# Description of Reggio Variables

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# 1 Overview

This document compiles information on the variables in the Reggio dataset. The information presented includes (1) an explanation of relevant variables by broad category (e.g. health outcomes), (2) descriptive statistics, (3) a tabulation of missing observations, and (4) a

discussion of any issues with the variables. Table 1 shows the number of individuals in each cohort by city.

Table 1: Overview of Sample by Cohort and City

| | | Cohort | | | | | | Total |
|---|---|---|---|---|---|---|---|---|
| | | Children | Migrants | Adolescents | Adults 30s | Adults 40s | Adults 50s | |
| **City** | Reggio | 311 | 110 | 300 | 280 | 285 | 200 | 1,486 |
| | Parma | 291 | 58 | 254 | 251 | 254 | 103 | 1,211 |
| | Padova | 278 | 113 | 282 | 251 | 252 | 146 | 1,322 |

# 2 Education Variables

## 2.1 Maximum Education

Maximum education variable has 9 categories, which are shown in Table 2. Since Italian education system has experienced changes in 1999 due to Bologna process[1], those need to be accounted for when converting the education categories into years of education. Column 3 of Table 2 shows the converted years of education according to information below.

Italian elementary school (Scuola elementare) lasts 5 years. We assume that all parents for younger cohorts attended elementary school unless noted otherwise. "Scuola media inferiore" last for 3 years (roughly from age 11 to 13). There are two types of high school listed in our category. "Biennio scuola media superiore" offers two years of education and the "Scoula media superiore" offers 4 or 5 years of education.

After the Bologna agreement, most of universities in Italy became a 3+2 system, each period granting a certification. First 3 years (laurea triennale) can be considered as a bachelors, and the second 2 years (laurea biennale) can be translated as a masters program. However, in reality, 3+2 is same as previous university degree (diploma universitario). Because of the timing when this change took place, these years of education does not apply to age-40 and

[1]Bologna process is a series of ministerial meetings and agreements between European countries designed to ensure comparability in the standards and quality of higher education qualifications.

age-50 cohorts in the Reggio data.

There are some difference in how degrees are called in Italy and in the United States. "Laurea specialistica o magistrale" in our category, although it is translated as "master", is more similar to bachelor's in the United States. On the other hand, "master post-laurea", which includes MBA, can be considered as the actual master's degree.

Table 2: Categories for Parental Maximum Education

| **Italian Label** | **English Label** | **Years of Education** |
|---|---|---|
| (1) Scuola media inferiore/licenza elementa | Junior High School/Primary School | 8 years |
| (2) Biennio scuola media superiore | Two years high school | 10 years |
| (3) Scuola media superiore (4 o 5 anni) | High School (4 or 5 years) | 12 years |
| (4) Diploma universitario | University Diploma | 16 years |
| (5) Laurea triennale | Three-year Degree | 15 years |
| (6) Laurea quadriennale/quinquennale | Five-year Degree | 17 years |
| (7) Laurea specialistica o magistrale | Master | 17 years |
| (8) Master post-laurea quadr./quinq./sp | Master postgraduate framework | 19 years |
| (9) Dottorato di ricerca | Ph.D. | 23 years |

## 2.2 High School Grades

High school grade (votoMaturita) that was asked in the questionnaires has two different scales, one has the maximum scoring of 60 and the other has 100. The former scale is the old

scoring scheme that was changed to latter by the law n.1/2007. Before 2007, the maximum grade was 60 and the minimum passing grade was 36 (below 36 was fail). After 2007, the maximum grade became 100 and the minimum passing grade became 60 (below 60 is fail)[2].

Since adolescent cohort went to high school after the change in scoring system, the questionnaire for adolescents asks respondents to provide their high school grades in 100 scale. On the other hand, since people the adult cohorts might have used 60 scale when they attended high school, the questionnaire for adults ask respondents two different choices (old way and new way) to report their high school grade. Grades reported in the 60 scale are converted to the 100 scale.

Table 3 shows the high school types listed in the questionnaire and mean high school grade for each school type in each city. Across all three cities, majority of people attended either classic high school, science high school, or technical institute, which is specialized in surveyor, accountancy, industrial, etc. Reggio's mean high school grade is generally higher than Parma and Padova across all school types. In Reggio, institutes for socio-psycho-pedagogy exhibit the highest mean grade and professional schools exhibit the lowest mean grade. In Parma, art, music, or choir school has the highest mean grade, and institute for socio-psycho-pedagogy shows the lowest mean grade. In Padova, language high schools show the highest mean grade, and art, music, or choir school show the lowest mean grade.

[2]http://www.classbase.com/Countries/italy/Grading-System

Table 3: Mean High School Grade for Each High School Type

| | **Reggio** | **Parma** | **Padova** | **Total** |
|---|---|---|---|---|
| **Classic high school** | | | | |
| Mean | 82.27 | 75.51 | 78.69 | 79.25 |
| SE | 10.22 | 15.05 | 14.05 | 13.16 |
| N | 121 | 87 | 69 | 277 |
| **Science high school** | | | | |
| Mean | 84.17 | 78.34 | 79.45 | 80.43 |
| SE | 8.65 | 16.34 | 13.79 | 13.64 |
| N | 109 | 119 | 160 | 388 |
| **Language high school** | | | | |
| Mean | 83.52 | 80.97 | 83.35 | 82.36 |
| SE | 8.78 | 11.71 | 10.78 | 10.54 |
| N | 34 | 43 | 20 | 97 |
| **Art, music, or choir school** | | | | |
| Mean | 84.57 | 87.88 | 73.55 | 81.8 |
| SE | 6.50 | 10.44 | 8.57 | 10.63 |
| N | 7 | 9 | 9 | 25 |
| **Institute for socio-psycho-pedagogy** | | | | |
| Mean | 86.88 | 70.1 | 79.26 | 78.58 |
| SE | 14.13 | 26.01 | 16.26 | 19.65 |
| N | 9 | 10 | 15 | 34 |
| **Conservatory** | | | | |
| Mean | 83 | 83 | 75 | 81 |
| SE | 0 | 0 | 0 | 4 |
| N | 2 | 1 | 1 | 4 |
| **Technical Institute** | | | | |
| Mean | 82.05 | 70.95 | 76.76 | 76.75 |
| SE | 7.94 | 16.27 | 11.24 | 12.95 |
| N | 204 | 187 | 206 | 597 |
| **Professional (chemical, electronic, etc.)** | | | | |
| Mean | 78.85 | 75.84 | 79.87 | 78.20 |
| SE | 7.62 | 9.07 | 13.36 | 9.28 |
| N | 76 | 38 | 24 | 138 |
| **Art institute** | | | | |
| Mean | 79.07 | 78.2 | 74.85 | 77.8 |
| SE | 9.88 | 19.34 | 6.54 | 12.97 |
| N | 13 | 10 | 7 | 30 |
| **Other** | | | | |
| Mean | . | 71.75 | . | 71.75 |
| SE | . | 5.67 | . | 5.67 |
| N | 0 | 4 | 0 | 4 |

# 3 Cognitive Variables

IQ is measured for all individuals in the sample as well as for the caregivers of the children, migrants, and adolescents using Raven's Progressive Matrices (Raven's).[3] Raven's is a non-verbal test that is correlated with other measures of fluid intelligence. The 12-Item and 18-Item versions are shortened from the original version, which helps reduce the duration of the test. Both shortened versions are highly correlated with the full version of the test, which in turn is highly correlated with other measures of IQ.

Each item on the test consists of a matrix of diagrams that follow some logical pattern with one missing diagram that the test-taker needs to select from multiple choices. A correct answer is assigned a value of 1, and an incorrect answer is assigned a value of 0. The IQ score is the proportion of questions answered correctly. If questions are missed, then they do not count in the total number of questions. The factor scores are computed using a specification of a structural equation using maximum likelihood that accounts for missing values. That is, it requires the assumption that bot the observed and latent variables are jointly distributed normally, and that any missing values are missing at random. The latter assumption is the more tenuous assumption given that a missing item could mean the individual could not answer the question at all due to lower cognitive ability (as opposed to rushing through the test or inability to focus).

Table 4 explains which individuals in which cohort received the 12- or 18-Item version of Raven's Progress Matrices (Raven's).

[3] Raven et al. (1988).

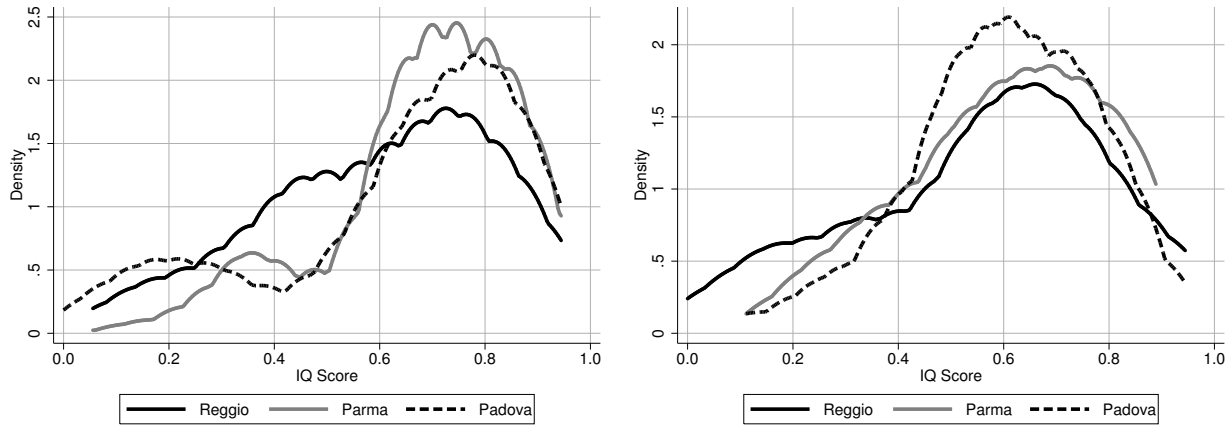
Table 4: IQ Test by Cohort

| Cohort | 12-Item | 18-Item |
|---|---|---|
| **Children** | | |
| Subjects | | ✓ |
| Caregivers | ✓ | |
| **Migrants** | | |
| Subjects | | ✓ |
| Caregivers | ✓ | |
| **Adolescents** | | |
| Subjects | ✓ | |
| Caregivers | ✓ | |
| **Adults** | | |
| Subjects | | ✓ |

Note: This table shows the type of test given for each cohort. The caregivers were always given the 12-Item Raven's. The 18-Item Raven's was only meant for younger subjects (the individuals in the children and migrants cohorts were about 6 years old at the time of the test).

Figure 1 shows the distribution of the IQ score by city and cohort.

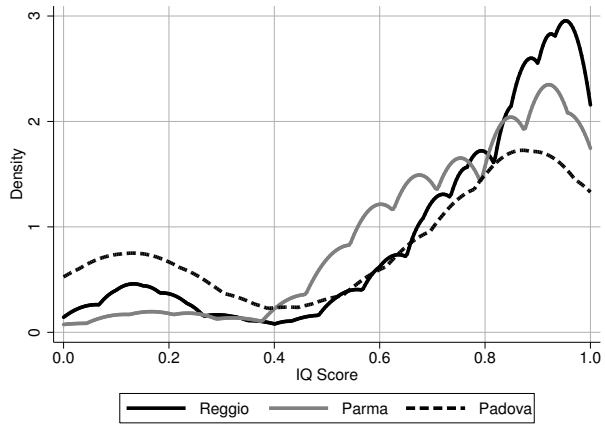
Figure 1: Densities of IQ Scores



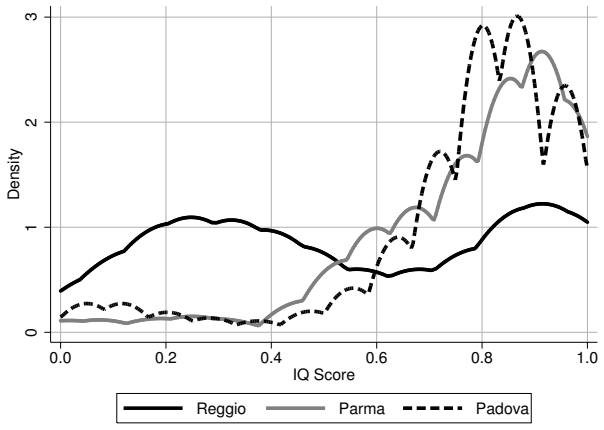

(a) Children



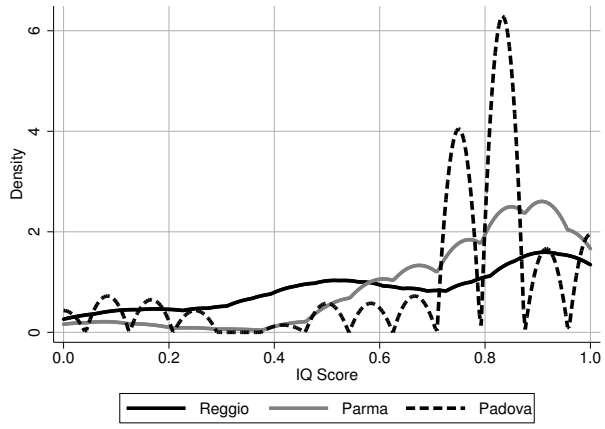

(b) Migrants



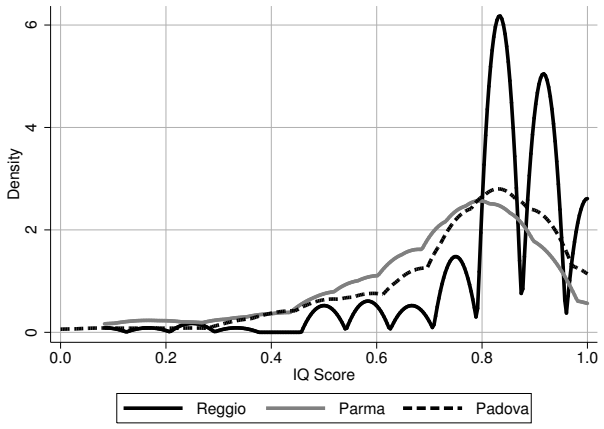

(c) Adolescents




(d) Adults 30s




(e) Adults 40s




(f) Adults 50s

Note: These plots show the distributions of IQ scores by city and cohort. The distributions of the different cities are more similar for the younger cohorts than for the adult cohorts.

# 4 Income and Employment Variables

## 4.1 Family Income

Table 5 lists categories of income in our questionnaire. This category is used for (i) baseline family income and (ii) current family income. Although (i) and (ii) are measuring income at different point of time with different inflation rates, since the questions that were asked does not account for the inflation rate, we do not account for inflation rate when converting categories into values. We apply median of reported category when creating income variables shown in values.

Table 5: Categories for Family Income

| **Category** | **Value** |
|---|---|
| 1 - 5,000 Euro | 2,500 Euro |
| 5,001 - 10,000 Euro | 7,500 Euro |
| 10,001 - 25,000 Euro | 17,500 Euro |
| 25,001 - 50,000 Euro | 37,500 Euro |
| 50,001 - 100,000 Euro | 75,000 Euro |
| 100,001 - 250,000 Euro | 175,000 Euro |
| More than 250,000 Euro | 375,000 Euro |

## 4.2 Caregiver's Occupation and Hours of Work

Caregiver's occupation variable has 12 categories in the questionnaire: (i) never worked, (ii) farmer, (iii) worker, (iv) employee, (v) teacher, (vi) executive, (vii) manager, (viii) professional (doctor, lawyer, etc.), (ix) entrepreneur, (x) self-employed, (xi) atypical worker, (xii) other.

There are two measures of caregiver's hours of work in the questionnaire: (i) normal hours of work per week and (ii) average overtime hours per week. Caregiver's total hours of work per week is computed by combining normal hours and overtime hours. Moreover, if a

caregiver reported to have "never worked" when reporting occupation, we record the total hours of work for such caregiver as 0 hours. The mean total hours of work of caregiver is 34.57 hours with the standard error 12.99. The minimum weekly hours of worked is 0 hour and the maximum is 90 hours in the data.

## 4.3 House Ownership

The question that asks "Is this house owned by this household?" is both for parents of children and adolescents and for adults. This means that for younger cohorts, this variable shows the ownership of their caregivers. For adult cohorts, this variable shows whether respondent owns house.

# 5 Non-cognitive Variables

Table 6: Availability of variables by cohort

| | Children Cohort | Adol Cohort | Adult Cohort |
|---|---|---|---|
| **Depression Score** | | ✓ | ✓ |
| **Locus of Control** | | ✓ | ✓ |
| **Optimistic outlook on life** | | ✓ | ✓ |
| **SDQ Scores** [4] | | | |
| SDQ Composite score | ✓ | ✓ | |
| SDQ Emotional score | ✓ | ✓ | |
| SDQ Conduct score | ✓ | ✓ | |
| SDQ Hyper score | ✓ | ✓ | |
| SDQ Peer problems score | ✓ | ✓ | |
| SDQ Pro-social score | ✓ | ✓ | |
| **Satisfaction variables** | | | |
| Satisfied with income | | | ✓ |
| Satisfied with work | | | ✓ |
| Satisfied with health | | ✓ | ✓ |
| Satisfied with family | | ✓ | ✓ |
| Satisfied with school | | ✓ | |
| **Reciprocity variables** | | | |
| Return favor | | ✓ | ✓ |
| Put someone in difficulty | | ✓ | ✓ |
| Help someone kind to me | | ✓ | ✓ |
| Insult back | | ✓ | ✓ |

[1] For children, one set of SDQ scores are available based on caregiver's response to the SDQ questionnaire. For adolescents, two sets of SDQ scores are available with one based on caregiver's response to questionnaires and the other on adolescent's self-response to the questionnaire.

## 5.1 Depression score

Adults and adolescents were administered the 10-item Center for Epidemiologic Studies Depression (CES-D) Scale [1]. Respondent's answers to these questions were used to construct a *depression* variable that ranges from 16 to 50, where higher values correspond with lower

[1] See Radloff (1977); also this scale is present in the NLSY.

levels of depression. The variable is constructed as the sum of the following underlying variables where each variable records respondent's response to the corresponding question on a 1 - 5 scale.

Table 7: Underlying scores used to construct depression variable where each questions corresponds to a specific variable

| **Question for each variable** | **Definition for scaled score** |
|---|---|
| I was bothered by things that dont usually bother me | 1 = "Always", 5 = "Never" |
| I had trouble keeping my mind on what I was doing | 1 = "Always", 5 = "Never" |
| I felt depressed | 1 = "Always", 5 = "Never" |
| I felt everything I did was an effort | 1 = "Always", 5 = "Never" |
| I felt hopeful about the future | 1 = "Never", 5 = "Always" |
| I felt fearful | 1 = "Always", 5 = "Never" |
| My sleep was restless | 1 = "Always", 5 = "Never" |
| I was happy | 1 = "Never", 5 = "Always" |
| I felt lonely | 1 = "Always", 5 = "Never" |
| I could not get going | 1 = "Always", 5 = "Never" |

## 5.2 Locus of Control

Adults, adolescents and caregivers of adolescents and children are administered a short version of the Rotter Locus-of-Control Scale [2]. According to Miller (2004), the Rotter scale "was designed to measure the extent to which individuals believe they have control over their lives through self-motivation or self determination (internal control) as opposed to the extent that the environment (i.e., chance, fate, luck) controls their lives (external control)."

Respondent's answers to the locus-of-control test is used to contruct a factor score, where higher values correspond with a more internal locus-of-control i.e., respondents with higher values believe that they are more in control of the outcomes in their lives. The factor score is based on the following underlying variables where each variable records respondent's response to the corresponding questions on a scale of 1 - 5. Each respondent is assigned a value of 1 if he/she answers "Strongly agree" and a value of 5 if respondent answers "Strongly disagree" to the following questions.

Table 8: Question used to construct Locus of Control factor score

| **Variable** | **Question** |
|---|---|
| Locus1 | I feel that I dont have enough control over the direction my life is taking |
| Locus2 | It is not always wise to plan too far ahead, because many things turn out to be a matter of good or bad fortune anyhow |
| Locus3 | Getting what I want has little or nothing to do with luck |
| Locus4 | I feel that I have little influence over the things that happen to me |

## 5.3 Optimistic outlook on life

Adults and adolescents were administered the Cantril's Self-Anchoring Ladder [3]. The Cantril Self-Anchoring Scale asks respondent's to answer where they see themselves in their "ladder

[2] See Rotter (1966); this scale is used in the National Longitudinal Study of Parents and Children (NSLY).
[3] See Cantril (1965); this scale is used in Gallup Surveys worldwide

of life" in the present and in the future, where higher values of the ladder correspond with better outcomes. Responses on this scale were used to construct a dummy variable that provides a binary measure of whether the respondent is an optimist or not. The variable takes on the value of 1 if the individual feels he/she will be at a better point in his/her "ladder of life" in the future than today, and 0 otherwise.

## 5.4 SDQ Scores

The Strength & Difficulties questionnaire (SDQ) is administered to caregivers of children, caregivers of adolescents, and adolescents [4]. The dataset distinguishes between SDQ scores derived from questionnaires administered to caregivers and scores derived from questionnaires administered to adolesents. The SDQ is a widely-used scale inquiring about emotional symptoms, conduct problems, hyperactivity and inattention, peer relationships problems, and pro-social behavior. The following variables are constructed based on the questionnaire.

### 5.4.1 SDQ Composite score

The variable takes on values from 13 to 40, with higher values corresponding with better outcomes. The variable is constructed as the sum of underlying SDQ component scores which are in turn derived based on responses to the SDQ. The underlying components measure performance in the areas of emotional symptoms, conduct problems, hyperactivity and inattention, and peer relationships problems. These components are described in detail in the following sections.

### 5.4.2 SDQ Emotional score

The variable takes on values from 0 to 10, with higher values corresponding with better outcomes. The variable is constructed as a function of the mean of 5 underlying variables, where each variable measures respondent's response to the corresponding questions in the

[4] See Goodman (1997); this scale is also used in the Avon Longitudinal Study of Parents and Children (ALSPAC) and in the Millennium Cohort Study

table below. The underlying variables take on the value of 1 if the respondent answers "Completely true" , 2 if the answer is "Partially true", and 3 if the answer is "False".

Table 9: SDQ questions related to emotional symptoms

| **Variable** | **Label** |
|---|---|
| SDQEmot1 | Often complains of headaches, stomach-aches or sickness |
| SDQEmot2 | Frequently worried or often seems worried |
| SDQEmot3 | Often unhappy, depressed or tearful |
| SDQEmot4 | Nervous or clingy in new situations, easily loses confidence |
| SDQEmot5 | Many fears, easily scared |

### 5.4.3 SDQ Conduct score

The variable takes on values from 2 to 10, with higher values corresponding with better outcomes. The variable is constructed as a function of the mean mean of 5 underlying variables, where each variable measures respondent's response to the corresponding questions in the table below. The underlying variables *SDQCond1*, *SDQCond3*, *SDQCond4* and *SDQCond5* take on the value of 1 if the respondent answers "Completely true", 2 if the answer is "Partially true", and 3 if the answer is "False". For *SDQCond2*, an answer of "Completely true" corresponds with 3 and "False" corresponds with 1. The order is reversed for this variable because the question measures a positive characteristic.

Table 10: SDQ questions related to conduct

| **Variable** | **Label** |
|---|---|
| SDQCond1 | Often loses temper or is in a bad mood |
| SDQCond2 | Generally well behaved, usually does what adults request |
| SDQCond3 | Often fights with other children or bullies them |
| SDQCond4 | Often lies or cheats |
| SDQCond5 | Steals from home, school or elsewhere |

### 5.4.4 SDQ Hyper score

The variable takes on values from 0 to 10, with higher values corresponding with better outcomes. The variable is constructed as a function of the mean of 5 underlying variables, where each variable measures respondent's response to the corresponding questions in the table below. The underlying variables *SDQHype1*, *SDQHype2* and *SDQHype3* take on the value of 1 if the respondent answers "Completely true", 2 if the answer is "Partially true", and 3 if the answer is "False". For *SDQHype4* and *SDQHype5*, an answer of "Completely true" corresponds with 3 and "False" corresponds with 1. The order is reversed for these variables because the question measures a positive characteristic.

Table 11: SDQ questions related to hyperactivity

| **Variable** | **Label** |
|---|---|
| SDQHype1 | Restless, overactive, cannot stay still for long |
| SDQHype2 | Constantly fidgeting or squirming |
| SDQHype3 | Easily distracted, concentration wanders |
| SDQHype4 | Thinks things out before acting |
| SDQHype5 | Good attention span, sees work through to end |

### 5.4.5 SDQ Peer problems score

The variable takes on values from 3 to 10, with higher values corresponding with better outcomes. The variable is constructed as a function of the mean of 5 underlying variables, where each variable measures respondent's response to the corresponding questions in the table below. The underlying variables *SDQPeer1*, *SDQPeer4* and *SDQPeer5* take on the value of 1 if the respondent answers "Completely true", 2 if the answer is "Partially true", and 3 if the answer is "False". For *SDQPeer2* and *SDQPeer3*, an answer of "Completely true" corresponds with 3 and "False" corresponds with 1. The order is reversed for these variables because the question measures a positive characteristic.

Table 12: SDQ questions related to peer problems

| Variable | Label |
|---|---|
| SDQPeer1 | Rather solitary, prefers to play alone |
| SDQPeer2 | Has atleast one good friend |
| SDQPeer3 | Generally liked by other children |
| SDQPeer4 | Picked on or bullied by other childres |
| SDQPeer5 | Gets along better with adults than with other children |

### 5.4.6 SDQ Pro-social score

The variable takes on values from 0 to 9, with higher values corresponding with better outcomes. The variable is constructed as a function of the mean of 5 underlying variables, where each variable measures respondent's response to the corresponding questions in the table below. The underlying variables take on the value of 1 if the respondent answers "False", 2 if the answer is "Partially true", and 3 if the answer is "Completely True".

Table 13: SDQ questions related to pro-social behavior

| Variable | Label |
|---|---|
| SDQPsoc1 | Considerate of other people's feelings |
| SDQPsoc2 | Shares readily with other children, for example toys, treats, pencils |
| SDQPsoc3 | Helpful if someone is hurt, upset or feeling ill |
| SDQPsoc4 | Kind to younger children |
| SDQPsoc5 | Often offers to help others (parents, teachers, other children) |

## 5.5 Satisfaction variables

Adults are asked to answer four questions relating to satisfaction with income, work, health and family, while adolescents are asked to answer three questions relating to satisfaction with health, family and school. For each question, respondent's can choose from five different answers ranging from "Very satisfied" to "Not satisfied". Using the respondent's answers to these questions, we construct the following satisfaction dummy variables where the indicator takes on a value of 1 if the individual answers "Very satisfied" or "Quite satisfied", and 0 if

they answer "Satisfied", "Somewhat satisfied", or "Not satisfied".

Table 14: Definition of Satisfaction binary variables

| **Indicator variable** | **Underlying question that variable is based on** |
|---|---|
| Satisfied with Income | How satisfied are you today with your income? |
| Satisfied with work | How satisfied are you today with your work? |
| Satisfied with health | How satisfied are you today with your health? |
| Satisfied with family | How satisfied are you today with your family? |
| Satisfied with school | How satisfied are you today with school? |

## 5.6 Reciprocity variables

Adolescents and adults were asked to indicate how well five statements on reciprocity applied to them [5]. For each statement, respondent's could choose five values ranging from "I don't identify" to "I identify very much". Using the respondent's answers to these questions, we construct the following reciprocity dummy variables where the indicator takes on a value of 1 if the individual answers "I identify very much" or " I identify quite a lot", and 0 if they answer "I am neutral", "I identify little", or "'I don't identify" to the questions below.

Table 15: Definition of Reciprocity binary variables

| **Indicator Variable** | **Underlying question that indicator is based on** |
|---|---|
| Return favor | If someone does me a favor, I am prepared to return it |
| Put someone in difficulty | If someone puts me in a difficult situation, I will do the same to him/her |
| Help someone kind to me | I go out of my way to help somebody who has been kind to me before |
| Insult back | If somebody insulted me, I will insult him/her back |

[5]These questions are based on a measure developed by Perugini et al. (2003); Dohmen et al. (2009)

# 6 Health Variables

## 6.1 Body Mass Index (BMI)

Body Mass Index (BMI) is available for all cohorts in the unit of kilograms of weight over square meters of height. For the cohorts of children, migrants, and adolescents, BMI is reported by the caregivers who also report their own BMI. The z-score of the measure is calculated using the distribution of BMI in the United States. The distributions of BMI are similar across cohorts and cities.

## 6.2 Subjective Health Measures

The variable "good health" captures a subjective measure of the quality of the subject's health. The possible responses are: (1) excellent, (2) very good, (3) good, (4) moderate, and (5) poor.

## 6.3 Risky Behaviors

There are several variables outlining whether and how much the subjects smoke cigarettes. The variables include age of smoking first cigarette, an indicator of smoking, and the number of cigarettes the subject smokes daily. The indicator variable of being a current smoker and the variable of the number of cigarettes per day do not correspond. There are some cases in which someone is not a smoker, but smokes at least one cigarette per day. To keep the variable consistent and conservative, the indicator for smoking is changed to 1 if the number of cigarettes smoked per day is at least 1. Similarly, anybody who does not smoke according to the indicator is coded to smoke 0 cigarettes per day. This issue is also seen in the analogous variables of alcohol consumption.[6] The same solution is implemented.

[6]The variable documenting the amount of alcohol consumed is on a monthly basis instead of a weekly, as for cigarettes.

The only variable related to involvement with drugs is an indicator of having smoked marijuana. It is asked to adolescents and all cohorts of adults.

Finally, there are several variables that capture engagement in violent behavior. There is a question posed to the adolescent and all adult cohorts. Subjects indicate if they have never fought, have fought once or twice in total, fight less than once a month, 1-3 times per month, or 1-2 times per week. These responses are made into indicators for analysis. The same structure is in place for a variable indicating having driven under the influence of alcohol.

# 7 Instruments

## 7.1 Descriptive statistics

Table 16: Mean and Standard Deviation for Education variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| IQ Score | 0.60 | 0.69 | 0.64 | 0.56 | 0.61 | 0.60 | 0.77 | 0.76 | 0.65 | 0.57 | 0.78 | 0.78 | 0.66 | 0.77 | 0.72 | 0.84 | 0.71 | 0.77 |
| | *0.22* | *0.18* | *0.24* | *0.24* | *0.19* | *0.17* | *0.25* | *0.21* | *0.34* | *0.33* | *0.21* | *0.22* | *0.29* | *0.22* | *0.25* | *0.15* | *0.20* | *0.19* |
| IQ Factor | -0.07 | 0.26 | 0.01 | -0.31 | -0.05 | -0.19 | 0.15 | 0.16 | -0.30 | -0.19 | 0.47 | 0.43 | 0.09 | 0.45 | 0.31 | 0.58 | 0.32 | 0.45 |
| | *0.93* | *0.79* | *1.08* | *1.02* | *0.80* | *0.75* | *0.85* | *0.67* | *1.19* | *0.93* | *0.54* | *0.62* | *0.80* | *0.58* | *0.76* | *0.40* | *0.57* | *0.48* |
| Caregiver IQ Score | 0.64 | 0.76 | 0.72 | 0.47 | 0.61 | 0.50 | 0.74 | 0.75 | 0.65 | . | . | . | . | . | . | . | . | . |
| | *0.29* | *0.21* | *0.29* | *0.27* | *0.23* | *0.27* | *0.26* | *0.22* | *0.33* | . | . | . | . | . | . | . | . | . |
| Caregiver IQ Factor | -0.04 | 0.35 | 0.18 | -0.61 | -0.11 | -0.58 | 0.09 | 0.17 | -0.26 | . | . | . | . | . | . | . | . | . |
| | *0.96* | *0.64* | *0.96* | *0.95* | *0.78* | *0.91* | *0.87* | *0.68* | *1.16* | . | . | . | . | . | . | . | . | . |
| High School Grade | . | . | . | . | . | . | 76.44 | 80.71 | 82.63 | 82.86 | 74.16 | 77.89 | 83.36 | 74.98 | 78.66 | 79.89 | 72.47 | 75.91 |
| | . | . | . | . | . | . | *12.13* | *12.05* | *10.64* | *9.20* | *18.32* | *14.42* | *8.22* | *14.91* | *11.25* | *8.80* | *14.79* | *11.77* |
| University Grade | . | . | . | . | . | . | . | . | . | 100.67 | 99.68 | 99.81 | 97.17 | 100.73 | 98.48 | 97.19 | 100.17 | 104.24 |
| | . | . | . | . | . | . | . | . | . | *6.38* | *7.35* | *8.38* | *6.49* | *7.52* | *7.74* | *6.77* | *7.12* | *6.66* |
| Graduate from High School | . | . | . | . | . | . | . | . | . | 0.88 | 0.89 | 0.88 | 0.80 | 0.84 | 0.82 | 0.74 | 0.59 | 0.57 |
| | . | . | . | . | . | . | . | . | . | *0.33* | *0.31* | *0.32* | *0.40* | *0.37* | *0.38* | *0.44* | *0.49* | *0.50* |
| Max Edu: University | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.38 | 0.45 | 0.15 | 0.28 | 0.33 | 0.11 | 0.12 | 0.23 |
| | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.39* | *0.49* | *0.50* | *0.36* | *0.45* | *0.47* | *0.31* | *0.32* | *0.42* |
| Max Edu: Graduate School | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.09 | 0.00 | 0.04 | 0.02 | 0.00 | 0.00 | 0.05 |
| | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.06* | *0.16* | *0.29* | *0.00* | *0.19* | *0.15* | *0.00* | *0.00* | *0.21* |

**Note:** Unconditional means are reported for each variable by cohort and city. Standard Deviations are reported in italics below each mean estimates.

Table 17: Mean and Standard Deviation for Health variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| BMI - Child | 16.26 | 16.31 | 16.03 | 17.61 | 16.18 | 18.64 | 21.22 | 21.30 | 21.24 | . | . | . | . | . | . | . | . | . |
| | *2.86* | *3.19* | *2.70* | *3.70* | *3.55* | *4.20* | *2.72* | *3.14* | *2.50* | . | . | . | . | . | . | . | . | . |
| BMI z-score - Child | 0.09 | 0.08 | 0.00 | 0.54 | -0.16 | 1.03 | -0.36 | -0.39 | -0.37 | . | . | . | . | . | . | . | . | . |
| | *1.45* | *1.41* | *1.40* | *1.64* | *2.02* | *1.35* | *0.91* | *1.00* | *0.87* | . | . | . | . | . | . | . | . | . |
| Caregiver BMI | 23.46 | 22.43 | 22.93 | 25.63 | 23.89 | 25.47 | 24.13 | 24.03 | 23.95 | . | . | . | . | . | . | . | . | . |
| | *4.04* | *3.68* | *3.37* | *3.48* | *3.80* | *3.72* | *3.67* | *3.41* | *3.83* | . | . | . | . | . | . | . | . | . |
| BMI | . | . | . | . | . | . | 21.36 | 21.39 | 21.40 | 23.35 | 23.29 | 23.39 | 24.16 | 23.92 | 23.71 | 24.46 | 23.76 | 25.11 |
| | . | . | . | . | . | . | *2.83* | *3.10* | *2.56* | *2.26* | *2.94* | *2.99* | *2.94* | *2.78* | *2.85* | *2.77* | *2.95* | *4.19* |
| BMI - z-score | . | . | . | . | . | . | -0.32 | -0.35 | -0.32 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *0.92* | *0.98* | *0.86* | . | . | . | . | . | . | . | . | . |
| Tried Marijuana | . | . | . | . | . | . | 0.23 | 0.18 | 0.17 | 0.20 | 0.17 | 0.20 | 0.11 | 0.07 | 0.07 | 0.04 | 0.03 | 0.06 |
| | . | . | . | . | . | . | *0.42* | *0.38* | *0.38* | *0.40* | *0.37* | *0.40* | *0.31* | *0.26* | *0.25* | *0.18* | *0.17* | *0.24* |
| Num. of Cigarettes Per Day | . | . | . | . | . | . | 7.52 | 5.26 | 7.00 | 16.02 | 12.06 | 10.23 | 15.90 | 13.35 | 11.19 | 15.98 | 18.67 | 7.96 |
| | . | . | . | . | . | . | *4.52* | *2.93* | *4.11* | *4.24* | *6.74* | *5.28* | *5.94* | *6.39* | *5.31* | *7.43* | *10.17* | *5.04* |
| Good Health | . | . | . | . | . | . | 3.98 | 3.69 | 4.05 | 4.23 | 3.84 | 3.80 | 3.90 | 3.54 | 3.55 | 3.28 | 3.10 | 3.16 |
| | . | . | . | . | . | . | *0.86* | *0.74* | *0.84* | *0.54* | *0.65* | *0.64* | *0.57* | *0.68* | *0.73* | *0.65* | *0.60* | *0.89* |
| Num. of Days Sick Past Month | . | . | . | . | . | . | . | . | . | 1.31 | 1.13 | 1.16 | 1.10 | 1.12 | 1.19 | 1.31 | 1.14 | 1.33 |
| | . | . | . | . | . | . | . | . | . | *0.56* | *0.51* | *0.63* | *0.40* | *0.54* | *0.62* | *0.66* | *0.38* | *0.91* |
| Engaged in A Fight | . | . | . | . | . | . | 0.07 | 0.09 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | . | . | . | . | . | . | *0.26* | *0.29* | *0.23* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Drove Under Influence | . | . | . | . | . | . | 0.12 | 0.09 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| | . | . | . | . | . | . | *0.32* | *0.28* | *0.31* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* | *0.00* |
| Ever Suspended from School | . | . | . | . | . | . | 0.07 | 0.04 | 0.02 | 0.08 | 0.06 | 0.05 | 0.06 | 0.05 | 0.05 | 0.06 | 0.05 | 0.09 |
| | . | . | . | . | . | . | *0.25* | *0.19* | *0.14* | *0.28* | *0.24* | *0.22* | *0.24* | *0.21* | *0.22* | *0.24* | *0.22* | *0.29* |
| Age At First Drink | . | . | . | . | . | . | 12.63 | 14.09 | 10.25 | 12.14 | 13.45 | 13.49 | 11.07 | 14.26 | 13.09 | 14.29 | 13.92 | 14.36 |
| | . | . | . | . | . | . | *5.64* | *4.12* | *7.29* | *7.98* | *6.08* | *6.61* | *8.58* | *5.76* | *7.43* | *6.31* | *7.13* | *6.63* |

**Note:** Unconditional means are reported for each variable by cohort and city. Standard Deviations are reported in italics below each mean estimates.

Table 18: Mean and Standard Deviation for Non-cognitive variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| SDQ Composite - Child | 32.23 | 33.18 | 32.32 | 33.10 | 31.88 | 30.96 | 32.60 | 32.79 | 32.78 | . | . | . | . | . | . | . | . | . |
| | *4.87* | *4.46* | *4.73* | *4.22* | *4.55* | *5.19* | *4.97* | *4.98* | *4.36* | . | . | . | . | . | . | . | . | . |
| SDQ Emotional - Child | 8.22 | 8.51 | 8.35 | 8.94 | 8.07 | 8.58 | 7.65 | 7.64 | 7.99 | . | . | . | . | . | . | . | . | . |
| | *1.81* | *1.61* | *1.61* | *1.35* | *1.51* | *2.00* | *2.06* | *2.13* | *1.73* | . | . | . | . | . | . | . | . | . |
| SDQ Conduct - Child | 8.35 | 8.56 | 8.39 | 8.83 | 8.41 | 8.19 | 8.46 | 8.56 | 8.56 | . | . | . | . | . | . | . | . | . |
| | *1.49* | *1.44* | *1.46* | *1.25* | *1.78* | *1.59* | *1.43* | *1.52* | *1.43* | . | . | . | . | . | . | . | . | . |
| SDQ Hyper - Child | 6.74 | 7.28 | 6.86 | 6.48 | 7.17 | 5.43 | 7.80 | 7.95 | 7.48 | . | . | . | . | . | . | . | . | . |
| | *2.30* | *2.17* | *2.19* | *2.19* | *2.09* | *2.13* | *1.97* | *2.04* | *1.95* | . | . | . | . | . | . | . | . | . |
| SDQ Peer problems - Child | 8.93 | 8.82 | 8.72 | 8.85 | 8.22 | 8.75 | 8.68 | 8.64 | 8.77 | . | . | . | . | . | . | . | . | . |
| | *1.32* | *1.47* | *1.57* | *1.40* | *1.72* | *1.41* | *1.57* | *1.40* | *1.41* | . | . | . | . | . | . | . | . | . |
| SDQ Pro-social - Child | 2.15 | 2.17 | 2.22 | 2.13 | 1.95 | 2.51 | 2.35 | 2.26 | 2.53 | . | . | . | . | . | . | . | . | . |
| | *1.79* | *1.76* | *1.82* | *1.81* | *2.16* | *1.68* | *1.91* | *1.76* | *1.71* | . | . | . | . | . | . | . | . | . |
| SDQ Composite | . | . | . | . | . | . | 30.77 | 31.78 | 31.09 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *5.33* | *4.90* | *5.15* | . | . | . | . | . | . | . | . | . |
| SDQ Emotional | . | . | . | . | . | . | 7.17 | 7.40 | 7.46 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *2.24* | *2.17* | *2.17* | . | . | . | . | . | . | . | . | . |
| SDQ Conduct | . | . | . | . | . | . | 8.18 | 8.36 | 8.23 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *1.59* | *1.57* | *1.58* | . | . | . | . | . | . | . | . | . |
| SDQ Hyper | . | . | . | . | . | . | 6.80 | 7.45 | 6.85 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *2.14* | *2.14* | *1.99* | . | . | . | . | . | . | . | . | . |
| SDQ Peer problems | . | . | . | . | . | . | 8.62 | 8.57 | 8.55 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *1.47* | *1.31* | *1.61* | . | . | . | . | . | . | . | . | . |
| SDQ Pro-social | . | . | . | . | . | . | 2.37 | 2.19 | 2.78 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *1.76* | *1.75* | *1.82* | . | . | . | . | . | . | . | . | . |
| Depression Score - positive | . | . | . | . | . | . | 37.14 | 37.89 | 38.61 | 37.80 | 39.21 | 38.94 | 38.83 | 39.51 | 39.10 | 37.62 | 38.04 | 35.79 |
| | . | . | . | . | . | . | *6.51* | *5.03* | *5.95* | *5.83* | *5.92* | *5.55* | *5.87* | *5.30* | *5.61* | *5.16* | *4.69* | *6.06* |
| Locus of Control - positive | . | . | . | . | . | . | 0.06 | -0.15 | 0.07 | 0.09 | -0.23 | 0.26 | 0.15 | -0.11 | 0.15 | 0.12 | -0.40 | -0.06 |
| | . | . | . | . | . | . | *0.71* | *0.82* | *0.73* | *0.74* | *0.97* | *0.79* | *0.82* | *0.87* | *0.82* | *0.83* | *0.91* | *0.91* |
| Optimistic Look on Life | . | . | . | . | . | . | 0.67 | 0.69 | 0.56 | 0.55 | 0.55 | 0.61 | 0.59 | 0.30 | 0.46 | 0.20 | 0.19 | 0.23 |
| | . | . | . | . | . | . | *0.47* | *0.46* | *0.50* | *0.50* | *0.50* | *0.49* | *0.49* | *0.46* | *0.50* | *0.40* | *0.39* | *0.42* |
| Return Favor | . | . | . | . | . | . | 0.83 | 0.83 | 0.87 | 0.89 | 0.96 | 0.89 | 0.92 | 0.96 | 0.85 | 0.99 | 0.95 | 0.82 |
| | . | . | . | . | . | . | *0.38* | *0.38* | *0.34* | *0.32* | *0.19* | *0.31* | *0.27* | *0.19* | *0.36* | *0.07* | *0.22* | *0.38* |
| Put Someone in Difficulty | . | . | . | . | . | . | 0.40 | 0.41 | 0.32 | 0.40 | 0.24 | 0.27 | 0.31 | 0.26 | 0.23 | 0.23 | 0.43 | 0.25 |
| | . | . | . | . | . | . | *0.49* | *0.49* | *0.47* | *0.49* | *0.42* | *0.44* | *0.46* | *0.44* | *0.42* | *0.42* | *0.50* | *0.43* |
| Help Someone Kind To Me | . | . | . | . | . | . | 0.81 | 0.84 | 0.78 | 0.93 | 0.96 | 0.89 | 0.96 | 0.94 | 0.85 | 0.99 | 0.96 | 0.83 |
| | . | . | . | . | . | . | *0.40* | *0.37* | *0.42* | *0.26* | *0.20* | *0.31* | *0.20* | *0.24* | *0.35* | *0.10* | *0.19* | *0.38* |
| Insult Back | . | . | . | . | . | . | 0.43 | 0.42 | 0.36 | 0.28 | 0.31 | 0.27 | 0.24 | 0.35 | 0.28 | 0.25 | 0.39 | 0.28 |
| | . | . | . | . | . | . | *0.50* | *0.49* | *0.48* | *0.45* | *0.47* | *0.44* | *0.43* | *0.48* | *0.45* | *0.44* | *0.49* | *0.45* |

**Note:** Unconditional means are reported for each variable by cohort and city. Standard Deviations are reported in italics below each mean estimates.

Table 18: Mean and Standard Deviation for Non-cognitive variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| Satisfied with School | . | . | . | . | . | . | 0.68 | 0.75 | 0.74 | . | . | . | . | . | . | . | . | . |
| | . | . | . | . | . | . | *0.47* | *0.44* | *0.44* | . | . | . | . | . | . | . | . | . |
| Satisfied with Health | . | . | . | . | . | . | 0.84 | 0.89 | 0.86 | 0.87 | 0.93 | 0.88 | 0.95 | 0.84 | 0.88 | 0.81 | 0.52 | 0.69 |
| | . | . | . | . | . | . | *0.37* | *0.31* | *0.34* | *0.33* | *0.26* | *0.32* | *0.21* | *0.36* | *0.33* | *0.40* | *0.50* | *0.46* |
| Satisfied with Family | . | . | . | . | . | . | 0.81 | 0.85 | 0.87 | 0.68 | 0.67 | 0.75 | 0.80 | 0.76 | 0.73 | 0.72 | 0.73 | 0.79 |
| | . | . | . | . | . | . | *0.40* | *0.36* | *0.34* | *0.47* | *0.47* | *0.43* | *0.40* | *0.43* | *0.44* | *0.45* | *0.44* | *0.41* |
| Satisfied with Income | . | . | . | . | . | . | . | . | . | 0.57 | 0.38 | 0.53 | 0.62 | 0.41 | 0.52 | 0.43 | 0.39 | 0.56 |
| | . | . | . | . | . | . | . | . | . | *0.50* | *0.49* | *0.50* | *0.49* | *0.49* | *0.50* | *0.50* | *0.49* | *0.50* |
| Satisfied with Work | . | . | . | . | . | . | . | . | . | 0.77 | 0.63 | 0.75 | 0.84 | 0.67 | 0.70 | 0.69 | 0.68 | 0.66 |
| | . | . | . | . | . | . | . | . | . | *0.42* | *0.48* | *0.43* | *0.37* | *0.47* | *0.46* | *0.47* | *0.47* | *0.48* |

**Note:** Unconditional means are reported for each variable by cohort and city. Standard Deviations are reported in italics below each mean estimates.

## 7.2 Missing observations

Table 19: Missing observations for education variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| IQ Score | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| IQ Factor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Caregiver IQ Score | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | - | - |
| Caregiver IQ Factor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | - | - |
| High School Grade | - | - | - | - | - | - | 0.93 | 0.72 | 0.71 | 0.23 | 0.12 | 0.19 | 0.26 | 0.16 | 0.21 | 0.26 | 0.44 | 0.49 |
| University Grade | - | - | - | - | - | - | - | - | - | 0.81 | 0.62 | 0.55 | 0.85 | 0.72 | 0.67 | 0.89 | 0.88 | 0.77 |
| Graduate from High School | - | - | - | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Max Edu: University | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Max Edu: Graduate School | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Note:** This table reports the number of observations that are missing for each education variable by city and cohort. − indicates that the variable has 0 observations for the particular cohort-city group.

Table 20: Missing observations for health variables by city and cohort

| | **Children** | | | **Migrants** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| BMI - Child | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | - | - |
| BMI z-score - Child | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | - | - |
| Caregiver BMI | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | - | - | - | - | - | - | - | - |
| BMI | - | - | - | - | - | - | 0.13 | 0.11 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| BMI - z-score | - | - | - | - | - | - | 0.13 | 0.11 | 0.24 | - | - | - | - | - | - | - | - | - |
| Tried Marijuana | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Num. of Cigarettes Per Day | - | - | - | - | - | - | 0.81 | 0.83 | 0.88 | 0.59 | 0.64 | 0.71 | 0.62 | 0.67 | 0.75 | 0.68 | 0.73 | 0.82 |
| Good Health | - | - | - | - | - | - | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| Num. of Days Sick Past Month | - | - | - | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Engaged in A Fight | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Drove Under Influence | - | - | - | - | - | - | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Ever Suspended from School | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Age At First Drink | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

**Note:** This table reports the number of observations that are missing for each health variable by city and cohort. − indicates that the variable has 0 observations for the particular cohort-city group.

Table 21: Missing observations for non-cognitive variables by city and cohort

| | Children | | | Migrants | | | Adolescents | | | Adults 30 | | | Adults 40 | | | Adults 50 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| SDQ Composite - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | - | - | - | - | - | - | - | - | - |
| SDQ Emotional - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Conduct - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | - | - | - | - | - | - | - | - | - |
| SDQ Hyper - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Peer problems - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Pro-social - Child | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Composite | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Emotional | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Conduct | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Hyper | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Peer problems | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| SDQ Pro-social | - | - | - | - | - | - | 0.01 | 0.01 | 0.01 | - | - | - | - | - | - | - | - | - |
| Depression Score - positive | - | - | - | - | - | - | 0.02 | 0.04 | 0.02 | 0.01 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | 0.04 | 0.03 |
| Locus of Control - positive | - | - | - | - | - | - | 0.01 | 0.02 | 0.01 | 0.02 | 0.06 | 0.06 | 0.02 | 0.05 | 0.05 | 0.09 | 0.11 | 0.07 |
| Optimistic Look on Life | - | - | - | - | - | - | 0.01 | 0.05 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Return Favor | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Put Someone in Difficulty | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Help Someone Kind To Me | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Insult Back | - | - | - | - | - | - | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Satisfied with School | - | - | - | - | - | - | 0.02 | 0.02 | 0.02 | - | - | - | - | - | - | - | - | - |
| Satisfied with Health | - | - | - | - | - | - | 0.01 | 0.02 | 0.02 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 |
| Satisfied with Family | - | - | - | - | - | - | 0.01 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.00 | 0.01 | 0.00 | 0.06 | 0.05 | 0.01 |
| Satisfied with Income | - | - | - | - | - | - | - | - | - | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.03 | 0.02 | 0.02 |
| Satisfied with Work | - | - | - | - | - | - | - | - | - | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.01 | 0.07 | 0.07 | 0.03 |

**Note:** This table reports the number of observations that are missing for each non-cognitive variable by city and cohort. − indicates that the variable has 0 observations for the particular cohort-city group.

Table 22: Mean and Standard Deviation for distance IVs by city and cohort

| | **Children** | | | **Adolescents** | | | **Adults 30** | | | **Adults 40** | | | **Adults 50** | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova | Reggio | Parma | Padova |
| Closest Municipal Asilo | 1.24 | 0.76 | 0.82 | 1.21 | 0.72 | 0.85 | 1.14 | 0.69 | 0.87 | 1.21 | 0.76 | 0.84 | 1.04 | 0.93 | 0.77 |
| | *1.43* | *0.85* | *0.58* | *1.34* | *0.72* | *0.56* | *1.33* | *0.78* | *0.60* | *1.38* | *0.89* | *0.59* | *1.35* | *1.15* | *0.51* |
| 2nd-closest Municipal Asilo | 1.83 | 1.32 | 1.48 | 1.66 | 1.25 | 1.45 | 1.73 | 1.18 | 1.48 | 1.75 | 1.23 | 1.48 | 1.59 | 1.90 | 1.26 |
| | *1.79* | *1.16* | *0.88* | *1.53* | *1.01* | *0.74* | *1.67* | *1.09* | *0.77* | *1.70* | *1.13* | *0.76* | *1.76* | *1.46* | *0.63* |
| Closest Private Asilo | 5.33 | 1.03 | 0.70 | 5.14 | 1.02 | 0.73 | 5.17 | 0.99 | 0.74 | 5.59 | 1.12 | 0.74 | 5.64 | 2.36 | 0.74 |
| | *2.51* | *1.18* | *0.43* | *2.47* | *1.17* | *0.48* | *2.38* | *1.25* | *0.58* | *2.57* | *1.39* | *0.54* | *2.36* | *2.38* | *0.48* |
| 2nd-closest Private Asilo | 8.81 | 1.57 | 1.15 | 8.36 | 1.41 | 1.20 | 8.59 | 1.39 | 1.10 | 9.24 | 1.56 | 1.17 | 9.23 | 2.86 | 1.04 |
| | *2.58* | *1.60* | *0.57* | *2.29* | *1.43* | *0.61* | *2.44* | *1.56* | *0.69* | *2.21* | *1.70* | *0.60* | *2.18* | *2.66* | *0.61* |
| Closest Religious Asilo | 1.66 | 1.51 | 1.14 | 1.67 | 1.33 | 1.10 | 1.87 | 1.27 | 0.96 | 1.71 | 1.28 | 0.97 | 1.42 | 1.47 | 0.89 |
| | *1.71* | *1.44* | *0.74* | *1.67* | *1.23* | *0.81* | *1.70* | *1.33* | *0.73* | *1.70* | *1.22* | *0.63* | *1.70* | *1.26* | *0.77* |
| 2nd-closest Religious Asilo | 2.27 | 2.21 | 1.96 | 2.32 | 2.04 | 1.91 | 2.46 | 1.97 | 1.75 | 2.37 | 2.02 | 1.78 | 1.99 | 2.79 | 1.57 |
| | *1.79* | *1.66* | *1.00* | *1.75* | *1.48* | *1.01* | *1.68* | *1.63* | *0.97* | *1.74* | *1.64* | *0.90* | *1.76* | *2.20* | *1.03* |
| Closest Municipal Materna | 1.17 | 0.84 | 1.08 | 1.06 | 0.74 | 0.96 | 1.12 | 0.73 | 1.12 | 1.09 | 0.78 | 1.06 | 0.97 | 1.15 | 0.89 |
| | *1.30* | *0.86* | *0.79* | *1.15* | *0.71* | *0.70* | *1.28* | *0.83* | *0.73* | *1.19* | *0.93* | *0.72* | *1.21* | *1.27* | *0.57* |
| 2nd-closest Municipal Materna | 1.78 | 1.39 | 1.75 | 1.60 | 1.29 | 1.63 | 1.68 | 1.27 | 1.70 | 1.74 | 1.34 | 1.69 | 1.60 | 1.89 | 1.35 |
| | *1.70* | *1.17* | *0.96* | *1.43* | *1.09* | *0.82* | *1.54* | *1.22* | *0.84* | *1.58* | *1.22* | *0.87* | *1.70* | *1.57* | *0.64* |
| Closest Private Materna | 2.24 | 1.88 | 2.17 | 2.14 | 1.87 | 2.18 | 2.28 | 1.75 | 2.14 | 2.49 | 1.92 | 2.27 | 2.09 | 3.26 | 1.94 |
| | *2.29* | *1.62* | *1.33* | *2.12* | *1.56* | *1.22* | *2.15* | *1.76* | *1.35* | *2.22* | *1.82* | *1.32* | *2.39* | *2.40* | *0.85* |
| 2nd-closest Private Materna | 2.97 | 2.78 | 3.22 | 2.81 | 2.68 | 3.21 | 2.97 | 2.62 | 3.18 | 3.24 | 2.76 | 3.25 | 2.79 | 4.23 | 2.87 |
| | *2.19* | *1.77* | *1.26* | *2.05* | *1.69* | *1.32* | *2.10* | *1.88* | *1.30* | *2.12* | *2.01* | *1.36* | *2.25* | *2.78* | *1.08* |
| Closest State Materna | 1.62 | 1.36 | 1.26 | 1.50 | 1.29 | 1.30 | 1.53 | 1.28 | 1.28 | 1.83 | 1.28 | 1.40 | 1.48 | 1.06 | 1.01 |
| | *1.62* | *0.99* | *1.00* | *1.23* | *0.90* | *0.93* | *1.25* | *0.99* | *0.99* | *1.58* | *1.00* | *0.99* | *1.57* | *1.09* | *0.70* |
| 2nd-closest State Materna | 2.38 | 2.22 | 1.91 | 2.25 | 2.04 | 1.86 | 2.31 | 1.98 | 1.85 | 2.61 | 1.99 | 1.93 | 2.15 | 2.90 | 1.59 |
| | *1.95* | *1.46* | *0.93* | *1.63* | *1.23* | *0.90* | *1.61* | *1.39* | *0.94* | *1.83* | *1.39* | *0.92* | *1.98* | *2.27* | *0.80* |
| Closest Religious Materna | 1.16 | 1.22 | 0.60 | 1.12 | 1.08 | 0.60 | 1.30 | 1.00 | 0.54 | 1.19 | 1.03 | 0.55 | 0.94 | 1.37 | 0.52 |
| | *0.91* | *1.31* | *0.41* | *0.88* | *1.14* | *0.44* | *0.96* | *1.17* | *0.42* | *0.86* | *1.10* | *0.40* | *0.74* | *1.19* | *0.49* |
| 2nd-closest Religious Materna | 1.74 | 1.72 | 1.12 | 1.81 | 1.58 | 1.09 | 1.92 | 1.46 | 1.01 | 1.88 | 1.53 | 1.04 | 1.50 | 2.12 | 0.92 |
| | *1.20* | *1.49* | *0.57* | *1.17* | *1.34* | *0.59* | *1.15* | *1.42* | *0.59* | *1.15* | *1.38* | *0.59* | *1.12* | *1.44* | *0.60* |

**Note:** Means are reported for each variable by cohort and city. Standard Deviations are reported in italics below each mean estimates.

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