader in Yemen. We find similar but opposite-signed relationship between all these variables and the indicator for being poor. We view these patterns as evidence for the quality of the retrospective information that we collected.

Information about the Childhood Environment

The survey asked each immigrant about their initial placement upon arrival to Israel, and regarding two subsequent placements after that. Specifically, we asked whether the immigrant

was placed in one of the four main absorption camps: Atlit, Bet Lid, Rosh Ha'ayin, or Ein Shemer. If the immigrant was placed in a different location, we asked for the name and location of the place (region of the country), and whether it was in a city, an agricultural community ("moshav"), a communal agricultural community ("kibbutz"), an immigration camp other than the four main ones listed above, or an abandoned Arab village. We also asked if the place had been built exclusively for Yemenite immigrants, and about their living conditions -- whether they slept in a tent or a more permanent house, and whether the house had running water, a bathroom, or electricity. Finally, we asked how long they stayed in that particular place, and whether their family chose to live there or whether they were directed to go there by the government. The same set of information was gathered for the second and third locations they lived in after arriving in Israel. This information is summarized in Appendix Table 2.

Most of the immigrants did indeed start out in one of the four immigrant camps (86 percent). The majority started out in Rosh Ha'ayin (22.3 Percent) and Ein Shemer (46 percent), while 84.5 percent were placed in a location built exclusively for Yemenite immigrants. Almost all of them (98 percent) were sent to their initial placement by the government. Roughly 8 percent are still living in the same place today, while the initial location was also the primary childhood environment (to be defined later) for about 12.5 percent of our respondents. Most of the immigrants moved away from the initial placement after only a few months or a year at most. For those that moved, most of them moved to a place built exclusively for Yemenites (51 percent), which usually was another immigrant camp or a small agricultural community. About 80 percent reported that the government chose the location for them, which again reflects their heavy dependence on the authorities at the time. Half of these people never left the second placement, which demonstrates just how important this location decision was at the time. Relocating was costly, as the Yemenites essentially arrived in Israel with no wealth or physical capital. Note also that the immigrants' second residence was much more geographically dispersed, with most of the immigrants concentrated in the Northern and Central regions, but a substantial minority moving to Jerusalem and the South.

Given that most immigrants left their initial placement and moved to many different kinds of environments, we needed to derive standard measures to characterize the early childhood environment in a consistent way for every child. To do this, we used the information gathered on the duration of stay in each of the first three locations to determine their location as of 1955 (or the closest year that we could confidently place them). It is important to note that some of the respondents did not remember the exact dates of transitions between places of residence, given

that they were young children at the time. Therefore, the interviewers asked for verbal answers (e.g., "less than a year", "a few months," etc.), to the question of how long they stayed in each place, and our research assistants had to use these often vague statements to determine where they were living as of 1955. In order to reduce the uncertainty about some cases, 264 respondents were re-interviewed to clarify the information they provided.

After determining the individual's "childhood location" as of 1955, the list of "childhood places" consisted of 233 different locations. In order to characterize each location in a consistent way, we choose to focus on three broad measures of the environment: a summary of sanitary and other living conditions in the home, the urban/rural status of the locality, and whether the place of residence was a settlement built specifically for Yemenite immigrants. These three measures are meant to capture, respectively, the health, economic, and social infrastructure available to immigrants.

There is a substantial literature that shows the importance of these channels for a variety of labor market and other socioeconomic outcomes. It is well documented that workers in cities earn a substantial wage premium, and there is mounting evidence that this premium is not due just to selectivity, but reflects the notion that cities foster the accumulation of human capital (Glaeser and Maré, 2001; Gould, 2007). Health conditions, and in particular the prevention or eradication of infectious diseases, have been shown to have a large impact on children' educational outcomes (Kremer and Miguel, 2004; Bleakley, 2007). Finally, there is a significant debate about whether ethnic enclaves, and more generally, ghettos are good or bad for immigrants and minorities (Borjas, 1995; Cutler and Glaeser, 1997; Bertrand, Luttmer and Mullainathan, 2000; Edin, Fredriksson and Åslund, 2003). Summary statistics for the three summary measures are presented in the first three columns of Table 2.

The first summary measure is an indicator for whether the respondent lived in a home with all three of the following: running water (48 percent), a bathroom (29 percent), and electricity (31 percent). Only 22 percent had all three amenities in their houses. Overall, most of the immigrants lived in fairly rugged conditions during their childhood. We view this measure as capturing broadly the overall quality of the environment, rather than just a summary measure of sanitary conditions during childhood.

The second measure is simply an indicator for whether the locality of residence was a "city." We define a locality as a city if the place of residence was classified as such in the 1961

Israeli Census, *and* the respondent described it as a city, an "abandoned Arab village," or "other."[15,16] Close to 20 percent of immigrants lived in a city according to this measure.

Our third measure is a self-assessed indicator for whether the place of residence was built exclusively for Yemenite immigrants. This variable is meant to capture the extent to which the place of residence was a segregated ethnic enclave. Many Yemenite immigrants were sent to settle in remote agricultural communities in frontier areas, established in the early 1950s and built exclusively for new immigrants. Others instead lived in segregated neighborhoods within larger towns that were populated exclusively by Yemenite immigrants. We rely on the self-assessed indicator of whether the locality of residence was an ethnic enclave, but the results are not sensitive to different definitions of ethnic enclaves. The table shows that 44 percent of the respondents lived in such an enclave.

Table 2 also shows that the means of the childhood environment variables are roughly similar for men and women, although women tended to report slightly better conditions than men, and these differences are statistically significant.

The correlations between all of the childhood environment measures are presented in the right panel of Table 2. There is a clear pattern that immigrants who lived in cities had better conditions – they were more likely to have a bathroom, running water, and electricity. On the other hand, immigrants who lived in a place built exclusively for Yemenites lived in more rugged living conditions – they were less likely to have a bathroom, electricity, and running water.

Overall, the data reveal that the Yemenites lived in generally sparse conditions, but there is considerable variation to exploit – roughly half of the immigrant children lived without water in their home, or in a new settlement built exclusively for Yemenite immigrants. Roughly a quarter of them lived with electricity, a bathroom, or near a city. Taken as whole, the Yemenites did not wind up in uniform conditions, and this variation will be exploited to test for their long-run effects on various social and economic outcomes.

Social and Economic Outcomes over the Lifetime

[15] The 1961 Census lists the places which were defined as a city in 1954 or 1957. A place is defined as a city if the population was over 10,000, so we considered places as cities if they were characterized as a city in 1957 and had at least 9,500 residents as of 1954.

[16] The indicator for city status is somewhat open to interpretation, since it depends on how a city is defined. However, our findings are robust to multiple ways of defining city status. All our results are essentially unchanged if we exclude from this definition localities that were described as "abandoned Arab village" or "other" by the respondents.

The goal of the paper is to study whether the childhood environment affects a broad array of social and economic outcomes throughout the life of an individual. To this end, we asked each respondent about outcomes related to educational attainment, marriage and fertility, health, employment, political views, religious observance, cultural tastes, and children's educational attainment. Table 3 presents the means for each outcome.

We find that 28 percent of the respondents obtained a high school matriculation degree, and 21.5 percent obtained some sort of post-secondary degree (not necessarily a four-year college). The average years of schooling is 11.6. These statistics, and other measures as we show below, are roughly comparable to those obtained in the 1995 Israeli Census for Yemenites born between 1945 and 1950.[17] This similarity supports the credibility and accuracy of the survey data.

The means for the fertility outcomes show that the average number of children is 4.04, while 93.2% were married at least once (slightly lower than in the Census, where the percentage of people ever married is 96.1). The divorce rate is quite low (a total of 6.25% are currently divorced), and 4.58% are widowed. The mean age at first marriage was 23.8 years old. In terms of health outcomes, 40 percent reported having some health problems, while only 12.5 reported receiving disability income support from the government. The latter number comes from a standard question that is asked on the Israeli Labor Force Survey, and is perhaps a more objective measure of health status. Regarding employment, 68.7 percent of the men and 58.3 of the women were employed at the time of the survey.

The next set of variables in Table 3 captures political and religious attitudes. The political attitudes index ranges from 1 (strongly right wing) to 4 (strongly left), and the religious index ranges from 1 (ultraorthodox) to 5 (secular). The results indicate that the Yemenites are generally on the right end of the political spectrum, and slightly on the religious side. However, the Yemenites are clearly not monolithic in their views -- there appears to be considerable variation in both of these variables. Marrying a fellow Yemenite is very common in our sample, with 72 percent marrying within the group.

We then created two variables that are meant to capture the extent of an immigrant's cultural assimilation, by measuring preferences for typically Yemenite foods or performing artists. We asked each respondent to give a rating from 1 to 5 for nine Israeli performing artists that were very popular over the last few decades. Four of them are of Yemenite origin, four of

[17] In the census for this population, the percentage with a high school diploma is 29.2% (std. error 1.4%), average years of schooling is 10.9 (std. error 0.09), and the percentage with some sort of post-secondary degree is 25.4% (std. error 1.3%).

them are of European descent, and the last one is from a Muslim country other than Yemen. To summarize their tastes in music, we use the first principal component from their responses to all nine singers. This variable gave positive weights to Yemenite singers versus non-Yemenite singers.[18] Therefore, a higher value of this variable is indicative of stronger tastes for their own culture versus the music of other cultures. Similarly, each respondent was asked to rate nine different foods from 1 to 5. Three of the food items are considered traditional Yemenite food, one is considered to be exclusively European, one is considered to be very modern, two are considered mainstream Israeli, and two originate in other Middle Eastern countries. The first principal component of all these nine foods put a higher positive weight on Yemenite food.[19] Therefore, a higher value is indicative of someone who is more loyal to Yemenite food (less assimilated in their tastes in food).

Finally, since Operation Magic Carpet occurred about 60 years ago, we are able to observe outcomes for each immigrant in the next generation. These variables are presented in the last panel of Table 3, and indicate that 77.9 percent of the offspring of these immigrants obtained a high school matriculation degree ("Bagrut"), and 45 percent obtained a college degree. [20]

IV. The Empirical Strategy

Our empirical strategy is to exploit the placement of Yemenite children across different kinds of living conditions in order to identify the causal effect of changing the child's environment on an array of economic and social outcomes measured 60 years later. Our basic regression model explains the outcome of person *i* who lived in a childhood environment with characteristic *j* with the following equation:

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[18] The factor loadings for the principle component of preferences for singers are: Boaz Sharabi (0.081), Ofra Haza (0.354), Shimi Tavori (0.571), Zohar Argov (0.643) (all these four singers are from a Yemenite origin], Chava Alberstein (-0.718), Arik Einstein (-0.756), Yehoram Gaon (0.047), Shlomo Artzi (-0.486) and Haim Moshe (0.528). Before computing the factor loadings on the variables for each singer, the mean rating an individual gave for all singers was subtracted from the rating the individual gave to each particular singer, in order to remove the fixed-effect for individuals who like all singers versus individuals that do not like singers in general. We did this in order to focus on explaining differences in tastes for a given individual across different artists, rather than capturing variation across individuals in tastes for all music in general.

[19] The factor loadings for the first principal component for preferences for different types of food are: jachnun (0.693), schug (0.190), malawach (0.753) [Yemenite], gefilte fish (-0.591) [European], sushi (-0.44) [modern], hummus (-0.032), falafel (0.223) [Israeli], couscous (-0.241), kubeh (-0.476) [Middle Eastern]. Similar to the procedure used for computing the principal component of singers, the overall mean for each respondent for all foods was subtracted from the individual's rating for each particular food before conducting the factor analysis.

[20] The survey collected information on the first three children's gender, age and educational outcomes. Children's educational attainment is calculated using the average of the first three children over age 19 (for high school completion), and the average of the first three children over age 26 (for college completion).

$$\text{Outcome}_{ij} = \lambda_0 + \alpha(\text{Childhood Quality})_j + \lambda_1(\text{Personal and Family Background})_i + u_{ij}$$

The quasi-randomization of immigrant children to settlements and camps throughout Israel should guarantee that the key explanatory variable, childhood quality, is uncorrelated with the residual, thus estimates for the parameter α can be interpreted as causal. Although α, in the presence of pure random assignment, would be identified without further controls for the person's individual and family characteristics, these additional measures are included in order to improve the precision of the estimates. We present results with and without an extensive set of personal and family control variables, and we will argue that the generally small differences between the two sets of estimates substantiate our claim that the Yemenites immigrants were placed into their childhood environment in a way that was uncorrelated with other factors which affect lifelong outcomes, so that our estimates should be given a causal interpretation.

V. Evidence on the Validity of the Identification Strategy: Balancing Tests

The key assumption for the identification strategy is that variation in the quality of the early childhood environment for Yemenite immigrants was indeed random. Anecdotal evidence is consistent with this hypothesis, given the chaotic nature of the country at the time, the strategic policy of scattering immigrants throughout the country, and the homogenous background of the Yemenites themselves (no formal schooling, no understanding of a modern culture, arriving with no belongings, etc). To this day, Yemenite immigrants complain about how the government treated them differently than other immigrant groups. The idea that the Yemenites lacked any significant power of choice is supported in our data by the high rate of immigrants who claim that the government chose their location of residence. This diminishes the possibility of a significant selection problem. Nevertheless, to examine this issue more in depth, we checked whether various characteristics of the respondent's early childhood environment are correlated with his/her family background characteristics in Yemen. If the assignment was indeed random, we would expect to find no significant correlation. This is not necessarily proof of random assignment, as the assumption requires there to be no correlation between the childhood environment and both observable and *unobservable* background characteristics. However, the lack of a significant relationship between the childhood environment and observable characteristics suggests that it is unlikely that such a relationship exists with the unobservable characteristics.

Since the Yemenites were homogenous in terms of parental education, we checked for selection based on observable measures from Yemen such as parental wealth, occupation, location of origin, and whether the father was a religious or community leader. We performed a series of balancing tests, where we regress each family background characteristic on the three summary measures of the environment, and on the three individual components of the "living conditions" measure. The results of these tests are presented in Table 4A.

For each measure of the early childhood environment and each background variable in these tables, we present three numbers. For example, for "Water" and "Household head occupation: merchant" in Table 4A, the three numbers are: 0.045, (0.017), and 0.105. The first number is the coefficient obtained from regressing the background measure ("household head was a merchant") on the childhood environment measure (had running water in the home). The second number in parentheses (0.017) is the standard error from this regression. The third number (0.105), which appears in italics, is the standardized difference in the background variable between the two groups defined by the childhood environment variable (this is sometimes also referred to as the "effect size").[21] In this example, 0.105 is the mean difference in the dependent variable ("household head was a merchant") between the treatment and the control groups (i.e., those with "Water" equal to 1 and zero, respectively), divided by the average standard deviation. Imbens and Wooldridge (2008) recommend using this ratio as a way of assessing whether the covariates are balanced between different treatment groups. They argue that using this ratio, instead of the significance of the regression coefficient, is more appropriate because it is not sensitive to sample size. The regression coefficient will tend to show statistically significant differences when the sample size is large, even if the difference in magnitude between the two groups are not meaningful.[22] Imbens and Wooldridge suggest using 0.25 standard deviations as a "critical value," where values of the standardized difference that exceed this value indicate a severe problem of imbalance in the covariates. With highly imbalanced covariates, results based on simple regression adjusting for the available covariates can be sensitive to the exact functional form of the regression equation.

The background characteristics tested in Tables 4A are classified into three groups. The first group describes the head of the household's occupation, location of residence in Yemen, and

[21] The standardized difference is simply the difference in means of the relevant variable divided by the average standard deviation in the two groups.

[22] The t-statistic, which is equal to the standardized difference multiplied by the square root of the sample size, does increase with the sample size. For a given standardized difference between the two groups in terms of average

whether the family had relatives in Israel. The second group measures family wealth status in Yemen based on indicators of being rich or poor, owning a farm or animals, and employing workers. The third group uses measures of the family's social status, i.e., whether the household head was a religious or a community leader in Yemen.

Overall, many of the regression coefficients in Tables 4A show statistically significant differences, but the standardized differences are generally quite small and not meaningful economically. In Table 4A, only 9 out of the possible 72 standardized differences are larger than 0.25 and none of them is above 0.5. These results indicate that that the background characteristics are generally well balanced with respect to the various treatment indicators (the childhood environment measures). This is particularly true for the measures of whether the family was rich or poor in Yemen, which appear to be completely orthogonal to any of the childhood indicators – according to the regression coefficients and the effect size measures. Only 3 of the 36 regression coefficients are significant at the 10 percent level and none of the effect size ratios are higher than 0.25.

However, there are some discernible patterns in the balancing tables which suggest that the government agencies did make an effort to guide Yemenite immigrants with an agricultural background into rural environments in Israel. In particular, the characteristics that seem to be imbalanced by treatment status are mainly related to whether the family resided in a city in Yemen and whether they owned a farm or animals. The coefficients indicate that immigrants from a farming background in Yemen had a higher probability to be placed in a farming community in Israel, and urban residents in Yemen were more likely to end up in a city in Israel. Whether the head of household is a community or a religious leader also appears to be somewhat imbalanced, being negatively correlated with all of the treatment indicators. The sign of these imbalances is counter-intuitive, since we would expect community leaders to find their way into better living conditions in Israel. However, based on the effect size ratios, these imbalances are not meaningful in magnitude.

In Table 4B, we present a set of balancing tests for specific subsamples. Since most of our analysis examines males and females separately, the first two columns of the table present balancing tests for the "all conditions" variable separately by gender. We find that the extent of imbalance is fairly similar for the two genders, but again, it is never very substantial: in the female sample only one (the ‘major city’ indicator) out of the 12 effect size ratios is larger than

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covariate values, a larger t-statistic just indicates a larger sample size, and therefore in fact an easier problem in terms

0.25, and 3 out of the 12 in the male sample.[23] As we will later see, this relative similarity in the balancing tests between genders stands in contrast to substantial gender differences in the relationship between the treatment and the outcome variables.

Since there appears to have been some effort to guide Yemenites with a farming background into agricultural communities in Israel, Table 4B presents balancing tests within three different sub-samples which are characterized by the extent of the family's farming background in Yemen. We attempted to identify families with and without an agricultural background, using the indicators of whether a family owned a farm in Yemen and whether it lived in a major city. We divided the sample into three groups as follows: farm owners who lived outside city (noted as "rural"), city dwellers who did not own any land (noted as "urban") and the rest (noted as "others"). The first group clearly had farming/agricultural activities in Yemen, the second clearly did not, and the third is a mixed group.

The balancing tests for these three samples on the "all conditions" indicator are presented in columns 4-6 of Table 4B and the full balancing estimates on all childhood measures are presented in Appendix Table 3c, 3d, and 3f. The results for all three samples show a significantly weakened pattern of correlations between the background characteristics and the various measures of treatment, a conclusion based both on the parameter estimates and the effect size ratios. For example, in the rural and "other" samples, only 4 of the 60 estimates (in each sample) are significantly different from zero and only two of the effect size ratios are larger than 0.25. We will show below that the outcome results obtained from these three remarkably balanced samples are very consistent with those obtained using the full sample, which supports our argument that the treatment variable is not correlated with unobserved factors which affect later outcomes.

Overall, the evidence is reasonably consistent with the idea that the process of placing immigrants into the four camps and subsequently re-locating them over time occurred in a rather random fashion. There is some evidence that authorities may have tried to match the occupational background of the families with their occupation in Israel, but there is no indication that authorities directed high ability or wealthy immigrants into certain locations. In any case, in the outcome regressions, we present estimates with and without controlling for the background variables from Yemen, and show that the estimates are not sensitive to these controls. In addition, we will show that the overall results are very similar to those obtained within the three balanced sub-samples which were defined by the degree of the family's farming background in Yemen.

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of finding credible estimators for average treatment effects.

These patterns indicate that there was no strong pattern of selection into childhood environmental conditions which seems to be affecting the estimated results on future outcomes.

VI. Empirical Results

We first present (in Table 5) the estimated effects of the childhood environment on the long-run education outcomes, for males and females separately. We report results using the three summary measures of the environment as treatment indicators, plus results using the three individual components of the living conditions indicator. In the top panel of the table, each row presents the coefficients for each treatment indicator from separate regressions. The bottom panel presents coefficients for the three treatment indicators after including all three in the same regression.

In Table 5, we present estimates for two specifications. The "limited controls" specification includes only dummies for birth year (1945-1950), immigration year (1949-1951), and whether or not the person was in the sample of 264 individuals that were re-interviewed. The "full controls" specification adds four dummy variables indicating which of the four camps the immigrant was initially placed in, an indicator for whether the individual already had relatives in Israel when he/she arrived, and indicators for the family background in Yemen: whether the household was rich or poor; whether it owned a farm, owned livestock, or employed workers; whether it lived in a major city in Yemen; whether the head of household was a religious or a community leader in Yemen; and the head of the household's occupation – dummies for merchants, craftsmen, construction workers, academic professions (mostly teachers and rabbis), free professions (legal officials, ritual scribes, healers) and public sector workers. To preserve as large a sample as possible, we set missing values for each of the background variables to zero, and included dummies for missing status.

A. The Effect on Educational Outcomes

We look at three educational outcomes: matriculation status in high school (an indicator of whether an individual passed all of the high school matriculation exams), an indicator of successful completion of some type of post secondary schooling (not necessarily an undergraduate degree), and the number of years of schooling. We first focus on the top part of the table, which shows the effect of the different treatment indicators from separate regressions. The

[23] The full set of balancing tests for males and females separately are presented in Appendix Tables 3a and 3b.

results indicate that a more modern childhood environment had a positive and significant effect on the educational attainment for females but not for males. The signs and the size of the coefficients for all of the alternative measures of the quality of the early environment present a consistent picture. The estimated coefficients in the "full controls" specification are almost always somewhat lower than the coefficients in the specification with only limited controls. However, the change in the coefficient is typically small (on the order of 10-15%), confirming that the various treatment measures are reasonably balanced in terms of the observable background characteristics of the immigrants. This pattern tends to hold throughout the analysis, so we focus our discussion on the results with the full set of control variables.

The finding of differential effects for males and females reinforces the notion that the effects reported can be interpreted as causal. There would be no reason to observe a different effect of the environment on males and females if it was all due to endogenous sorting, especially given the fact that we did not observe meaningful gender differences in the balancing tests. (Table 4B actually shows stronger sorting for males than for females).

According to Table 5, growing up in a house with running water, WC, or electricity increases the probability that a female obtains a matriculation diploma by between 5.7 and 8.6 percentage points. The estimated effect of having all three is 8.8 percentage points, which implies a 30 percent increase in the matriculation rate relative to the 26.7 percent matriculation rate observed among females. The estimated effect of growing up in a “city” environment is similar: an increase of 6.3 percentage points. On the other hand, living in an ethnic enclave lowers the high school matriculation rate by 4.1 percentage points.

The early environment also affects females’ probability of obtaining a post-secondary degree and total years of schooling. For example, having all three conditions increases the probability of obtaining a post-secondary degree by 6.2 percentage points relative to the overall rate of 22.2 percent, and it increases years of schooling by 0.6 years relative to the observed mean of 11.4 years. The former effect is particularly large in magnitude. The effects of living in a city and in an ethnic enclave are smaller and not always statistically significant.

The three summary measures of the environment are highly correlated, so the similarity in the results is not surprising. In the bottom panel of the table, we report the results when all three variables are entered simultaneously in order to shed some light on the mechanisms behind the adverse effect of a bad childhood environment. Interestingly, we now find that most of the effect comes from the living conditions variable. This is consistent with the findings in the development literature that health conditions can have large effects on children's educational outcomes. On the

other hand, the findings also suggest that urban environments and ethnic enclaves do not have any beneficial or detrimental effects *per se*, once living conditions are controlled for.

Relative to the large estimated effects for females, we find much weaker or no effects at all for males. For example, the estimate for "all conditions" on having a high school matriculation diploma is 0.013 (s.e. 0.032) versus 0.088 (s.e 0.028) for women. The effect of living in a city or outside of an ethnic enclave has an effect on matriculation outcomes that is larger and comparable to the effect for females, though not always precisely estimated. The estimated effects of the early conditions on total years of schooling and post-secondary degree for men are even negative (though not significant) in comparison to the positive and large estimated effects for women. This is a striking contrast, and is a pattern which tends to repeat itself throughout the rest of the paper. It is worth noting that a similar pattern was found by Kling, Liebman, and Katz (2007), who found that being in a safer neighborhood had beneficial effects on education, risky behavior, and health for girls, but not for boys.

Robustness Checks

The results presented in Table 5 were not sensitive to several variations in specification. First, including an additional control variable for whether the family placement in the childhood locality was determined by the government (which was true for about 70 percent of the sample) left all the parameter estimates almost unchanged, largely because this variable is uncorrelated with any of the childhood environment measures. Second, we tried an intermediate specification which controlled only for the background variables which were perfectly balanced according to Table 4A. The point estimates from this specification were almost always half-way between the estimates obtained from the 'limited controls' and those obtained based on the 'full controls' specification in Table 5. This pattern suggests that controlling for the seemingly imbalanced characteristics changed the point estimates by 5-7 percent at most and in some cases even left them unchanged. We also tried a specification which included indicators for whether the "childhood place" was the first, second or third location of the family after arriving to Israel. These indicators obviously could be endogenous, especially the probability of moving to a third location, as they reflect family relocation decisions. However, the estimates presented in Table 5 are very similar when these controls are added.[24] Finally, it is worth noting that the unreported coefficient estimates on the variables which tend to be imbalanced (occupation, city status, and

[24] These results are not presented in the paper but are available from the authors.

farming background variables) are almost always insignificant. This finding reinforces our argument that the treatment variable is uncorrelated with factors which affect later outcomes, despite being somewhat correlated with family background in Yemen.

To further examine whether our results are driven by selection, we re-estimated the models using the three subsamples defined by the extent of the family's farming background (described above in Table 4B). Table 6 presents results obtained from the "rural" sample (panel A), the "urban" sample (panel B) and the "other" sample (panel C). Recall that in comparison to the full sample, these samples were well balanced in terms of the characteristics of the family in Yemen. To save space, we present only the estimated effect of the three measures when each is used in a separate regression, with the "full controls" specification. We should note, however, that almost all the estimates from these samples are not sensitive at all to adding the controls, reflecting the perfect balancing shown in Table 4B.

The pattern of results in Table 6 is identical to that of Table 5: positive estimated effects on female for the "all conditions" measure in all three samples and no significant effect on any of the male education outcomes in two of the three samples. Overall, the point estimates in the "rural" sample are larger than those from the other two samples. For example, the effect on the female matriculation rate is 0.166 (significant at the 10% significant level) versus 0.082 in the "urban" sample and 0.072 in the "others" sample. Overall, the estimates in Table 6 are less precise than those in Table 5, most likely because of the smaller sample sizes in comparison to the full sample. The "rural" female and male samples include only 213 and 280 observations, respectively. The "urban" female and male samples include 280 and 273 observations, respectively. The "others" sample is the largest, 965 female and 878 male observations, and this sample's point estimates are not very different from the respective estimates from the full sample. However, the estimates based on the three samples do not point to much heterogeneity in the treatment effect. These results strengthen our confidence that the detrimental effect of a bad childhood environment on girls' educational outcomes is causal and not due to any omitted variables or endogenous placement.

B. The Effect on Other Outcomes

The Effect on Marriage and Fertility Outcomes

We consider three marriage and fertility related outcomes: age at first marriage, currently divorced, and total number of children. The mean age of marriage is 22.5 for women and 25.1 for men. Almost 7 percent of women in the sample are divorced versus 5.7 percent among men. The

mean number of children among women and men in the sample is almost identical, four children per family.

Table 7 presents the estimated effects for men and women separately on these three outcomes. For brevity, we present only the results for the three summary measures, and from now on we focus only on the specification with the full set of control variables. The results are only marginally different from the estimates without control variables. Again, significant effects are found for women and no effect is found for men. For women, a childhood environment with better sanitary conditions tends to raise the age at first marriage and the divorce rate (perhaps an indicator of women's independence and increased bargaining power within the household), but lowers their fertility. The coefficient on whether the place was built for Yemenites has the expected sign, but is significant only for the fertility outcome, while growing up in a city has no effect on any of the outcomes. The effects for "all conditions" are not only significant, but substantial in magnitude: having all three sanitary amenties during childhood increases a woman's age of marriage by two-thirds of a year, raises the divorce rate by almost 5 percentage points, and lowers the number of children by about one-fifth of a child. When all three indicators are included together, we find that most of the effect on age at first marriage and on divorce is coming through the living conditions variable, but it is the ethnic enclave indicator that drives the variation in fertility. Overall, the results indicate that a more established childhood environment helped women to achieve outcomes that conform less to traditional gender roles within the family

For men, we find mostly insignificant results for the living conditions and the ethnic enclave indicators, but growing up in an urban environment significantly raises the age at first marriage and lowers fertility. The urban effect remains significant even in the regressions with all treatments included simultaneously. These results suggest that the larger choice set in urban marriage markets may have enabled Yemenite men to deviate more from the norm of marrying at a young age and having a large family. We later will see that growing up in a city also lowered the probability of men marrying within the Yemenite community.

The Effect on Health Outcomes and Employment

Table 8 studies the effect of the early childhood environment on health outcomes and employment. These outcomes are recorded at the time of the interview, when respondents were in their late 50s and 60s. The ability to study the effect of the childhood environment on these very long-term outcomes is one of the distinguishing features of this study.

We use two measures of health status: an indicator of whether the individual has health problems (self-assessed); and an indicator for whether the individual receives disability income support from the National Social Security System, which can be viewed as a more objective measure of health. Forty percent of men and women report that they have health problems. Fourteen percent of men and 11 percent of women receive disability income. The labor market outcome that we study is whether the respondent was employed at the time of the interview in the summer of 2006.

Many of the health related estimates in Table 8 are small and not significantly different from zero, both for men and women, painting a somewhat mixed picture about the relationship between the quality of the early childhood environment and health outcomes later in life. For women, there is evidence that growing in an urban environment had a positive effect on health outcomes, even when holding constant the other indicators of the quality of the environment. The effect is non-negligible: growing up in a city lowers the probability of reporting a health problem by 6.2-8.2 percentage points. On the other hand, neither the summary measure of living conditions, nor any of the individual measures appear to have any effect on health outcomes. For men, the pattern is reversed: poor living conditions lower self-reported health status by 4.8-6.8 percentage points, but living in a city has no effect on health outcomes. Of course, it is possible that poor sanitary conditions early in life had an effect primarily on child mortality, and we only observe a sample of individuals who reached an advanced age.[25]

For women, we find evidence that growing up in a more established environment had a positive effect on employment fifty years later. Living in a household with all three sanitary conditions raises the employment rate by 6.8 – 7.5 percentage points for women. This finding is remarkable given that employment is a very long-term outcome, and many mediating factors could have intervened to weaken the impact of living conditions during childhood. For men, the results show again that there is no effect of having better childhood conditions on current employment. The fact that we do find some residual effect for women, which is not negligible in magnitude, is quite notable.

C. The Effect on Political Attitudes, Religiosity, and Social Assimilation

[25] Unfortunately, we did not have information on deceased individuals, and we did not feel comfortable asking the respondents about siblings who died as children because of the sensitivity of the subject matter, especially given the controversy surrounding the case of the "missing Yemenite children." See also footnote 9.

Table 9 analyzes the effect of the early childhood environment on political and religious attitudes, and on three measures of social assimilation. The first column in the table shows that the early childhood environment has no effect on the political attitudes of either men or women.[26] The second column, on the other hand, shows that good living conditions and living outside of a Yemenite enclave strongly reduce the probability of being religious for women. The two effects are statistically significant even when the variables are entered simultaneously. For men, the probability of being religious is negatively affected by childhood living conditions, but positively affected by living in a city.

We then examine three indicators of the extent of social integration into Israeli society. The first is an indicator for being married to a spouse of Yemenite origin (i.e., a spouse either born in Yemen or whose father was born in Yemen). Seventy-one percent of the men and 73 percent of the women married within their group. This probability increases substantially for both men and women if they grew up in a Yemenite enclave, but the effect for women is larger by about 60 percent. Interestingly, growing up in a city reduced the probability of marrying within the Yemenite community for men, but had no effect on women. These results suggest that women were less likely to take advantage of the increased matching opportunities available in cities, and were more likely to be shielded by their families. It appears that growing up in an immigrant enclave slows down the process of assimilation into society at large.

Finally, we show that the early childhood environment affected the individual's tastes in food and music. In particular, both men and women who grew up in an immigrant enclave were more likely to develop a loyalty to Yemenite cultural tastes, and less likely to develop worldly tastes in music and food. These results join the growing literature on the importance of culture in shaping economic outcomes (Guiso, Sapienza and Zingales, 2006; Bisin and Verdier, 2000; Bisin, Topa and Verdier, 2004; Fernández, Fogli and Olivetti, 2004; Fernández and Fogli, 2005; Alesina and Giuliano, 2007), and contribute to the understanding of the dynamics of cultural assimilation. They are consistent with the theoretical predictions and the empirical findings of Lazear (1999), who documents that immigrant cultural assimilation (as measured by language proficiency) is inversely related to the relative size of the immigrant community.[27] Our results show that this prediction extends also to other dimensions of cultural assimilation, as well as to

[26] To facilitate the interpretation of the coefficients, the models in columns 1 and 2 were estimated as a linear regression, even though the dependent variable is ordered and discrete. Results using an ordered probit are essentially identical.

the generation who migrated at a very young age, and thus did not face language problems. Importantly, our results show that the transmission of cultural traits and preferences across generations is not fixed and immutable, but is also mediated by the outside environment.

D. The Effect on Human Capital of the Second Generation

In this section, we assess whether the childhood environment affects not just the individual's outcomes, but also the outcomes of the next generation. We focus on the human capital of the first three children because other children are most likely too young to complete their schooling at the time of the survey. Also, we want to compare the outcomes of children across families, and therefore, not controlling for family size may confound the estimated treatment effect on human capital with the treatment effect on family size.

In the survey, we asked each respondent for the education levels of their first three children. Specifically, we know whether each child completed high school and whether he or she obtained a B.A. degree from a university or other institution of higher education.We then averaged this information over all three children aged 19 and above (for high school completion) and aged 26 and above (for college completion). [28] For this outcome, we estimate reduced form equations focusing on the three summary measures of the early childhood environment. We consider this "reduced form" in the sense that we do not estimate the distinct channels through which there might be an effect – such as through observed effects on the parents (perhaps their level of human capital) or unobserved channels (through the quality of the spouse if there is assortative matching based on different childhood conditions).

The structure of Table 10 is similar to that of the other tables. In the top panel, we show the effect of the three childhood conditions on the respondent's children's educational outcomes, estimated from separate regressions. The bottom panel presents the results when all three conditions are entered in the regression simultaneously. The sample includes all female respondents in the first two columns, and all male respondents in the next two columns. We also present the results for the entire sample of respondents in the last two columns of the table. This additional column is important because children's educational outcomes are likely to be affected by the human capital of both parents, so that looking at only one parent's childhood conditions may yield imprecise estimates. In addition to the usual controls, the regressions also control for

[27] Similarly, Fernández and Fogli (2005) find that the effect of cultural proxies on the work and fertility behavior of second-generation immigrant women is amplified the greater the tendency of immigrant groups to cluster in ethnic neighborhoods.

the gender of the children (female children have significantly better educational outcomes), and the average age of the children (which has little effect on outcomes).

We find that parents growing up in better childhood environments had children with slightly higher educational outcomes. This is true of both female and male parents: the effect of the environment on high school completion rates is higher in the male sample, but the effect on college completion rates is higher in the female sample. When we pool all respondents together, we obtain more precise estimates and find that good early living conditions of the parents raised children's high school and college completion rates by 3.2 and 3.3 percentage points respectively. The size of this estimate is about one third of the size of the effect of the environment on the parents' educational outcomes, which is consistent with much of the evidence on the intergenerational correlation in economic status.

VII. Additional Evidence from Israeli Census Data

In this section, we use data from the 1961 Israeli Census to corroborate the findings described above. The advantage of the 1961 Census data is that the information available is less likely to be contaminated by recall bias, and it allows us to investigate more deeply some of the outcomes, such as human capital accumulation, that were determined early in life.

One of the disadvantages of the Census data is that we only have limited information on the initial location of the Yemenite immigrants. However, we can approximate the childhood environment using information on the locality of residence in 1956, five years before the Census was conducted. Specifically, we use as our measure of the environment an indicator for whether the 1956 locality of residence was a rural locality (a large village, a small village, a collective moshav or a kibbutz) built for immigrants (i.e. established after 1948). Using the same year of birth and year of immigration restrictions as we used in the main analysis (i..e. year of birth between 1945 and 1950, year of immigration between 1948 and 1951) we find that 27% of respondents lived in such a locality in 1956.

Table 11 presents a series of balancing tests, where we regress a number of background characteristics of the two parents on an indicator for whether the locality of residence in 1956 was a rural locality built for immigrants. The first column presents the balancing tests for the sample of all Yemenite immigrants born between 1945 and 1950 and immigrated between 1948 and 1951. The second and third columns look at males and females separately. Relative to the data

[28] Because of compulsory military service, most Israelis complete their college education no earlier than age 25.

collected for the main analysis, the 1961 Census allows us to include some additional variables, such as the parents' age and illiteracy status, and the proportion of children born to the mother abroad who did not survive.

The results are in many ways similar to those obtained using our own retrospective survey. The likelihood of living in an isolated rural locality was higher for children whose fathers were craftsmen in Yemen, and lower for children whose fathers were employed in commerce. Father's education and illiteracy status were uncorrelated with the type of locality in 1956, but children with illiterate mothers and mothers with high child mortality rates were more likely to live in relatively weak environments. One important feature that jumps out from this data is that younger parents were substantially more likely to live in rural localities, presumably because younger workers could be more productive in the agricultural sector.

Overall, the pattern that emerges is that, as in our main analysis, locality of residence was somewhat correlated with background characteristics. However, this correlation was likely small and not economically important. The last two columns of Table 11 show the balancing tests for all other immigrants (column 4) and for all immigrants from Middle Eastern countries. The contrast in the relationship between father's years of schooling and type of locality is especially striking: fathers of other immigrants living in rural localities had between 0.6 and 0.9 fewer years of schooling relative to fathers living in other localities. Also, the effect of having an agricultural background on the probability of living in a rural locality was larger for other immigrants than it was for Yemenites. These findings suggest that the pattern of selection into localities based on observed (and possibly unobserved) characteristics was weaker for Yemenites than it was for other immigrants.

In Table 12 we examine the effect of living in a rural locality in 1956 on the education and employment outcomes of Yemenite immigrants. The Census asked questions about enrollment in school, completed years of schooling and employment status only of people aged 14 and above. Therefore, we can investigate the effect of the environment only for the older cohorts among the population of interest (those born between 1945 and 1947). The first two rows of the table present the means of the dependent variable by type of locality in 1956. For females, the results are strikingly similar to those obtained in the main analysis. Living in a rural environment in 1956 reduces enrollment rates of 14-16 year old girls by almost 16 percentage points. This difference falls slightly when we control for year of birth and year of immigration dummies (third row of the table), and is further reduced when we control for all of the parental background variables described in Table 11 (fourth row of the table), but is still large in

magnitude and statistically significant at the ten percent level. This same finding is confirmed when we use completed years of schooling as the dependent variable: girls in rural localities had completed on average one full year of schooling less than those in other localities. Lower female enrollment rates in rural localities are compensated by substantially higher employment rates. More than two thirds of girls in rural localities worked for pay in the week prior to the census, as opposed to barely 12 percent in other localities. For boys, we find some evidence that enrollment rates in rural localities were higher, but the difference is not robust to the specification used, and there is no evidence for a rural-urban gap in completed years of schooling and in employment rates.

VIII. Discussion

Both the main analysis using our own survey data and data from the 1961 Census show that Yemenite girls who grew up in less advanced environments ended up dropping out of school earlier and accumulating less human capital. On the other hand, there is no evidence that boys in less advanced environments attained lower educational outcomes. What then can explain this pattern?

Some simple explanations can be readily ruled out. For example, a simple labor supply based explanation, whereby high wages draw young girls out of school and into the labor force in rural areas is not plausible, because wages were generally higher in urban areas than in rural areas. Similarly, it is unlikely that girls were substituting for their mother's labor supply in rural areas, because older women's labor supply was very close to zero in both urban and rural areas. Lastly, we can also rule out that lower enrollment rates were due to lower health in rural areas, since this is inconsistent with the higher employment rates.

A potential explanation for the larger effect of the initial environment for women is based on a simple human capital model, where the costs and benefits of attending school were different for boys and girls in less established areas. Moreover, these differences may have been exacerbated by the stricter enforcement of traditional cultural norms in rural areas and in ethnic enclaves.

The costs of acquiring human capital was substantially higher in rural areas, as students were often required to travel several miles to neighboring villages or towns to attend high school. Boys and girls do not necessarily have the same costs of education, even if they attend the same schools. Schools outside the neighborhood may be perceived as prohibitively costly for girls to attend because parents are uncomfortable with girls traveling far from home unsupervised. This

would be especially true in enclaves, where the traditional cultural norms are more strictly enforced and women's independence was more likely to be frowned upon.

Similarly, there may also have been substantial gender asymmetries in the returns to human capital. In the traditional Yemenite society, it was extremely rare for women to work outside of the household, so the returns to girls' investment in human capital were very low. This would not necessarily be the case for boys, who instead were expected to become the main breadwinners in the household, and therefore were required to acquire at least the basic skills necessary for success in Israeli society. Traditional gender norms were probably easier to enforce in closely-knit Yemenite enclaves (see also the evidence on the effect of the environment on cultural tastes in Table 10). Moreover, the physical isolation of many of the agricultural communities in which the Yemenites lived also meant that young girls were less likely to be exposed to more modern cultural influences. All these factors combine to generate a substantial shortfall in the educational attainment of young girls living in less modern environments. Additional evidence for gender asymmetries in the effect of the environment on human capital accumulation can be gleaned from modern data as well. Frisch and Zussman (2009) find that "age-at-immigration" had a much larger detrimental impact on schooling attainment for girls versus boys who immigrated to Israel from Arab countries in the early 1950s. A similar pattern is found for the Yemenite immigrants: using data from the 1995 Israeli Census, we regressed completed years of schooling on age at immigration for Yemenite immigrants from 1948-1951 who immigrated before the age of 10: the estimated coefficient is -0.36 (s.e. 0.03) for women and -0.16 (s.e. 0.03) for men. Immigrating at an older age is in some ways similar to growing up in a more difficult environment, because younger children acquire language skills more easily and therefore face lower obstacles in school (Bleakley and Chin, 2004). Hence, the fact that age at immigration has a much larger effect on women than on men is consistent with the notion that Yemenite parents attempted to compensate for weak external factors by investing in the human capital of their sons, but not that of their daughters.

IX. Conclusion

This paper exploits a unique situation where 50,000 Yemenites were airlifted to Israel in 1949 over the course of a few months. The Yemenites lacked any formal schooling, and literally arrived to Israel without any money or belongings. Being completely unfamiliar with the environment they suddenly found themselves in, the Yemenites essentially followed the

instructions of governmental authorities who scattered them across the country for strategic reasons.

As a result, this operation presents a rare opportunity to estimate the effect of the childhood environment on a large array of social and economic outcomes. Our focus on long-term outcomes lasting almost 60 years, including the educational attainment of the next generation, is a key distinguishing feature of the paper.

Our analysis indicates that children who were placed in a more established environment (living in homes with good sanitary and infrastructure conditions) were more likely to obtain higher education, marry at an older age, have fewer children, and be more assimilated into Israeli society. There is also evidence that the early childhood environment affected health and employment outcomes, but the results are not as sharp. We also find an effect on the next generation – children who lived in a more modern environment grew up to have children who had higher educational attainment. Most of these effects are much more pronounced for girls than boys. We obtain a similar pattern of results when the childhood environment is defined by city-status or being a settlement built exclusively for Yemenite immigrants. But, after separating the impact of all three measures, it appears that the sanitary and infrastructure conditions affected economic outcomes, while living in a Yemenite enclave affected cultural outcomes.

Although we do find that the Yemenite immigrants from families with a farming background in Yemen were more likely to find themselves in farming communities in Israel during their childhood, there are several reasons to believe that this kind of sorting is not responsible for the results summarized above: (1) the size of this selection process appears to be modest and there does not appear to be any sorting on a variety of other important background variables; (2) the families of boys and girls were sorted similarly, so if sorting is producing our results, we should obtain similar results for boys versus girls, but we do not; (3) there does not appear to be any sorting within the sample that had an agricultural background versus those that did not, and the results are similar within each group as well; (4) the results are similar with and without controlling for a variety of background variables; and (5) although there is modest sorting on having an agricultural background, this background characteristic does not significantly affect long-term outcomes, so there was no sorting on variables which determine outcomes later on in life. All of this evidence together supports a causal interpretation for the estimated effects summarized above.

Our finding that the environment has a stronger effect on girls versus boys highlights the need to perform a separate analysis for each gender. Grouping them together is likely to produce

much more modest effects. Also, the pattern of our findings is similar to Kling, Liebman, and Katz (2007), who show that being in a safer neighborhood had beneficial effects on education, risky behavior, and health for girls, but not for boys. Stronger effects for girls versus boys is also found when examining 1961 Census data, or the effect of "age-at-immigration" for immigrants to Israel during this time period from Yemen and other Arab countries. We conjecture that this pattern is due to parents investing more in their sons' human capital to compensate for adverse environmental conditions, especially in societies in which women's returns to human capital are expected to be low. However, further research is probably warranted to understand more in depth the sources and mechanisms of these differences.

In addition to shedding light on the long-run impact of the childhood environment, our results have implications for immigration and welfare policies. All industrialized countries have seen a sharp increase in immigration rates from the developing world in the past two decades. Some of these immigration waves have gaps between the immigrants and natives similar in magnitude to those between the Yemenites and native Israelis in the 1950's. Our results suggest that encouraging lower income families and immigrants to locate into more established neighborhoods could have long-lasting effects.

References

Alaska Air Website. http://www.alaskaair.com/as/www2/company/History/MagicCarpet.asp.

Alesina, Alberto and Giuliano, Paola. "The Power of the Family." NBER Working Paper 13051, April 2007.

Angrist, Joshua D. and Lang, Kevin. "Does School Integration Generate Peer Effects? Evidence from Boston's Metco Program," *American Economic Review*, 94(5), December 2004, 1613-1634.

Arnott, Richard J. and Rowse, John. "Peer Group Effects and Educational Attainment." *Journal of Public Economics*, April 1987, 32(3), pp. 287-305.

Barer, Shlomo. *The Magic Carpet*, Harper & Brothers, New York, 1952.

Bertrand, Marianne; Luttmer, Erzo F.P. and Mullainathan, Sendhil. "Network Effects and Welfare Cultures." *Quarterly Journal of Economics*, August 2000, 115(3), pp. 1019-1055.

Bisin, Alberto and Verdier, Thierry. "'Beyond the Melting Pot': Cultural Transmission, Marriage, and the Evolution of Ethnic and Religious Traits." *Quarterly Journal of Economics*, 115(3), August 2000, 955-88.

Bisin, Alberto; Topa, Giorgio and Verdier, Thierry. "Religious Intermarriage and Socialization in the United States." *Journal of Political Economy*, 112(3), June 2004, 615-64.

Bleakley, Hoyt. "Disease and Development: Evidence from Hookworm Eradication in the American South." *Quarterly Journal of Economics*, February 2007.

Bleakley. Hoyt and Chin, Aimee. "Language Skills and Earnings: Evidence from Childhood Immigrants." *Review of Economics and Statistics* 86, May 2004, 481-496.

Borjas, George J. "Ethnicity, Neighborhoods, and Human Capital Externalities." *American Economic Review*, June 1995, 85(3), pp. 365-390.

Brooks-Gunn, Jeanne; Duncan Greg J.; Kato Klebanov, Pamela and Sealand, Naomi. "Do Neighborhoods Influence Child and Adolescent Development?" *American Journal of Sociology*, September 1993, 99 (2), pp. 353–395.

Currie, Janet. "Early Childhood Education Programs." *Journal of Economic Perspectives,* Spring 2001, 15(2), pp. 213-238.

Currie, Janet and Thomas Duncan. "Early Test Scores, School Quality and SES: Longrun Effects on Wage and Employment Outcomes," *Research in Labor Economics,* 2001, vol. 20, pp. 103-132.

Cutler, David M. and Glaeser, Edward L. "Are Ghettos Good or Bad?" *Quarterly Journal of Economics*, August 1997, 112(3), pp. 827-872.

Edin, Per-Anders; Fredriksson, Peter, and Åslund, Olof. "Ethnic Enclaves and the Economic Success of Immigrants – Evidence from a Natural Experiment," *Quarterly Journal of Economics,* February 2003, 118(1), pp. 329-357.

Fernández, Raquel and Fogli, Alessandra. "Culture: An Empirical Investigation of Beliefs, Work and Fertlity." NBER Working Paper 11268, 2005.

Fernández, Raquel; Fogli, Alessandra and Olivetti, Claudia. "Mothers and Sons: Preference Formation and Female Labor Force Participation." *Quarterly Journal of Economics*, 119(4) November 2004, 1249-99.

Frisch, Roni and Noam Zussman. "The Causal Effect of Parents' Childhood Environment and Education on Their Children's Education," Bank of Israel Working Paper, 2009.

Garces, Eliana; Thomas, Duncan and Currie, Janet. "Longer Term Effects of Head Start," *American Economic Review,* December 2002, 92(4), pp. 999-1012.

Glaeser, Edward L. and David C. Maré. "Cities and Skills," *Journal of Labor Economics*, April 2001, 19(2), pp. 316-342.

Goering, J.M. and J. D. Feins (eds.), *Choosing a Better Life: Evaluating the Moving to Opportunity Social Experiment*. Washington, DC: Urban Institute Press, 2003.

Gould, Eric D. "Cities, Workers, and Wages: A Structural Analysis of the Urban Wage Premium." *Review of Economic Studies*, April 2007, 74(2), pp. 477–506.

Gould, Eric D.; Lavy, Victor and Paserman, M. Daniele. "Immigrating to Opportunity: Estimating the Effects of School Quality Using a Natural Experiment on Ethiopians in Israel." *Quarterly Journal of Economics*, May 2004, 119(2), pp. 489-526.

Gould, Eric D.; Lavy, Victor and Paserman, M. Daniele. "Does Immigration Affect the Long-Term Educational Outcomes of Natives? Quasi-Experimental Evidence." *Economic Journal*, forthcoming.

Goux, Dominique and Maurin, Eric. "Close Neighbours Matter: Neighbourhood Effects on Early Performance at School," *Economic Journal*, October 2007, 117 (523), 1193-1215.

Guiso, Luigi; Sapienza, Paola and Zingales, Luigi. "Does Culture Affect Economic Outcomes?" *Journal of Economic Perspectives*, 20(2), Spring 2006, 23-48.

Hanushek, Eric, John F. Kain, and Steven G. Rivkin, "New Evidence About Brown V. Board of Education: The Complex Effects of School Racial Composition on Achievement," NBER Working Paper No. 8741, 2002.

Heckman, James J, "Policies to Foster Human Capital," *Research in Economics*, LIV (2000), 3-56.

Hoxby, Caroline M. "Peer Effects in the Classroom: Learning from Gender and Race Variation." NBER Working Paper No. 7867, August 2000.

Imbens, Guido M. and Wooldridge, Jeffrey M. "Estimation of Average Treatment Effects under Unconfoundedness." NBER Working Paper 14251, August 2008.

Jacob, Brian A. "Public Housing, Housing Vouchers and Student Achievement: Evidence from Public Housing Demolitions in Chicago," *American Economic Review*, March 2004, 94(1), , pp. 233-258.

Jencks, Christopher, and Susan E. Mayer, "The Social Consequences of Growing up in a Poor Neighborhood," in Laurence E. Lynn, Jr. and Michael G. H. McGeary, eds., *Inner-City Poverty in the United States* (Washington, DC: National Academy Press, 1990), pp. 111–186.

Katz, Lawrence F.; Kling, Jeffrey R. and Liebman, Jeffrey B. "Moving to Opportunity in Boston: Early Results from a Randomized Mobility Experiment," *Quarterly Journal of Economics* May 2001, 116(2), pp. 607-654.

Kling, Jeffrey R.; Liebman, Jeffrey B. and Katz, Lawrence F. "Experimental Analysis of Neighborhood Effects," *Econometrica*, January 2007, 75(1), pp. 83–119.

Kling, Jeffrey R.; Ludwig, Jens and Katz, Lawrence F. "Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Voucher Experiment," *Quarterly Journal of Economics*, February 2005, 120 (1), 87–130.

Kremer, Michael and Edward Miguel. "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities," *Econometrica,* January 2004, 72(1), pp. 159-217.

Krueger, Alan B. and Whitmore, Diane M. "The Effect of Attending a Small Class in the Early Grades on College-Test Taking and Middle School Test Results: Evidence from Project STAR," *Economic Journal,* January 2001, 111(468), pp. 1-28.

Lazear, Edward. "Culture and language." *Journal of Political Economy*, 107(6) Part 2, December 1999, S95-126.

Ludwig, Jens; Duncan, Greg J. and Hirschfield, Paul. "Urban Poverty and Juvenile Crime: Evidence from a Randomized Housing-Mobility Experiment," *Quarterly Journal of Economics*, May 2001, 116 (2), pp. 655–679.

Oreopoulos, Philip, "The Long-Run Consequences of Living in a Poor Neighborhood," *Quarterly Journal of Economics*, November 2003, 118(4), pp. 1533-1575.

Sacerdote, Bruce, "Peer Effects with Random Assignment: Results for Dartmouth Roommates," *Quarterly Journal of Economics*, May 2001, 116(2), pp. 681-704.

Sachar, Howard M. *A History of Israel: From the Rise of Zionism to Our Time*. New York: Knopf, 1979.

Sanbonmatsu, Lisa; Kling, Jeffrey R.; Duncan, Greg J. and Brooks-Gunn, Jeanne. "Neighborhoods and Academic Achievement: Results from the MTO Experiment," *Journal of Human Resources*, Fall 2006, 41(4), pp. 649-691.

Weinberg, Bruce A.; Reagan, Patricia B. and Yankow, Jeffrey J. "Do Neighborhoods Affect Hours Worked: Evidence from Longitudinal Data," *Journal of Labor Economics*, October 2004, 22 (4), pp. 891-924.

Zameret, Zvi. "The Integration of Yemenites into Israeli Schools," *Israel Studies* 6 (3), Fall 2001, 1-25.

Zimmerman, David J., "Peer Effects in Academic Outcomes: Evidence from a Natural Experiment," *Review of Economics and Statistics*, February 2003, 85(1), pp. 9-23.

Table 1: Descriptive Statistics of Family and Personal Characteristics

	Full Sample	Female	Male
Measure	Mean	Mean	Mean
Family Background			
Head of household's occupation: merchant	0.246 (2720)	0.259 (1336)	0.233 (1384)
Head of household's occupation: craftsman	0.578 (2720)	0.585 (1336)	0.572 (1384)
Location in Yemen: major city	0.435 (2339)	0.456 (1135)	0.416 (1204)
Family has relatives living in Israel	0.401 (2656)	0.384 (1316)	0.419 (1340)
Head of household is female	0.021 (2897)	0.021 (2897)	0.011 (1440)
Family Wealth Status in Yemen			
Rich	0.310 (2785)	0.310 (2785)	0.309 (1390)
Poor	0.166 (2785)	0.166 (2785)	0.172 (1390)
Owned farm	0.386 (2424)	0.386 (2424)	0.408 (1238)
Owned animals	0.696 (2565)	0.696 (2565)	0.721 (1320)
Employed workers	0.250 (2615)	0.250 (2615)	0.256 (1311)
Family Social Status in Yemen			
Head of household is religious leader	0.288 (2795)	0.288 (2795)	0.277 (1406)
Head of household is community leader	0.255 (2745)	0.255 (2745)	0.251 (1389)

Notes: Numbers of observations are presented in parentheses. Sample size varies by indicators, reflecting differences in number of missing values. All variables are indicators that assume a 1 or 0 value.

Table 2: Descriptive Statistics and Correlation Matrix of Various Measures of the Early Childhood Environment

	Full Sample	Female	Male	Correlation matrix					
Measure	Mean	Mean	Mean	Water	WC	Electricity	All conditions	City	Place was built for Yemenites
Water	0.477	0.515	0.439	1.000	-	-	-	-	-
	(2744)	(1362)	(1382)						
WC	0.285	0.308	0.261	0.638	1.000	-	-	-	-
	(2799)	(1404)	(1395)						
Electricity	0.311	0.342	0.280	0.675	0.669	1.000	-	-	-
	(2764)	(1377)	(1387)						
All conditions	**0.220**	**0.241**	**0.198**	0.571	0.855	0.802	**1.000**	**-**	**-**
	(2809)	**(1410)**	**(1399)**						
City	**0.203**	**0.213**	**0.194**	0.280	0.377	0.287	**0.336**	**1.000**	**-**
	(2870)	**(1434)**	**(1436)**						
Place was built for Yemenites	**0.444**	**0.443**	**0.445**	-0.245	-0.314	-0.256	**-0.298**	**-0.340**	**1.000**
	(2794)	**(1379)**	**(1415)**						

Notes: Number of observations are presented in parentheses. Standard deviations are presented in brackets. The variable "All conditions" is a dummy variable equal to 1 if the respondent lived in a home with running water, WC and electricity during the childhood period.
All correlation coefficients have a p-value lower than 0.001.

Table 3: Descriptive Statistics of Outcomes Variables

	Full Sample	Female	Male
Measure	Mean	Mean	Mean
Education Outcomes			
High school matriculation diploma	0.279	0.267	0.291
	(2882)	(1458)	(1424)
Years of Schooling	11.613	11.397	11.832
	(2908)	(1466)	(1442)
Post Secondary Diploma	0.215	0.222	0.208
	(2873)	(1452)	(1421)
Marriage and Fertility			
Age at First Mariiage	23.838	22.537	25.126
	(2798)	(1392)	(1406)
Divorced	0.063	0.069	0.057
	(2922)	(1471)	(1451)
Number of Children	4.037	4.001	4.072
	(2866)	(1429)	(1437)
Health and Employment			
Has Health Problems	0.399	0.402	0.396
	(2874)	(1454)	(1420)
Receiving Disability Income Support	0.125	0.110	0.140
	(2876)	(1458)	(1418)
Currently Employed	0.635	0.583	0.687
	(2908)	(1464)	(1444)
Attitudes and Assimilation			
Political Affiliations (right=1 left=4)	1.619	1.589	1.648
	(2130)	(1031)	(1099)
Religiosity Level (religious=1 secular=5)	2.837	2.803	2.871
	(2910)	(1469)	(1441)
Married to Yemenite	0.720	0.733	0.707
	(2911)	(1464)	(1447)
Preference for Yemenite foods	0.000	-0.141	0.150
	(2269)	(1171)	(1098)
Preference for Yemenite singers	0.000	-0.117	0.120
	(2762)	(1398)	(1364)
Children's Outcomes			
Children's Bagrut Average	0.779	0.788	0.770
	(2765)	(1373)	(1392)
Children's BA Average	0.450	0.455	0.446
	(2639)	(1315)	(1324)

Notes: Numbers of observations are presented in parentheses. Sample size varies by indicators, reflecting differences in number of missing values.

Table 4A: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables, All Sampl

		Treatment indicators					
	Mean	Water	WC	Electricity	All Conditions	City	Place Was Built for Yemenites
DEPENDENT VARIABLES							
Family Background							
Head of household's occupation: merchant	0.246	0.045* (0.017) *0.105*	0.077* (0.019) *0.175*	0.073* (0.018) *0.168*	0.090* (0.020) *0.204*	0.126* (0.020) *0.283*	-0.033* (0.017) *-0.076*
Head of household's occupation: craftsman	0.578	-0.034* (0.020) *-0.069*	-0.045* (0.021) *-0.090*	-0.073* (0.021) *-0.148*	-0.074* (0.023) *-0.149*	-0.108* (0.024) *-0.218*	0.024 (0.019) *0.048*
Location in Yemen: major city	0.435	0.109* (0.021) *0.221*	0.191* (0.023) *0.389*	0.137* (0.023) *0.278*	0.202* (0.025) *0.413*	0.224* (0.025) *0.460*	-0.097* (0.021) *-0.197*
Family has relatives living in Israel	0.401	0.015 (0.020) *0.031*	0.056* (0.022) *0.113*	0.046* (0.021) *0.093*	0.073* (0.023) *0.149*	0.077* (0.024) *0.157*	-0.072* (0.020) *-0.146*
Head of household is female	0.021	0.000 (0.006) *0.003*	0.000 (0.006) *-0.001*	-0.001 (0.006) *-0.005*	-0.003 (0.007) *-0.021*	-0.009 (0.007) *-0.069*	0.000 (0.005) *0.001*
Family Wealth Status in Yemen							
Rich	0.310	-0.018 (0.018) *-0.038*	0.027 (0.020) *0.058*	-0.006 (0.019) *-0.014*	0.048* (0.022) *0.103*	0.010 (0.022) *0.022*	-0.007 (0.018) *-0.015*
Poor	0.166	0.011 (0.015) *0.029*	-0.026* (0.016) *-0.072*	0.010 (0.016) *0.026*	-0.027 (0.017) *-0.074*	-0.010 (0.018) *-0.026*	0.005 (0.014) *0.013*
Owned farm	0.386	-0.078* (0.020) *-0.160*	-0.120* (0.022) *-0.252*	-0.093* (0.022) *-0.194*	-0.117* (0.024) *-0.246*	-0.103* (0.024) *-0.216*	0.074* (0.020) *0.151*
Owned animals	0.696	-0.083* (0.019) *-0.180*	-0.136* (0.020) *-0.292*	-0.124* (0.020) *-0.266*	-0.164* (0.022) *-0.348*	-0.155* (0.023) *-0.330*	0.083* (0.019) *0.182*
Employed workers	0.250	0.026 (0.018) *0.060*	0.034* (0.019) *0.078*	0.026 (0.019) *0.058*	0.045* (0.021) *0.101*	0.026 (0.021) *0.059*	-0.029* (0.017) *-0.067*
Family Social Status in Yemen							
Head of household is religious leader	0.288	-0.039* (0.018) *-0.087*	-0.047* (0.019) *-0.105*	-0.043* (0.019) *-0.097*	-0.049* (0.021) *-0.109*	-0.061* (0.021) *-0.138*	0.019 (0.018) *0.041*
Head of household is community leader	0.255	-0.029* (0.017) *-0.068*	-0.044* (0.019) *-0.102*	-0.048* (0.018) *-0.111*	-0.046* (0.021) *-0.108*	-0.069* (0.021) *-0.162*	0.029* (0.017) *0.066*

Notes: Entries in the table represent the coefficients from separate regressions of the relevant dependent variable on each one of the treatment indicators. Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Table 4B: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables, Specific Samples

		Treatment indicator and sample				
	Mean	All Conditions, females only	All Conditions, males only	All Conditions, RURAL	All Conditions, URBAN	All Conditions, OTHERS
DEPENDENT VARIABLE						
Family Background						
Head of household's occupation: merchant	0.246	0.103* (0.028) *0.231*	0.073* (0.029) *0.168*	0.025 (.069) *.061*	0.112* (.060) *.240*	.042 (.039) *.098*
Head of household's occupation: craftsman	0.578	-0.094* (0.032) *-0.189*	-0.055 (0.034) *-0.111*	-0.000 (.088) *-.001*	-0.122* (.065) *-.245*	-.023 (.046) *-.047*
Location in Yemen: major city	0.435	0.186* (0.035) *0.378*	0.216* (0.035) *0.442*	- 	.000 (.000) 	0.116* (.050) *.241*
Family has relatives living in Israel	0.401	0.092* (0.032) *0.187*	0.057* (0.034) *0.115*	-0.121 (.090) *-.251*	.101 (.065) *.202*	.052 (.047) *.106*
Head of household is female	0.021	-0.011 (0.011) *-0.067*	0.004 (0.007) *0.033*	0.022 (.015) *.193*	.015 (.019) *.101*	-.011 (.009) *-.215*
Family Wealth Status in Yemen						
Rich	0.310	0.074* (0.030) *0.157*	0.020 (0.032) *0.042*	-0.055 (.089) *-.110*	.079 (.059) *.170*	.026 (.041) *.058*
Poor	0.166	-0.038 (0.023) *-0.107*	-0.013 (0.026) *-0.035*	0.063 (.041) *.238*	-.069 (.055) *-.164*	-.042 (.036) *-.111*
Owned farm	0.386	-0.101* (0.033) *-0.215*	-0.129* (0.035) *-0.269*	- 	.000 (.000) 	-.012 (.049) *-.027*
Owned animals	0.696	-0.120* (0.031) *-0.251*	-0.207* (0.031) *-0.446*	-0.095* (.041) *-.342*	-0.238* (.065) *-.501*	-0.107* (.043) *-.234*
Employed workers	0.250	0.056* (0.029) *0.127*	0.033 (0.031) *0.075*	-0.107 (.089) *-.219*	0.131* (.058) *.289*	.025 (.038) *.062*
Family Social Status in Yemen						
Head of household is religious leader	0.288	-0.060* (0.029) *-0.134*	-0.039 (0.030) *-0.087*	0.020 (.082) *.043*	-.011 (.055) *-.025*	-.056 (.042) *-.129*
Head of household is community leader	0.255	-0.047 (0.028) *-0.108*	-0.047 (0.030) *-0.110*	-0.064 (.085) *-.138*	-.052 (.055) *-.125*	-.028 (.040) *-.067*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Table 5: Estimates of the Effects of the Childhood Environment on Education Outcomes

	Female						Male					
	High School Matriculation		Post Secondary Diploma		Years of Schooling		High School Matriculation		Post Secondary Diploma		Years of Schooling	
Treatment Measure	Limited Controls	Full Controls	Limited Controls	Full Controls	Limited Controls	Full Controls	Limited Controls	Full Controls	Limited Controls	Full Controls	Limited Controls	Full Controls
A: Treatment measures included separately (each row a separate regression)												
Water	0.066*	0.060*	0.053*	0.053*	0.592*	0.492*	0.038	0.022	0.025	0.016	0.062	-0.059
	(0.024)	(0.024)	(0.023)	(0.023)	(0.183)	(0.179)	(0.025)	(0.025)	(0.023)	(0.023)	(0.191)	(0.191)
WC	0.103*	0.086*	0.066*	0.063*	0.889*	0.690*	0.036	0.014	0.012	0.000	0.029	-0.159
	(0.026)	(0.026)	(0.024)	(0.025)	(0.193)	(0.194)	(0.028)	(0.029)	(0.025)	(0.026)	(0.213)	(0.217)
Electricity	0.065*	0.057*	0.045*	0.048*	0.542*	0.430*	0.048*	0.035	0.010	0.001	0.057	-0.056
	(0.025)	(0.025)	(0.024)	(0.024)	(0.189)	(0.187)	(0.028)	(0.028)	(0.025)	(0.025)	(0.211)	(0.213)
All conditions	0.108*	0.088*	0.069*	0.062*	0.842*	0.607*	0.039	0.013	0.001	-0.013	0.096	-0.102
	(0.028)	(0.028)	(0.026)	(0.026)	(0.208)	(0.208)	(0.031)	(0.032)	(0.028)	(0.029)	(0.235)	(0.240)
City	0.069*	0.063*	0.018	0.021	0.690*	0.563*	0.067*	0.047	0.050*	0.044	0.346	0.159
	(0.029)	(0.029)	(0.027)	(0.027)	(0.216)	(0.215)	(0.031)	(0.033)	(0.028)	(0.029)	(0.233)	(0.242)
Place was built for Yemenites	-0.057*	-0.041*	-0.038*	-0.031	-0.503*	-0.299*	-0.055*	-0.045*	-0.042*	-0.038*	0.014	0.122
	(0.024)	(0.025)	(0.023)	(0.023)	(0.180)	(0.180)	(0.025)	(0.025)	(0.022)	(0.023)	(0.186)	(0.189)
B: Estimates of the regression in which the All conditions, City and Place was built for Yemenites treatments are put in together												
All conditions	0.096*	0.079*	0.081*	0.075*	0.761*	0.578*	0.012	-0.005	-0.025	-0.035	-0.016	-0.164
	(0.032)	(0.032)	(0.030)	(0.030)	(0.235)	(0.232)	(0.033)	(0.034)	(0.030)	(0.030)	(0.252)	(0.253)
City	0.011	0.022	-0.023	-0.008	0.414*	0.407*	0.047	0.031	0.042	0.036	0.452*	0.287
	(0.033)	(0.033)	(0.031)	(0.031)	(0.244)	(0.242)	(0.035)	(0.036)	(0.031)	(0.032)	(0.263)	(0.268)
Place was built for Yemenites	-0.022	-0.012	-0.018	-0.010	-0.162	-0.040	-0.038	-0.035	-0.034	-0.032	0.104	0.156
	(0.028)	(0.028)	(0.026)	(0.026)	(0.205)	(0.204)	(0.027)	(0.027)	(0.024)	(0.024)	(0.203)	(0.205)

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. The limited controls specification includes birth year dummies (1945-1950), immigration year dummies (1949-1951) and a dummy whether the person was re-interviewed. The full controls specification includes in addition first immigration camp dummies and background in Yemen dummies: rich in Yemen, poor in Yemen, head of household (HH) was a merchant, HH was a craftsmen, HH was a builder, HH had an academic profession, HH had a free profession, HH worked in the public sector, HH was a religious leader, HH was a community leader, family owned a farm, family owned animals, family employed workers, family lived in a major city and family had relatives already living in Israel.

Table 6: Estimates of the Effects of the Childhood Environment on Education Outcomes - Specific Subsamples

Treatment Measure	Females					
	High School Matriculation	Post Secondary Diploma	Years of Schooling	High School Matriculation	Post Secondary Diploma	Years of Schooling
	Full Controls	Full Controls	Full Controls	Full Controls	Full Controls	Full Controls
A: Land owners outside of major cities in Yemen						
All conditions	0.166*	0.142	0.824	-0.124	-0.112	-0.783
	(.098)	(.090)	(.665)	(.090)	(.085)	(.721)
City	0.233*	0.155*	0.579	-0.031	-0.007	-0.482
	(.096)	(.088)	(.660)	(.090)	(.082)	(.696)
Place was built for Yemenites	-0.101	-0.102	-0.337	-0.034	-0.050	0.422
	(.075)	(.069)	(.524)	(.063)	(.060)	(.494)
B: Major city dwellers who did not own land						
All conditions	0.082	0.022	1.226*	0.011	-0.012	-0.035
	(.069)	(.065)	(.437)	(.072)	(.030)	(.248)
City	0.140*	0.035	0.917*	0.127*	0.047	0.222
	(.071)	(.067)	(.448)	(.069)	(.030)	(.248)
Place was built for Yemenites	-0.110	-0.024	-0.885*	-0.175*	-0.042*	0.077
	(.067)	(.063)	(.426)	(.074)	(.024)	(.196)
C: Others						
All conditions	0.077*	0.056*	0.347	0.072*	0.025	0.001
	(.036)	(.034)	(.286)	(.043)	(.038)	(.316)
City	0.011	-0.013	0.373	0.062	0.038	0.450
	(.037)	(.035)	(.292)	(.045)	(.039)	(.320)
Place was built for Yemenites	0.010	0.017	0.044	-0.031	-0.014	0.117
	(.031)	(.029)	(.240)	(.033)	(.029)	(.242)

Notes: Entries in the table represent the coefficients from *separate* regressions of the outcome variable on the treatment measure. Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. All specifications include birth year dummies (1945-1950); immigration year dummies (1949-1951); a dummy for whether the person was re-interviewed; first immigration camp dummies; rich in Yemen and poor in Yemen dummies; head of household (HH) was a merchant, a craftsman, a construction worker, had an academic profession, had a free profession, or worked in the public sector dummies; HH was a religious leader; HH was a community leader; family owned a farm; family owned animals; family employed workers; family lived in a major city and family had relatives already living in Israel.

Table 7: Estimates of the Effects of the Childhood Environment on Marriage and Fertility Outcomes

	Female			Male		
Treatment Measure	Age at First Marriage	Divorced	Number of Children	Age at First Marriage	Divorced	Number of Children
A: Treatment measures included separately (each row a separate regression)						
All conditions	0.641*	0.048*	-0.205*	0.001	0.015	-0.050
	(0.330)	(0.016)	(0.111)	(0.305)	(0.016)	(0.125)
City	0.189	-0.009	-0.144	0.785*	0.026	-0.218*
	(0.347)	(0.017)	(0.116)	(0.304)	(0.017)	(0.126)
Place was built for Yemenites	-0.338	-0.022	0.239*	0.115	-0.020	0.091
	(0.293)	(0.014)	(0.098)	(0.238)	(0.013)	(0.098)
B: Estimates of the regression in which the All conditions, City and Place was built for Yemenites treatments are put in together						
All conditions	0.701*	0.054*	-0.092	-0.128	0.008	0.023
	(0.372)	(0.018)	(0.125)	(0.316)	(0.017)	(0.132)
City	-0.116	-0.031	-0.129	1.022*	0.007	-0.161
	(0.391)	(0.019)	(0.130)	(0.334)	(0.018)	(0.140)
Place was built for Yemenites	-0.386	-0.017	0.206*	0.417*	-0.015	0.061
	(0.327)	(0.016)	(0.110)	(0.252)	(0.014)	(0.106)

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. All specifications include birth year dummies (1945-1950); immigration year dummies (1949-1951); a dummy for whether the person was re-interviewed; first immigration camp dummies; rich in Yemen and poor in Yemen dummies; head of household (HH) was a merchant, a craftsman, a construction worker, had an academic profession, had a free profession, or worked in the public sector dummies; HH was a religious leader; HH was a community leader; family owned a farm; family owned animals; family employed workers; family lived in a major city and family had relatives already living in Israel.

Table 8: Estimates of the Effects of the Childhood Environment on Health and Employment Outcomes

Treatment Measure	Female			Male		
	Has Health Problems	Receiving Disability Income Support	Currently Employed	Has Health Problems	Receiving Disability Income Support	Currently Employed
A: Treatment measures included separately (each row a separate regression)						
All conditions	0.024	-0.013	0.072*	-0.048	0.020	-0.033
	(0.032)	(0.020)	(0.032)	(0.034)	(0.025)	(0.033)
City	-0.062*	-0.029	0.034	-0.013	-0.027	-0.060*
	(0.033)	(0.021)	(0.033)	(0.036)	(0.025)	(0.033)
Place was built for Yemenites	-0.032	0.006	0.009	0.005	-0.001	0.004
	(0.028)	(0.018)	(0.028)	(0.028)	(0.020)	(0.026)
B: Estimates of the regression in which the All conditions, City and Place was built for Yemenites treatments are put in together						
All conditions	0.030	-0.004	0.075*	-0.068*	0.014	-0.006
	(0.036)	(0.023)	(0.035)	(0.037)	(0.026)	(0.035)
City	-0.082*	-0.031	0.027	0.012	-0.033	-0.064*
	(0.037)	(0.024)	(0.037)	(0.039)	(0.028)	(0.037)
Place was built for Yemenites	-0.042	-0.001	0.033	-0.003	-0.006	-0.010
	(0.031)	(0.020)	(0.031)	(0.029)	(0.021)	(0.028)

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. All specifications include birth year dummies (1945-1950); immigration year dummies (1949-1951); a dummy for whether the person was re-interviewed; first immigration camp dummies; rich in Yemen and poor in Yemen dummies; head of household (HH) was a merchant, a craftsman, a construction worker, had an academic profession, had a free profession, or worked in the public sector dummies; HH was a religious leader; HH was a community leader; family owned a farm; family owned animals; family employed workers; family lived in a major city and family had relatives already living in Israel.

Table 9: Estimates of the Effects of the Childhood Environment on Attitudes and Assimilation Outcomes

	Female					Male				
Treatment Measure	Political Affiliations (right=1 left=4)	Religiosity Level (religious=1 secular=5)	Married to Yemenite	Preferences for Yemenite Food	Preferences for Yemenite singers	Political Affiliations (right=1 left=4)	Religiosity Level (religious=1 secular=5)	Married to Yemenite	Preferences for Yemenite Food	Preferences for Yemenite singers
A: Treatment measures included separately (each row a separate regression)										
All conditions	-0.063	0.128*	-0.030	-0.073	-0.106*	0.008	0.179*	0.010	-0.113	0.000
	(0.059)	(0.066)	(0.028)	(0.072)	(0.063)	(0.059)	(0.069)	(0.032)	(0.077)	(0.074)
City	-0.053	-0.023	-0.041	-0.107	-0.136*	-0.050	-0.052	-0.077*	-0.070	-0.062
	(0.063)	(0.069)	(0.029)	(0.073)	(0.066)	(0.061)	(0.070)	(0.032)	(0.080)	(0.074)
Place was built for Yemenites	-0.029	-0.131*	0.096*	0.146*	0.173*	-0.041	-0.044	0.062*	0.040	0.121*
	(0.054)	(0.058)	(0.024)	(0.063)	(0.055)	(0.048)	(0.055)	(0.025)	(0.063)	(0.058)
B: Estimates of the regression in which the All conditions, City and Place was built for Yemenites treatments are put in together										
All conditions	-0.069	0.129*	-0.006	-0.026	-0.047	0.022	0.207*	0.039	-0.094	0.044
	(0.068)	(0.075)	(0.031)	(0.080)	(0.071)	(0.064)	(0.074)	(0.034)	(0.082)	(0.079)
City	-0.033	-0.107	-0.005	-0.046	-0.063	-0.069	-0.167*	-0.067*	-0.032	-0.038
	(0.072)	(0.078)	(0.033)	(0.084)	(0.074)	(0.067)	(0.078)	(0.036)	(0.089)	(0.084)
Place was built for Yemenites	-0.047	-0.129*	0.092*	0.123*	0.144*	-0.037	-0.050	0.054*	0.008	0.116*
	(0.061)	(0.065)	(0.027)	(0.071)	(0.062)	(0.051)	(0.059)	(0.027)	(0.068)	(0.063)

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All regressions include the full set of controls (listed in the notes to Table 6). Factor loadings for the principal component of Preferences for Food items are: Falafel: 0.223 Melawach: 0.753 Couscous: -0.241 Hummus: -0.032 Gefilte fish: -0.591 Shug: 0.190 Cube: -0.476 Jachnun: 0.693 Sushi: -0.44. Factor loadings for the principal component of prefrences for singers are: Yehoram Gaon: 0.047 Haim Moshe: 0.528 Chava Alberstein: -0.718 Arik Einstein: -0.756 Boaz Sharabi: 0.081 Shimi Tavori: 0.571 Shlomo Artzi: -0.486 Ofra Haza: 0.354 Zohar Argov: 0.643.

Table 10: Estimates of the Effects of the Childhood Environment on Children's Education Outcomes

Treatment Measure	Female respondents		Male respondents		All respondents	
	Completed high school (average of first three children)	College degree (average of first three children)	Completed high school (average of first three children)	College degree (average of first three children)	Completed high school (average of first three children)	College degree (average of first three children)
A: Treatment measures included separately (each row a separate regression)						
All conditions	0.021	0.038	0.047*	0.027	0.032*	0.033*
	(0.021)	(0.026)	(0.024)	(0.029)	(0.016)	(0.019)
City	0.031	0.021	0.012	0.002	0.021	0.010
	(0.022)	(0.027)	(0.024)	(0.029)	(0.016)	(0.020)
Place was built for Yemenites	0.009	-0.014	-0.003	0.001	0.002	-0.005
	(0.018)	(0.023)	(0.019)	(0.023)	(0.013)	(0.016)
B: Estimates of the regression in which the All Three Treatment Measures are put in together						
All conditions	0.023	0.035	0.039	0.026	0.030*	0.031
	(0.024)	(0.029)	(0.025)	(0.032)	(0.017)	(0.021)
City	0.043*	0.010	0.001	-0.007	0.022	0.001
	(0.025)	(0.031)	(0.027)	(0.033)	(0.018)	(0.022)
Place was built for Yemenites	0.035*	-0.001	0.002	-0.001	0.017	0.000
	(0.021)	(0.026)	(0.020)	(0.025)	(0.014)	(0.018)

Notes: Standard deviations are presented in parenthesis. Entries in the table represent the coefficients from separate regressions. All specifications control for the gender and age of the children. in addition, they include birth year dummies (1945-1950); immigration year dummies (1949-1951); a dummy for whether the person was re-interviewed; first immigration camp dummies; rich in Yemen and poor in Yemen dummies; head of household (HH) was a merchant, a craftsman, a construction worker, had an academic profession, had a free profession, or worked in the public sector dummies; HH was a religious leader; HH was a community leader; family owned a farm; family owned animals; family employed workers; family lived in a major city and family had relatives already living in Israel.

Table 11: Balancing Tests using 1961 Census Data

Dependent variable:	All Yemenites	Yemenites, Males	Yemenites, Females	All other immigrants	All other Middle eastern immigrants
Father's years of schooling	-0.190	-0.166	-0.213	-0.872*	-0.575*
	(0.411)	(0.499)	(0.571)	(0.189)	(0.262)
Father illiterate	0.038	-0.024	0.096*	0.054*	0.034
	(0.044)	(0.059)	(0.056)	(0.017)	(0.025)
Father's age	-2.547*	-1.797	-3.257*	-0.957*	-1.596*
	(0.883)	(1.160)	(1.215)	(0.370)	(0.536)
Father's occupation abroad: commerce	-0.104*	-0.104*	-0.105*	0.032	-0.014
	(0.039)	(0.054)	(0.049)	(0.021)	(0.029)
Father's occupation abroad: agriculture	0.031	0.029	0.033	0.063*	0.045*
	(0.024)	(0.044)	(0.033)	(0.012)	(0.014)
Father's occupation abroad: craftsman	0.108*	0.100	0.118*	-0.046*	0.016
	(0.047)	(0.063)	(0.059)	(0.020)	(0.028)
Mother illiterate	0.071*	0.081*	0.062*	0.139*	0.114*
	(0.021)	(0.026)	(0.029)	(0.021)	(0.027)
Mother's age	-1.528*	-1.901*	-1.167	-0.979	-0.973*
	(0.684)	(0.904)	(0.915)	(0.309)	(0.450)
Mother's child mortality rate (abroad)	0.057*	0.071*	0.044	0.049*	0.076*
	(0.032)	(0.043)	(0.041)	(0.011)	(0.017)

Notes: Sample includes all respondents in the 1961 Israeli Census born between 1945 and 1nd 1950, and immigrated to Israel between 1948 and 1951. The numbers in the table represent the coefficient in a regression of the relevant dependent variable on an indicator for whether the locality of residence in 1956 was a rural locality built for immigrants. Standard deviations in parentheses.

Table 12: The Effect of Living in a Rural Locality Built for Immigrants on
Education and Employment Outcomes of Yemenite Immigrants, 14-16 Years Old, 1961 Census Data

	Females			Males		
	Dependent variable:			Dependent variable:		
	Enrolled in School	Completed Years of Schooling	Worked last week	Enrolled in School	Completed Years of Schooling	Worked last week
Mean of the dependent variable in rural localities built for immigrants	*0.627* *(.487)*	*7.132* *(2.074)*	*0.377* *(.488)*	*0.766* *(.427)*	*8.095* *(1.489)*	*0.270* *(.447)*
Mean of the dependent variable in other localities	*0.785* *(.412)*	*8.201* *(1.289)*	*0.116* *(.321)*	*0.682* *(.467)*	*7.875* *(1.843)*	*0.232* *(.423)*
Adjusted difference, limited set of controls	-0.148* (0.059)	-0.990* (0.212)	0.244* (0.050)	0.092 (0.065)	0.290 (0.256)	0.049 (0.063)
Adjusted difference, full set of controls	-0.109* (0.062)	-0.897* (0.221)	0.255* (0.054)	0.147* (0.066)	0.300 (0.265)	0.076 (0.063)

Notes: Sample includes all respondents in the 1961 Israeli Census born in Yemen between 1945 and 1nd 1950, and immigrated to Israel between 1948 and 1951, and who were between ages 14 and 16 at the time of the 1961 Israeli Census. The numbers in the table represent the estimated coefficient on an indicator for whether the locality of residence in 1956 was a rural locality built for immigrants. Standard deviations in parentheses. Limited set of controls: year of birth dummies and year of immigration dummies. Full set of controls: year of birth dummies, year of immigration dummies, father's age, father's years of schooling, whether the father is illiterate, dummies for father's occupation abroad, dummy for no father present, mother's age, whether the mother is illiterate, mother's infant mortality rate, an indicator for whether the mother's infant mortality rate is missing, and an indicator for no mother present.

Appendix Table 1: Family Background Variables and Economic Status in Yemen

	Dependent Variable		
	1 if Rich	1 if Poor	Sample Size
Family Background			
Head of household's occupation: merchant	0.139* (0.021)	-0.074* (0.016)	2617
Head of household's occupation: craftsman	-0.137* (0.018)	0.026 (0.014)	2617
Location in Yemen: major city	0.062* (0.020)	-0.005 (0.015)	2273
Family has relatives living in Israel	0.123* (0.019)	-0.053* (0.015)	2555
Head of household is female	-0.093 (0.061)	0.126* (0.049)	2762
Family Wealth Indicators in Yemen			
Owned farm	0.243* (0.019)	-0.166* (0.016)	2349
Owned animals	0.123* (0.020)	-0.115* (0.016)	2482
Employed workers	0.444* (0.019)	-0.194* (0.017)	2523
Family Social Status in Yemen			
Head of household is religious leader	0.116* (0.020)	-0.042* (0.016)	2680
Head of household is community leader	0.216* (0.020)	-0.102* (0.016)	2639

Notes: Each coefficient comes from a separate regression whereby the variable indicated in at the top of the column is regressed on the variable in each row. Sample size varies by indicators, reflecting differences in number of missing values. All variables are indicators that assume a 1 or 0 value.

Appendix Table 2: Descriptive Statistics of the First Three Locations Upon Arriving to Israel - All Sample

Measure	First Placement	Second Placement	Third Placement
	Percentage of Sample	Percentage of Sample	Percentage of Sample
Location			
Atlit (immigrant camp)	13.66		
	(2892)		
Rosh Haayin (immigrant camp)	22.27	8.72	3.77
	(2892)	(2683)	(1539)
Ein Shemer (immigrant camp)	46.02		
	(2892)		
Beit Lid (immigrant camp)	4.05		
	(2892)		
Other	14.00		
	(2892)		
Type of Settlement (Self Defined)			
Immigrant camp (or *ma'abara*)	95.00	42.15	17.98
	(2740)	(2607)	(1513)
Agricultural community (*moshav* or *kibbutz*)	2.15	28.19	33.64
	(2740)	(2607)	(1513)
City	0.88	12.24	30.87
	(2740)	(2607)	(1513)
Other	1.97	17.42	17.52
	(2740)	(2607)	(1513)
Other Location Characteristics			
Government chose the location	98.12	79.79	39.48
	(2767)	(2429)	(1454)
Place was built for Yemenites	84.51	51.37	27.58
	(2330)	(2488)	(1494)
Never left the placement	8.11	43.01	63.20
	(2898)	(2674)	(1538)
Location was childhood place	12.46	52.27	35.27
	(2858)	(2858)	(2858)
Location Region			
North region	65.02	28.01	18.93
	(2867)	(2635)	(1516)
Center and Tel Aviv region	31.50	41.37	59.70
	(2867)	(2635)	(1516)
Jerusalem region	2.55	16.85	11.61
	(2867)	(2635)	(1516)
South region	0.94	13.78	9.76
	(2867)	(2635)	(1516)

Notes: Numbers of observations are presented in parentheses. Sample size varies by indicators, reflecting differences in number of missing values.

Appendix Table 3a: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables, Female

	Mean	Water	WC	Electricity	All Conditions	City	Place Was Built for Yemenites
Family Background							
Head of household's occupation: merchant	0.259	0.065* (0.025) *0.150*	0.093* (0.026) *0.209*	0.094* (0.026) *0.212*	0.103* (0.028) *0.231*	0.127* (0.029) *0.282*	-0.064* (0.025) *-0.147*
Head of household's occupation: craftsman	0.585	-0.056* (0.028) *-0.113*	-0.062* (0.030) *-0.125*	-0.091* (0.029) *-0.185*	-0.094* (0.032) *-0.189*	-0.102* (0.033) *-0.206*	0.048* (0.028) *0.098*
Location in Yemen: major city	0.456	0.101* (0.030) *0.203*	0.179* (0.032) *0.364*	0.113* (0.032) *0.228*	0.186* (0.035) *0.378*	0.176* (0.036) *0.358*	-0.077* (0.030) *-0.154*
Family has relatives living in Israel	0.384	0.019 (0.028) *0.040*	0.077* (0.030) *0.158*	0.048 (0.029) *0.098*	0.092* (0.032) *0.187*	0.074* (0.033) *0.152*	-0.077* (0.028) *-0.159*
Head of household is female	0.032	0.001 (0.009) *0.006*	-0.002 (0.010) *-0.010*	-0.009 (0.010) *-0.053*	-0.011 (0.011) *-0.067*	-0.015 (0.011) *-0.095*	0.004 (0.009) *0.022*
Family Wealth Status in Yemen							
Rich	0.311	0.001 (0.026) *0.002*	0.056* (0.027) *0.120*	0.002 (0.027) *0.003*	0.074* (0.030) *0.157*	0.010 (0.030) *0.021*	-0.006 (0.026) *-0.012*
Poor	0.160	0.010 (0.020) *0.029*	-0.044* (0.021) *-0.124*	0.005 (0.021) *0.013*	-0.038 (0.023) *-0.107*	-0.008 (0.024) *-0.021*	0.028 (0.020) *0.077*
Owned farm	0.363	-0.067* (0.029) *-0.139*	-0.124* (0.031) *-0.264*	-0.089* (0.030) *-0.187*	-0.101* (0.033) *-0.215*	-0.050 (0.034) *-0.104*	0.074* (0.029) *0.155*
Owned animals	0.670	-0.076* (0.027) *-0.164*	-0.106* (0.029) *-0.224*	-0.109* (0.029) *-0.231*	-0.120* (0.031) *-0.251*	-0.139* (0.033) *-0.292*	0.076* (0.028) *0.162*
Employed workers	0.245	0.038 (0.025) *0.087*	0.037 (0.027) *0.084*	0.031 (0.026) *0.072*	0.056* (0.029) *0.127*	0.017 (0.029) *0.038*	-0.032 (0.025) *-0.074*
Family Social Status in Yemen							
Head of household is religious leader	0.298	-0.038 (0.025) *-0.084*	-0.060* (0.027) *-0.132*	-0.042 (0.027) *-0.092*	-0.060* (0.029) *-0.134*	-0.039 (0.030) *-0.087*	0.020 (0.026) *0.043*
Head of household is community leader	0.260	-0.057* (0.025) *-0.131*	-0.051* (0.026) *-0.118*	-0.063* (0.026) *-0.145*	-0.047 (0.028) *-0.108*	-0.081* (0.029) *-0.191*	0.033 (0.025) *0.075*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Appendix Table 3b: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables, Male

	Mean	Water	WC	Electricity	All Conditions	City	Place Was Built for Yemenites
Family Background							
Head of household's occupation: merchant	0.233	0.023 (0.024) *0.054*	0.057* (0.026) *0.133*	0.049* (0.026) *0.114*	0.073* (0.029) *0.168*	0.122* (0.029) *0.279*	-0.003 (0.023) *-0.007*
Head of household's occupation: craftsman	0.572	-0.017 (0.028) *-0.035*	-0.029 (0.031) *-0.058*	-0.057* (0.030) *-0.116*	-0.055 (0.034) *-0.111*	-0.115* (0.034) *-0.232*	0.001 (0.027) *0.002*
Location in Yemen: major city	0.416	0.114* (0.029) *0.231*	0.199* (0.032) *0.407*	0.158* (0.032) *0.322*	0.216* (0.035) *0.442*	0.269* (0.035) *0.558*	-0.117* (0.029) *-0.240*
Family has relatives living in Israel	0.419	0.016 (0.028) *0.032*	0.037 (0.031) *0.074*	0.049 (0.031) *0.099*	0.057* (0.034) *0.115*	0.082* (0.034) *0.166*	-0.066* (0.027) *-0.134*
Head of household is female	0.011	-0.003 (0.006) *-0.029*	-0.001 (0.007) *-0.007*	0.005 (0.006) *0.048*	0.004 (0.007) *0.033*	-0.004 (0.007) *-0.043*	-0.003 (0.006) *-0.031*
Family Wealth Status in Yemen							
Rich	0.309	-0.037 (0.026) *-0.080*	-0.005 (0.029) *-0.011*	-0.016 (0.028) *-0.034*	0.020 (0.032) *0.042*	0.011 (0.031) *0.023*	-0.008 (0.025) *-0.018*
Poor	0.172	0.013 (0.021) *0.035*	-0.005 (0.024) *-0.012*	0.017 (0.023) *0.046*	-0.013 (0.026) *-0.035*	-0.011 (0.026) *-0.029*	-0.017 (0.021) *-0.046*
Owned farm	0.408	-0.083* (0.029) *-0.170*	-0.112* (0.032) *-0.233*	-0.092* (0.032) *-0.191*	-0.129* (0.035) *-0.269*	-0.154* (0.035) *-0.325*	0.074* (0.028) *0.151*
Owned animals	0.721	-0.083* (0.025) *-0.185*	-0.162* (0.028) *-0.353*	-0.133* (0.028) *-0.290*	-0.207* (0.031) *-0.446*	-0.167* (0.032) *-0.361*	0.089* (0.025) *0.200*
Employed workers	0.256	0.016 (0.025) *0.036*	0.032 (0.028) *0.073*	0.020 (0.028) *0.046*	0.033 (0.031) *0.075*	0.036 (0.031) *0.082*	-0.026 (0.025) *-0.059*
Family Social Status in Yemen							
Head of household is religious leader	0.277	-0.043* (0.025) *-0.096*	-0.036 (0.028) *-0.080*	-0.049* (0.027) *-0.111*	-0.039 (0.030) *-0.087*	-0.085* (0.030) *-0.196*	0.017 (0.024) *0.039*
Head of household is community leader	0.251	-0.004 (0.024) *-0.009*	-0.037 (0.027) *-0.087*	-0.033 (0.027) *-0.077*	-0.047 (0.030) *-0.110*	-0.056* (0.030) *-0.133*	0.026 (0.024) *0.059*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Appendix Table 3c: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables
(**RURAL - Owned Land and Lived Outside City**)

	Mean	Water	WC	Electricity	All Conditions	City	Place Was Built for Yemenites
Family Background							
Head of household's occupation: merchant	.192	-.028 (.049) *-.072*	.022 (.061) *.055*	-.028 (.058) *-.073*	.025 (.069) *.061*	.038 (.070) *.094*	.033 (.047) *.085*
Head of household's occupation: craftsman	.543	.064 (.062) *.129*	-.000 (.077) *-.001*	.060 (.073) *.121*	-.000 (.088) *-.001*	-.020 (.089) *-.040*	.003 (.061) *.005*
Location in Yemen: major city	.000	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Family has relatives living in Israel	.413	-.086 (.063) *-.174*	-.091 (.078) *-.186*	-.126 * (.075) *-.259*	-.121 (.090) *-.251*	-.033 (.091) *-.067*	-.015 (.060) *-.031*
Head of household is female	.007	.003 (.011) *.032*	.014 (.013) *.138*	.011 (.013) *.116*	.022 (.015) *.193*	.024 (.015) *.205*	-.014 (.010) *-.237*
Family Wealth Status in Yemen							
Rich	.442	-.022 (.062) *-.044*	-.076 (.077) *-.154*	-.078 (.073) *-.157*	-.055 (.089) *-.110*	-.029 (.089) *-.058*	.083 (.060) *.168*
Poor	.054	.045 (.029) *.189*	.076 * (.036) *.287*	.035 (.035) *.141*	.063 (.041) *.238*	.033 (.041) *.134*	-.018 (.028) *-.079*
Owned farm	1.000	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Owned animals	.946	-.013 (.029) *-.057*	-.053 (.036) *-.206*	-.059 * (.035) *-.228*	-.095 * (.041) *-.342*	-.036 (.041) *-.141*	-.025 (.028) *-.107*
Employed workers	.432	-.022 (.063) *-.044*	-.088 (.078) *-.179*	-.088 (.074) *-.179*	-.107 (.089) *-.219*	-.052 (.091) *-.106*	.023 (.062) *.047*
Family Social Status in Yemen							
Head of household is religious leader	.336	.005 (.059) *.010*	.064 (.072) *.135*	-.020 (.069) *-.043*	.020 (.082) *.043*	-.089 (.085) *-.192*	.054 (.057) *.113*
Head of household is community leader	.341	.084 (.059) *.178*	.027 (.074) *.058*	-.028 (.070) *-.059*	-.064 (.085) *-.138*	-.025 (.086) *-.052*	.069 (.057) *.146*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Appendix Table 3d: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables,
(URBAN - City dwellers who did not own land)

	Mean	Water	WC	Electricity	All Condotions	City1	Place Was Built for Yemenites
Family Background							
Head of household's occupation: merchant	.192	-.028 (.049) *-.072*	.022 (.061) *.055*	-.028 (.058) *-.073*	.025 (.069) *.061*	.038 (.070) *.094*	.033 (.047) *.085*
Head of household's occupation: craftsman	.543	.064 (.062) *.129*	-.000 (.077) *-.001*	.060 (.073) *.121*	-.000 (.088) *-.001*	-.020 (.089) *-.040*	.003 (.061) *.005*
Location in Yemen: major city	.000	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Family has relatives living in Israel	.413	-.086 (.063) *-.174*	-.091 (.078) *-.186*	-.126 * (.075) *-.259*	-.121 (.090) *-.251*	-.033 (.091) *-.067*	-.015 (.060) *-.031*
Head of household is female	.007	.003 (.011) *.032*	.014 (.013) *.138*	.011 (.013) *.116*	.022 (.015) *.193*	.024 (.015) *.205*	-.014 (.010) *-.237*
Family Wealth Status in Yemen							
Rich	.442	-.022 (.062) *-.044*	-.076 (.077) *-.154*	-.078 (.073) *-.157*	-.055 (.089) *-.110*	-.029 (.089) *-.058*	.083 (.060) *.168*
Poor	.054	.045 (.029) *.189*	.076 * (.036) *.287*	.035 (.035) *.141*	.063 (.041) *.238*	.033 (.041) *.134*	-.018 (.028) *-.079*
Owned farm	1.000	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Owned animals	.946	-.013 (.029) *-.057*	-.053 (.036) *-.206*	-.059 * (.035) *-.228*	-.095 * (.041) *-.342*	-.036 (.041) *-.141*	-.025 (.028) *-.107*
Employed workers	.432	-.022 (.063) *-.044*	-.088 (.078) *-.179*	-.088 (.074) *-.179*	-.107 (.089) *-.219*	-.052 (.091) *-.106*	.023 (.062) *.047*
Family Social Status in Yemen							
Head of household is religious leader	.336	.005 (.059) *.010*	.064 (.072) *.135*	-.020 (.069) *-.043*	.020 (.082) *.043*	-.089 (.085) *-.192*	.054 (.057) *.113*
Head of household is community leader	.341	.084 (.059) *.178*	.027 (.074) *.058*	-.028 (.070) *-.059*	-.064 (.085) *-.138*	-.025 (.086) *-.052*	.069 (.057) *.146*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.

Appendix Table 3e: Balancing Test of Family and Personal Characteristics with Respect to the Treatment Variables
(**OTHERS - City dwellers who owned land and non-city dwellers who did not own land**)

	Mean	Water	WC	Electricity	All Conditions	City	Place Was Built for Yemenites
Family Background							
Head of household's occupation: merchant	.192 276	-.028 (.049) *-.072*	.022 (.061) *.055*	-.028 (.058) *-.073*	.025 (.069) *.061*	.038 (.070) *.094*	.033 (.047) *.085*
Head of household's occupation: craftsman	.543 276	.064 (.062) *.129*	-.000 (.077) *-.001*	.060 (.073) *.121*	-.000 (.088) *-.001*	-.020 (.089) *-.040*	.003 (.061) *.005*
Location in Yemen: major city	.000 283	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Family has relatives living in Israel	.413 271	-.086 (.063) *-.174*	-.091 (.078) *-.186*	-.126 * (.075) *-.259*	-.121 (.090) *-.251*	-.033 (.091) *-.067*	-.015 (.060) *-.031*
Head of household is female	.007 281	.003 (.011) *.032*	.014 (.013) *.138*	.011 (.013) *.116*	.022 (.015) *.193*	.024 (.015) *.205*	-.014 (.010) *-.237*
Family Wealth Status in Yemen							
Rich	.442 278	-.022 (.062) *-.044*	-.076 (.077) *-.154*	-.078 (.073) *-.157*	-.055 (.089) *-.110*	-.029 (.089) *-.058*	.083 (.060) *.168*
Poor	.054 278	.045 (.029) *.189*	.076 * (.036) *.287*	.035 (.035) *.141*	.063 (.041) *.238*	.033 (.041) *.134*	-.018 (.028) *-.079*
Owned farm	1.000 283	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)	.000 (.000)
Owned animals	.946 276	-.013 (.029) *-.057*	-.053 (.036) *-.206*	-.059 * (.035) *-.228*	-.095 * (.041) *-.342*	-.036 (.041) *-.141*	-.025 (.028) *-.107*
Employed workers	.432 266	-.022 (.063) *-.044*	-.088 (.078) *-.179*	-.088 (.074) *-.179*	-.107 (.089) *-.219*	-.052 (.091) *-.106*	.023 (.062) *.047*
Family Social Status in Yemen							
Head of household is religious leader	.336 280	.005 (.059) *.010*	.064 (.072) *.135*	-.020 (.069) *-.043*	.020 (.082) *.043*	-.089 (.085) *-.192*	.054 (.057) *.113*
Head of household is community leader	.341 276	.084 (.059) *.178*	.027 (.074) *.058*	-.028 (.070) *-.059*	-.064 (.085) *-.138*	-.025 (.086) *-.052*	.069 (.057) *.146*

Notes: Standard errors are presented in parentheses. An asterisk denotes significance at 10%. All conditions measure is a dummy variable for having water, WC and electricity during the childhood period. Numbers in italics are the ratio of the mean difference by treatment status divided by the mean of the standard deviation of the characteristic.