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Entrepreneurial Intention among High-School Students: The Importance of Parents, Peers and Neighbours

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Abstract

Literature on the formation of intention toward entrepreneurship in adolescents has focused on either *parental* (vertical) transmission of social capital or network effects from *peers* or *neighbours* (horizontal). Considering the simultaneous effect of parents, peers, and neighbours, we suggest that such three levels identify a mechanism whereby the individual perception of their importance interacts with their objective characteristics. With a unique dataset for second-year high-school adolescents in the Italian city of Palermo, and employing Logit and 3SLS methods, we find evidence for a strong parental effect and for secondary peer (peers) effects on student intention. We also detect clear endogenous effects from the neighbourhood and the overall context. Moreover, entrepreneurship is confirmed to be perceived, even by high-school students, as a buffer for possible unemployment and social mobility.

Key words: intention toward entrepreneurship; peer-effects; individual uncertainty; contextual uncertainty.

JEL classification: R32, R38, Z10, J60.

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1 Introduction

In the stage preceding the legal formation of a new venture young people who have not yet completed their formal education develop a *commitment to start* a new firm sometime in the future (*entrepreneurial intention*) (Krueger, 1993). The entrepreneurship literature has mostly focused on the portion of this population corresponding to young adulthood, that is, aged between 18 and 23 years. We broaden this perspective by focusing on the portion aged 15–16, considering three levels of contextual factors, in terms of proximity between the adolescent and: *i)* her/his parents; *ii)* her/his peers; and *iii)* her/his neighbourhood. The endogeneity of these attitudinal transmission mechanisms is empirically addressed. Controls for perceived feasibility, personal qualities, and socio-demographic characteristics are also used. In addition, we test the idea of entrepreneurship as a tool for social mobility and against unemployment. The data set is based on a survey, carried out in 2015, among adolescents enrolled in the second year of high school in the city of Palermo, Italy.

The paper is organized as follows. Sections 2 and 3 present an overview of the theoretical and the empirical literature motivating our research hypotheses. Section 4 introduces the research hypotheses. Section 5 describes the model that will be estimated in the study. Section 6 presents the original dataset and our estimation strategy. Section 7 discusses the empirical results. Finally, section 8 presents concluding remarks and directions for future research.

2 Overview of the Theoretical Literature

Scholars from different fields in the social sciences - management, economics, psychology, and sociology - provided insightful explanations of the drivers of individual decisions. Dealing with the entrepreneurial intention of high-school students, we build upon the interdisciplinary perspective resulting from such fields altogether.

2.1 Management

Ajzen's (1991, p. 181; 2002) theory of planned behaviour (TPB) identifies three antecedents of individual intention that shape a person's future behaviour: attitude ("degree to which a person has a

favourable or unfavourable evaluation … of the behaviour in question"), subjective norms (individual perception of the behaviour in question, influenced by the view and judgment of parents and peers), and perceived behavioural control ("perceived ease or difficulty of performing the behaviour").

Sarasvathy's (2001) theory of effectuation (TE) approaches decision making related to entrepreneurial action as a process by means of which entrepreneurially active individuals decide step by step by assessing the resources available in order to achieve their goals. This decision process pushes individuals to find solutions with the available resources, learn from unavoidable mistakes, pursue new partnerships, and invest only the maximum amount of money that they are willing to lose (Alsos et al., 2020). Of course, TE deals with actual entrepreneurial *action*. However, it provides hints which prove extremely useful in the study of entrepreneurial *intention*, as it allows in depth analysis of uncertain situations such as those faced by adolescents who are asked to decide whether they will be interested to become entrepreneurs once they leave the high-school.

2.2 Economics

Distinguishing between individual and local uncertainty, Shackle (1949) introduces the idea of the 'potential surprise function', according to which uncertainty avoidance has two main dimensions: individual uncertainty, reflecting personal inclinations; and local uncertainty, representing the preferences and the attitudes of the local context in which the individual operates. Minkes and Foxall (2003) aptly emphasized that Simon's (1979) ideas on imperfect and dispersed knowledge as drivers of an individual's decision to become entrepreneur are pillars of the current explanations of entrepreneurial motives and characteristics. In fact, taking into account decision making under conditions of bounded rationality Simon provides strong support to the view that individuals make 'satisfactory' rather than 'optimal' decisions, therefore pursuing tangible sub-goals rather than maximising a well-defined utility function. The intention to create a new firm may result from the awareness that it represents an alternative to uncertain future career prospects or an "escape from unemployment" (Storey, 1991; Santarelli and Vivarelli, 2007).

2.3 Psychology

Winfield (1984) singles out two main groups of external influences that may push individuals to set up a business: *i)* a response to traumatic changes occurred in an individual's life (a personal loss, a social upheaval, and so on), which usually make her/him more autonomous; *ii)* the support that entrepreneurial ideas may receive from social interaction.

Kahneman (2011) fast-thinking vs. slow-thinking understanding of the formation of internal and external orders of preferences helps to identify cultural capital and social capital as distinct components of the intention formation process of an individual. Acknowledging, consistent with behavioural genetics (Nicolaou et al., 2008) and psychological studies on occupational aspiration (Schmitt-Rodermund and Wondracek, 2002), the role of genetic factors and age-appropriate entrepreneurial competencies in pushing individuals to become entrepreneurs during adulthood, Obschonka (2016) observes that the tendency to break rules in the younger years associated with the development of entrepreneurial competencies (inventing, leading, engaging in commerce, etc.) in adolescence shapes the personality of successful entrepreneurs. Accordingly, early entrepreneurial precursors are in part expression of biologically related propensities (personality traits) and in part the result of embeddedness in supportive environments characterized by the availability of entrepreneurial role models (self-employed parents) and interaction with peer groups favouring the development of "a sense of identity, status, competence, and self-efficacy" (p. 198). Among the entrepreneurial precursors, a greater endowment of agency culture has been shown by Carbonara et al. (2018) to be associated with a higher intention to start a business.

2.4 Sociology

Bourdieu's (1986) cultural capital hypothesis states that parental skills and attitudes, and their prestige in society largely influence the value system and the socio-economic success of their children (see also Katsillis and Rubinson 1990; Dumais et al. 2002; P. M. De Graaf 1986; N. D. De Graaf et al. 2000; Albanese et al. 2016). Coleman (1966) determines that the socio-economic success of a student depends much more on peer effects than on overall investment in education, class size

and appliances available (see also Epple et al. 2003; Hanushek 1986; Hoxby 2000). Putnam's (2001) social capital hypothesis adds the understanding of networking with the context on different levels of proximity: bonding (for closer relations) and bridging (for more distant relations). Granovetter (1973) stresses the cohesive power of weak ties, arguing that the strength of a tie between two individuals affects the degree of overlapping of their friendship networks. Finally, Burt (1992, 2000) clarifies that weak ties are even more important than strong network connections, due to their opening ways to the less probable, and potentially most profitable opportunities (Santarelli and Tran 2013).

3 Overview of the Empirical Literature

The empirical literature on adolescents' entrepreneurial intention is not particularly wide. However, some contributions provide useful hints for the purposes of our analysis.

Kickul et al. (2008) find for more than 5,000 middle and high-school students in the U.S. that having an entrepreneurial mother or father exerts a positive impact on girls', but not boys', intention to become entrepreneurs.

Dávila and Mora (2004) find for a sample of Hispanic white students in the U.S. that teenagers with self-employed parents underperform scholastically since they have the expectation to work in family-owned businesses. By the same token, one cannot exclude that high-school students with self-employed parents have a greater proneness toward entrepreneurship.

Sobel and King (2008) use U.S. county-level youth self-employment data to check whether school choice programs create more business-like environment in K-12 education[1] which is in turn associated to higher youth entrepreneurship rates in counties with school choice programs. Finding confirms that voucher programs[2] create higher rates of youth entrepreneurship.

Schoon and Duckworth (2012) use the 1970 British Birth Cohort, following individuals till the age of 34, and show that entrepreneurial intention measured at age 16 is a significant predictor of

[1] The publicly-supported school grades prior to college in the US.
[2] Certificates of government funding for a student at a school chosen by the student herself or by her parents.

entrepreneurship at 34. Having an entrepreneur as a father is also found to significantly and positively influence both intention at 16 and entrepreneurship later on. Schmitt-Rodermund (2007) (reported in Lerner and Damon 2012) finds that East German 10th-graders with entrepreneurial parents show higher interest in gaining entrepreneurial competencies and stronger interest in future entrepreneurship. Further support comes from Saw and Schneider (2012), who use longitudinal data from HS&B (a nationally representative sample of US 10th-graders from 1980 to 1992) and find a strong relationship between entrepreneurial orientation in 10th-grade and business ownership at age 28, in addition to the effect of having an entrepreneurial parent.

For a sample of British adolescents aged 16–19 displaying a positive interest in entrepreneurship, Bonnett and Furnham (1991) find that those with a greater internal locus of control and a stronger belief in hard work are more attracted to the idea of becoming entrepreneurs. Remarkably, parental attitude toward entrepreneurship turns out to exert no significant influence on adolescents' preferences for setting up a new business. Similarly, Obschonka et al. (2017) study, for high-school students in Finland, the role of personality characteristics and age-appropriate entrepreneurial competencies, such as leadership, self-esteem, creativity, and proactivity motivation. They find that, while entrepreneurial alertness and career intention are generally predicted by entrepreneurial competencies, personality characteristics act as mediating factors of the impact of entrepreneurial competencies on entrepreneurial intention. Similarly to the findings illustrated above for university students, Obschonka et al. (2011) find a role for entrepreneurial competence, in case acquired during adolescence, with a positive impact on future progress in venture creation.

4 Research Hypotheses

As we have seen when surveying the managerial, economic, psychological, and sociological literature in Section 2 above, entrepreneurial intention is often hypothesized to depend on personal factors. These include not only personality traits, motivations, skills and 'passions', but also gender, age, professional background, experience, native/migrant status (Kourilsky and Walstad 1998; Carland et

al. 1988; McClelland 1961; Shapero and Sokol 1982; Henderson and Robertson 1999; van der Zwan et al. 2016). Along with personal factors, also contextual factors have been identified as crucial determinants of intention. These include, among others, the role played by nature and frequency of the interaction with parents (Kickul et al. 2008), peers, and neighbours (see Ajzen 1991; Sarasvathy 2001; Boissin et al. 2009; Criaco et al. 2017; Van Gelderen et al. 2015; Krueger 1993). Different subfields of the entrepreneurship literature have revealed a variety of approximations of contextual factors and sociocultural underpinnings (Audretsch et al., 2018), showing possible sources of both horizontal and vertical transmission of intentions (Quatraro and Usai 2017): from parents (Wyrwich 2015), grandparents (Laspita et al. 2012), spouses (Moog and Backes-Gellner 2009), school peers (Liñán and Santos 2007), work peers and neighbours (Backman and Karlsson 2013).

We assume that both personal and contextual factors shape individual confidence for activities with uncertain outcomes and represent, in the 'local' context important determinants of the decision to engage in entrepreneurship (Van Praag and Cramer 2001; Falck et al. 2010; Pirinsky 2013). This leads us to the formulation of our first working hypothesis, which can be divided into two parts:

Hypothesis 1a. *One's entrepreneurial intention is a function of both personal attitude (idiosyncratic internal drive for action) and the attributes of the local context.*

Hypothesis 1b. *The local context influences intention toward entrepreneurship on multiple levels of proximity (including different forms of social interaction and their intensity).*

Among the several contextual factor mentioned above, the attitude toward entrepreneurship of the parents, and the intention toward entrepreneurship of the student's peers in class and in the neighbourhood at large are the most important when one studies the entrepreneurial intentional of 16 year old high-school students, who are unlikely to be married and are by definition excluded from the labour market. In line with Storey's (1991) "escape from unemployment hypothesis" we hypothesize

that individual intention is also a question of general embeddedness in the bigger picture of local culture and institutions (Alesina and Giuliano 2015; Carbonara et al. 2016), and is shaped by the 'spirit' of a location, before the networking effects from parents, peers and neighbours come into force (Acemoglu and Robinson, 2010; Guiso et al., 2006; Axelroad 1977). Thus, besides examining the direct relationship between individual intention and parents' and peers' attitudes, one ought to account for their endogeneity. This can be summed up in our second working hypothesis:

Hypothesis 2. *Both vertical (from parents) and horizontal (from peers and neighbours) transmission of entrepreneurial intention and the preferences and intentions of others are endogenous.*

Following the contributions by Shackle (1949) and Kahneman (2011) discussed in Section 2 above, three main components of individual intention can be identified: (i) rational consideration of an opportunity, given the economic incentives external to the individual; (ii) source of the internal drive (e.g., desire for free riding); as well as (iii) contextual limits – which modify individual drive – that is, the determinants of the revealed order of preferences. Since these components are susceptible to their context, one may assume that they are shaped by the socio-economic circumstances of parents and peers (Light and Dana, 2013):

Hypothesis 3. *Vertical transmission from parents is formant for entrepreneurial intention at a hierarchical level, while the local network (peers and neighbours) influences intention only indirectly.*

5 The Model

To test our hypotheses, we start from the following model:

$$EI = \beta_1 Z + \beta_2 ExpNPV + e_1; \qquad (1)$$

$$EI = \beta_1 Z + \beta_{21} Feasibility_risk + \beta_{22} Uncertainty + e_1; \quad (2)$$

$$EI = \beta_1 Z + \beta_{21} Feasibility_risk + \beta_{221} Indiv_Uncert + \beta_{222} Context_Uncert + e_1. \quad (3)$$

In Equation (1), *EI* denotes entrepreneurial intention (towards some generic investment in an own business), *Z* represents the required capital for such investment, and *ExpNPV* stands for its net present value. In Equation (2), we substitute *ExpNPV* with its two components: *Feasibility_risk*, which denotes probabilistically knowable risk, that is, the probability of failure based on past experiences known by slow thinking; and *Uncertainty*, which stands for the fast-thinking intuitive judgement on matters for which there is not enough information from past experiences. Thus, Model (2) allows to state that, given the same information and skills, two individuals can reach the same risk evaluation, but their choice can be influenced also by their attitude to uncertainty.

Equation (3) considers two measures of the attraction to choices characterized by uncertain outcomes: *Indiv_Uncert*, which denotes the person-specific tendency to be open toward one's environment; and *Context_Uncert*, capturing the characteristic of the environment with which the individual enters into contact (see Tubadji and Nijkamp 2015). Accordingly, intention is shaped: (i) vertically, as a function of the parents' social capital and its transmission to the offspring's social capital; and (ii) horizontally, as a function of the individual's own character and interaction with the experiences of peers (level-1 horizontal transmission) and neighbours (level-2 horizontal transmission). So, for both horizontal and vertical transmission we consider always: (i) the individual character, and (ii) the characteristics of the level of the context, in order to capture the effect of proximity on transmission. Thus, Model (3) allows us to test Hypotheses 1a and 1b.

While feasibility is objective to all, and individual uncertainty is random, the component *Context_Uncert* depends on local culture as much as on the particular individual and her/his intention. When we analyse a case where all observations come from the same institutional reality – e.g., from the same city/region – this endogeneity may seem negligible, but there is a temporally-bounded inbuilt dependence in the vertical transmission of attitudes. Parents' attitudes are shaped over time

before the offsprings'. Both peers and neighbours have been exposed differently to the local culture and shaped as individuals by it. Since the overall cultural context is different from the cultural context created by parents and peers we can further transform Model (3) into a recursive model:

$$Context_Uncert = \beta_0 Context_Culture + X + e_1 \quad (4a)$$

$$EI = \beta_1 Z + \beta_2 Feasibility_risk + \beta_{221} Indiv_Uncert + \beta_{222} Context_Uncert + e_2 \quad (4b)$$

In Equation (4a), we first express the contextual uncertainty of a place as a function of the local culture (*Context_Cultur*) and a vector of controls *X* capturing one's susceptibility to the context.[3] Then, in Equation (4b) we use the dependent variable from Equation (4a) as an explanatory variable. Thus, our model first states that the level of social capital in different contexts is a product of local culture and generates the overall level of uncertainty that the environment will transmit. Model (4) will serve the empirical operationalization of **Hypotheses 2** and **3**.

As standard control variables we use the individual's personal and socio-demographic characteristics (gender, age, human capital), controlling for three types of additional factors. First, we control for entrepreneurship being viewed as a mechanism for social mobility and/or as an unemployment buffer (see, e.g., Thurik et al., 2008; Arrighetti et al., 2016; Guerra and Patuelli, 2016). Second, we distinguish between trust as a measure for healthy relationships, which is established as a positive factor for socio-economic prosperity at the individual level (Vaillant 2012), and obedience to parents, which has been pointed out as a negative factor for prosperity and entrepreneurial activity (see Boz and Ergeneli 2014). Third, possible cultural differences, such as migrant status, entail potential groupwise heterogeneity which could lead to bias. To take this aspect into account, we use information for the years of residence in the country. The next section describes in detail the available data and the methods used to test empirically Models (3) and (4).

[3] Such as one's household income etc., as we know higher poverty is associated with higher reliance on extended family and social networks.

6 Data and Methods

6.1 The Data Set and Survey

The data set used in this paper is a result of primary data collection carried out in 2015 among students (about 2,000) enrolled in the second year of secondary schools (mostly aged 15–16) in the city of Palermo, Italy.[4] The survey, through 212 questions[5] mostly employing answers on a 1–10 Likert scale, was primarily designed to collect information regarding civic capital and to measure the social and cultural characteristics of students, their parents, peers and neighbors, the socio-demographic and financial characteristics of the family, such as the educational background and the occupation of the parents, as well as different aspects of the relationship between the parents and the child. It was administered in-class, in collaboration with the local educational authorities, to a representative sample of 12 schools (121 classes in total), stratified considering the different types of high school studies available in the city and its eight administrative subdivisions. The survey intercepts almost a quarter of the same-age population in the city and its surrounding areas and, for each school, contains responses from all students of the cohort (only excluding those who were absent from school on the day of the survey).

6.2 Description of Variables

Our dependent variable – entrepreneurial intention (*EI*) – is quantified on the basis of question 199 from the questionnaire, which asks how attractive one finds, on a scale from 1 to 10 (where 10 is the highest level of desirability) the idea of having her own business. We first use this variable (*Intention*) in its raw format. However, in order to bring the economic interpretation of this variable closer to the actual economic choice that can be expected from the students, we transform the variable

[4] Palermo is the capital city of the region of Sicily. In 2017, it had a resident population of 673,735 inhabitants and an unemployment rate of 21.3%, almost twice as big as the national average (10.9%). The data collection was implemented by the University of Palermo as part of the national project 'Social and Spatial Interactions in the Accumulation of Civic and Human Capital', funded by the Italian Ministry of Education, University and Research under the call *Futuro in Ricerca 2012*. For further details, refer to Fazio et al. (2016, 2018).

[5] A list of all questions is available from the authors upon request.

into a binary one, which is equal to 1 for all answers in the range from 8 to 10 (stronger intention). We label this variable as *Intention (dummy).*

The capital necessary for investment in entrepreneurship as a determinant of intention [element *Z* in Models (3) and (4)] is quantified with two variables from the questionnaire, regarding the family wealth status and the actual resources needed for undertaking entrepreneurship. Namely, we use question 196, answering the question if the family house is rented or owned. The resulting variable *Home ownership* is equal to 1 if the house is rented. Secondly, we use question 203, which infers what type of resources one will use in case she considers to start a business, the answers being: (i) personal resources, (ii) co-financing with others, (iii) borrowing from peers and family, or (iv) external resources such as banks or venture capital. We transform these data into a categorical variable, taking value 1 when personal resources are indicated, and 0 otherwise. This variable is labelled *Own resources*.

The model component *Feasibility_risk* is quantified in our data set through question 200, which answers the query how feasible one finds the idea to have her own business.

We take then into account two types of uncertainty – individual (*Indiv_Uncert*) and contextual (*Context_Uncert*). First, we use variables at the parental, peers and neighbours level for both individual and contextual uncertainty. Second, we employ a proxy for contextual uncertainty, which we use in our recursive model. *Indiv_Uncert* is then quantified as the level of individual embeddedness in one's context, that is: *Embeddedness (parents)*, based on question 169 (How many hours per day parents spend helping the student with her homework); *Embeddedness (peers)*, based on question 143 (How many times per week one meets her peers outside of school); and *Embeddedness (neigh.)*, based on question 128 (How much free time one spends in her own neighbourhood). *Context_Uncert* is approximated by *Indiv. uncertainty*, based on question 154, dealing with how close one finds herself to a person who is willing to take a risk and get involved in adventures. *Context_Culture*, instead, makes use of the same three levels used for *Indiv_Uncert*: *Trust (parents)*, based on question 34 (How important is caution in trusting people for the interviewee's

parents); *Trust (peers)*, based on question 52 (How important is caution in trusting people for the interviewee's peers); and *Trust (neigh.)*, based on question 59 (How cautious are people in the interviewee's neighbourhood in trusting people). In fact, global factor *Indiv_Uncert* is the level to which one is susceptible to the context, while global factor *Context_Uncert* is the degree of social capital one has access/exposure on the three levels: parents, peers and neighbours.

Standard personal and socio-demographic controls are drawn from the questionnaire as well. These are: *Male* (question 1, coded as a binary variable equal to 1 when the indicated gender is male); *Age* (question 2, taking values from 13 to 17, and '17 or more'); *Educ. achievement*, a human capital proxy (question 167, asking the student's average grade from the previous year, and ranging from 3 to 10); and *Math skills*, based on question 163 (asking student's preferred subject between Italian, mathematics, foreign languages and others). The latter variable is recoded as a binary variable equal to 1 for mathematics and 0 for else.

An additional set of control variables includes: (i) the self-assessed quality of the relationship with parents *Embeddedness (parents; control)* (question 211), taken as a proxy for family embeddedness, and equal to 1 when the interviewee indicates easy interaction and comfort in dependency from parents, and to 0 when difficult relationships emerge; (ii) *Embeddedness (neigh.; control)*, a proxy for quality of neighbourhood (question 132, inquiring if the student would prefer to live in a different neighbourhood); (iii) *Crisis effect*, collecting information about a possible role of the economic crisis (question 198, asking to which degree the economic situation of the student's family has improved or worsened); (iv) *Entrep mother* and *Entrep father* (deriving from questions 176 and 181, on the type of employment status of parents), which are dummy variables for mother/father being entrepreneur versus all other outcomes (including shop owner or independent professional).

6.3 Estimation Strategy

We start exploring our working hypotheses as follows: (i) first, we provide an initial exploration of the data using Model (3), which is estimated by ordinary least squares (OLS) and Logit models; (ii) next, we estimate the Model (4) by means of a three-stage least squares (3SLS) estimation.

Our primary statistical exploration provides an overview of basic descriptive statistics for the main variables of interest. We then employ a basic OLS regression with robust standard errors in order to cross-check if correlation findings are confirmed in a multivariate regression framework. Estimations will inform us of the significance of economic and physical factors, together with the cultural factor, on the three levels of cultural transmission (parents, peers and neighbours) in explaining entrepreneurial intention. We also control for obedience to parents, entrepreneurship as a means for social mobility or as a buffer against unemployment, and migrant status.

We triangulate empirically these results by transforming the Likert-scale dependent variable for entrepreneurial intention into the binary variable *Intention (dummy)* (where 1 indicates intention expressed with an intensity of 8 out of 10 or more), and by estimating a Logit model with the same explanatory variables. On the one hand, the Logit allows us to gain in economic interpretation, in particular with reference to the implicit binary nature of the entrepreneurial choice. On the other hand, focusing on the highest segment of the measurement scale can provide us with possible indications of nonlinearity, if effect signs or significance levels change.

According to **Hypothesis 2**, it is crucial to deal with the endogeneity issue underlying individual intention and its contextual uncertainty. For this purpose, we need to provide findings that are consistent with the ones obtained from the use of the variables determining contextual uncertainty (social capital of parents, peers and neighbours). Therefore, we first estimate our OLS and Logit specifications using the contextual uncertainty variables, and we subsequently substitute them with *Indiv. uncertainty* (self-reported openness to adventure). In case there is a consistent statistical support for this approximation, using *Indiv. uncertainty* for modelling endogeneity is justified.

Finally, we use a 3SLS approach to estimate Model (4). In the first equation, we explain contextual uncertainty (*Indiv. uncertainty*) with the social capital of parents, peers and neighbours, while controlling for home ownership as a proxy for household welfare. Then, we use contextual uncertainty together with individual uncertainty, as well as the rest of the explanatory and control variables already tested in the previous estimations, as determinants of individual intention. This

approach allows us to explore in detail the formation of personal uncertainty as a function of the social capital of the different networks.

7 Results

7.1 OLS and Logit Models

Analysis of descriptive statistics (Table 1 and Table A in the Appendix) offers a few insights into the data. The dependent variable *Intention* for entrepreneurial intention, when measured on a 1–10 Likert scale, shows an average value of 6.39, with a moderate dispersion (standard deviation is 2.57), suggesting a general presence of students hypothetically prone to self-employment. We transform this variable into a categorical variable, to differentiate between students with high intention and the rest. Therefore, the variable *Intention (dummy)* assumes value 1 when *Intention* is equal to 8 or more, and 0 otherwise. The percentage of respondents with such a high intention is about 40 per cent.

Levels of social capital exhibited by parents, peers and neighbours appear to be similar, ranging numerically from 6.66 to 8.03. The categorical variable *Embeddedness (parents; control)* collects information about the quality of the respondents' relationship with their parents, which we take as a proxy for embeddedness. It takes value 1 when a smooth relationship with parents is indicated (66%), and 0 otherwise. The intensity of the relationship with the parents, *Embeddedness (parents)*, is measured on a 1-10 Likert scale, and averages at 7.89, but with relatively high dispersion.

Our sample is evenly split between males and females, all interviewees have been living in the country in the previous eight years, and 19 per cent of them have a preference to mathematical problem solving (*Math skills*). About three quarters of students live in rented accommodations (*Home ownership*), and when asked about possible resources to employ for founding a company (*Own resources*), 26 per cent state that they would use own resources rather than personal network or market ones.The percentage of respondents with a father or a mother active as an entrepreneur (*entrep father* and *entrep mother*) is 7 and 2 per cent, respectively.

Table 1. Descriptive statistics

Variable description		Variable name	Obs	Mean	Std. dev.	Min	Max
Dependent variable 1 (OLS & 3SLS)	Entrepreneurial intention	*Intention*	2,001	6.39	2.57	1	10
Dependent variable 2 (Logit)	Strong entrepreneurial intention (8+), binary	*Intention (dummy)*	2,001	0.37	0.48	0	1
Explanatory variables							
Economic investment	Home ownership, binary	*Home ownership*	2,004	0.73	0.44	0	1
	Own financial resources, binary	*Own resources*	2,095	0.26	0.44	0	1
Risk	Feasibility of entrepreneurship	*Feasibility*	1,975	5.21	2.30	1	10
Individual uncertainty	Quality of the relationship with parents, binary	*Embeddedness (parents; control)*	2,095	0.66	0.47	0	1
	Intensity of the relationship with parents	*Embeddedness (parents)*	1,969	7.89	1.97	1	10
	Free time spent in neighbourhood	*Embeddedness (neigh.)*	1,998	5.03	2.78	1	10
	Desire to leave the neighbourhood	*Embeddedness (neigh.; control)*	2,059	4.86	3.17	1	10
	Weekly interaction with peers	*Embeddedness (peers)*	2,050	4.22	2.11	1	8
Contextual uncertainty	Social capital possessed by parents	*Trust (parents)*	2,079	8.03	2.12	1	10
	Social capital possessed by peers	*Trust (peers)*	2,059	7.45	2.12	1	10
	Social capital possessed by neighbours	*Trust (neigh.)*	2,032	6.66	2.23	1	10
	Risk-loving attitude	*Indiv. uncertainty*	2,050	6.37	2.46	1	10
Controls	Gender	*Male*	2,095	0.50	0.50	0	1
	Age category	*Age*	2,091	3.47	0.75	1	6
	School performance of previous year	*Educ. achievement*	2,036	4.99	1.16	1	8
	Math as preferred subject, binary	*Math skills*	2,095	0.19	0.39	0	1
	Worsening of economic condition of household	*Crisis effect*	1,973	5.82	1.88	1	10
	Entrepreneur mother	*Entrep mother*	1,988	0.02	0.15	0	1
	Entrepreneur father	*Entrep father*	1,984	0.07	0.25	0	1

Table 2 presents OLS estimations results for Model (3). Five model specifications are presented, in increasing order of complexity. We first employ no contextual cultural factors (column 1), then include them one by one (columns 2–4), and finally column 5) horse-race them together [i.e. the

variables *Trust (parents)*, *Trust (peers)* and *Trust (neigh.)*]. The results are consistent across specifications and corroborate both **Hypothesis 1a**, showing that intention toward entrepreneurship depends positively on perceived *Feasibility* (denoting the role of slow thinking), and **Hypothesis 1b**, showing that intention depends on the quality of the relationship with the parents [*Embeddedness (parents; control)*]. The latter result confirms that healthy interpersonal relationships are the main sources of social and economic wellbeing of an individual (Shah et al. 2014; Waldinger et al. 2006; Waldinger et al. 2015).

Table 2. Model (3), OLS estimation

Dependent variable: *Intention*	Coef.	*t*-value	Coef.	*t*-value	Coef.	*t*-value	Coef.	*t*-value	Coef.	*t*-value
Male	–0.005	–0.05	0.013	0.13	0.011	0.11	–0.008	–0.01	0.027	0.27
Age	–0.038	–0.54	–0.026	–0.36	–0.035	–0.49	–0.044	–0.61	–0.031	–0.43
Educ. achievement	0.005	0.45	0.004	0.08	0.005	0.11	0.002	0.04	0.002	0.04
Math skills	–0.035	–0.29	–0.044	–0.36	–0.064	–0.53	–0.051	–0.42	–0.063	–0.51
Home ownership	–0.060	–0.55	–0.056	–0.52	–0.067	–0.62	–0.071	–0.65	–0.065	–0.59
Own resources	0.156	1.38	0.160	1.41*	0.160	1.41*	0.154	1.35*	0.161	1.41*
Feasibility	0.663	24.63***	0.659	24.51***	0.667	24.86***	0.668	24.81***	0.665	24.68***
Embeddedness (parents)	0.025	0.79	0.023	0.71	0.018	0.58	0.016	0.51	0.015	0.48
Embeddedness (parents; control)	0.103	2.94***	0.084	2.34***	0.100	2.87***	0.122	3.60***	0.096	2.72***
Embeddedness (neigh.)	0.032	1.57*	0.031	1.52*	0.029	1.41*	0.028	1.38*	0.028	1.38*
Embeddedness (neigh.; control)	0.042	2.40***	0.041	2.34***	0.039	2.26**	0.040	2.29**	0.037	2.11**
Embeddedness (peers)	0.024	0.92	0.031	1.18	0.020	0.74	0.018	0.69	0.024	0.91
Entrepreneur mother	–0.626	–1.50*	–0.631	–1.52*	–0.622	–1.42*	–0.602	–1.42*	–0.628	–1.44*
Entrepreneur father	–0.188	–1.03	–0.174	–0.96	–0.174	–0.96	–0.182	–1.00	–0.168	–0.93
Trust (parents)			0.060	2.16**					0.052	1.67**
Trust (peers)					0.047	1.71**			0.034	1.09
Trust (neigh.)							0.006	0.23	–0.016	–0.57
Crisis effect	0.070	2.30**	0.070	2.30	0.070	2.29**	0.070	2.29**	0.071	2.32**
Constant	1.252	2.28**	0.904	1.62	1.004	1.80**	1.215	2.15**	0.841	1.48*
F test	(15, 1682) = 56.48		(16, 1678) = 53.04		(16, 1671) = 55.52		(16, 1662) = 54.51		(14, 1652) = 48.82	
Prob > *F*	0.0000		0.0000		0.0000		0.0000		0.0000	
R-squared	0.384		0.386		0.390		0.389		0.392	
N	1,698		1,695		1,688		1,679		1,671	

Note: Robust standard errors are employed. ***, **, * denote statistical significance at the 1%, 5%, 10% level.

Being embedded in the neighbourhood [*Embeddedness (neigh.)*] is not significant, while the desire to move out of the neighbourhood [*Embeddedness (neigh.; control)*] is consistently significant, though with a smaller effect. This finding suggests that entrepreneurship may additionally be perceived as a tool for social and spatial mobility. In addition, the crisis-related variable (*Crisis effect*) is found to have a strong positive influence on entrepreneurial intention, showing that worsening financial conditions of the household positively affects entrepreneurial intention of the offspring.

Finally, **Hypothesis 3** receives a first, preliminary confirmation, since the cultural context-related variables show that the parental (vertical) effect [*Trust (parents)*] dominates the remaining contextual levels (peers and neighbourhood). This evidence is consistent with the result for *Embeddedness (parents)*. The parental contextual level also appears to be the one where the student perceives the highest amount of social capital.

We then estimate a Logit model using the same explanatory variables and the transformed binary dependent *Intention (dummy)*. As previously discussed, this model can serve as a test for possible nonlinearities in our specification. It is also noteworthy that in both the OLS and Logit models probabilistic risk evaluation (*Feasibility*) is always highly significant. Its positive sign is also confirming the classical notion of a link between risk-loving attitude and entrepreneurial intention, which we assumed *a priori* worth of empirical testing.

Table 3 presents our results. The results corroborate those from the OLS estimation, with the exception of trust in peers (*Trust (peers)*), which becomes statistically significant, and *Own resources*, whose significance reinforces the effect of Feasibility and signals the link between a marked intention and the availability of the necessary financial resources. Overall, the results in It is also noteworthy that in both the OLS and Logit models probabilistic risk evaluation (*Feasibility*) is always highly significant. Its positive sign is also confirming the classical notion of a link between risk-loving attitude and entrepreneurial intention, which we assumed *a priori* worth of empirical testing.

Table 3 provide further support to **Hypothesis 1b**, suggesting a role for contextual peer effects (*peers*) as well in generating stronger entrepreneurial intention. Students who see their peers as more trusting can be thought of as the ones who exhibit stronger bridging bonds.

It is also noteworthy that in both the OLS and Logit models probabilistic risk evaluation (*Feasibility*) is always highly significant. Its positive sign is also confirming the classical notion of a link between risk-loving attitude and entrepreneurial intention, which we assumed *a priori* worth of empirical testing.

Table 3. Model (3), Logit estimation

Dependent variable: *Intention (dummy)*	Coef.	*z*–value	Coef.	*z*–value	Coef.	*z*–value	Coef.	*z*–value	Coef.	*z*–value
Male	0.096	0.82	0.118	1.00	0.141	1.18	0.106	0.89	0.150	1.25
Age	0.020	0.24	0.039	0.48	0.043	0.53	0.028	0.34	0.052	0.63
Educ. achievement	0.025	0.49	0.022	0.43	0.023	0.44	0.029	0.54	0.026	0.49
Math skills	0.002	0.02	–0.014	–0.10	–0.023	–0.16	–0.016	–0.11	–0.026	–0.18
Home ownership	0.129	0.98	0.140	1.06	0.127	0.95	0.115	0.86	0.132	0.99
Own resources	0.303	2.42***	0.320	2.55***	0.312	2.47***	0.317	2.51***	0.336	2.65***
Feasibility	0.485	15.58***	0.484	15.49***	0.492	15.59***	0.490	15.47***	0.490	15.41***
Embeddedness (parents)	0.030	0.90	0.027	0.82	0.020	0.59	0.022	0.68	0.018	0.54
Embeddedness (parents; control)	0.118	3.11***	0.094	2.41***	0.103	2.59***	0.130	3.35***	0.099	2.45***
Embeddedness (neigh.)	0.005	0.23	0.004	0.18	0.003	0.14	0.002	0.08	0.002	0.10
Embeddedness (neigh.; control)	0.039	2.03**	0.038	1.98**	0.037	1.89**	0.039	2.01**	0.035	1.77**
Embeddedness (peers)	0.027	0.93	0.036	1.25	0.024	0.81	0.024	0.83	0.031	1.05
Entrepreneur mother	0.246	0.64	0.250	0.65	0.362	0.91	0.315	0.80	0.365	0.91
Entrepreneur father	–0.238	–1.07	–0.229	–1.02	–0.224	–0.99	–0.223	–0.99	–0.222	–0.98
Trust (parents)			0.082	2.66***					0.054	1.58*
Trust (peers)					0.088	2.89***			0.069	2.03**
Trust (neigh.)							0.035	1.27	0.002	0.06
Crisis effect	0.064	2.05**	0.067	2.12**	0.067	2.11**	0.063	1.98**	0.069	2.16*
Constant	–5.668	–8.54***	–6.229	–8.88***	–6.235	–8.90***	–5.967	–8.61***	–6.576	–9.02***
Chi-squared	2 (15) = 394.71		2 (16) = 402.27		2 (16) = 408.77		2 (16) = 401.94		2 (18) = 411.05	
Prob > chi-squared	0.0000		0.0000		0.0000		0.0000		0.0000	
Pseudo-R-squared	0.175		0.179		0.183		0.181		0.185	
N	1,699		1,696		1,689		1,680		1,672	

Note: Robust standard errors are employed. ***, **, * denote statistical significance at the 1%, 5%, 10% level.

7.2 A 3SLS Approach

Individual contextual uncertainty [till here expressed by *Trust (parents)*, *Trust (peers)* and *Trust (neigh.)*] can be approximated by self-reported openness toward adventure (*Indiv. uncertainty*). If the latter variable results in consistent estimation findings and appears to approximate satisfactorily the above contextual levels, using it as an alternative measurement may be justified.

Table 4 presents a reliability test toward expressing the *Context_Uncert* latent factor shown in Model (4) by its proxy *Indiv. uncertainty*. This approximation may allow us to model recursively our hypothesized multilevel transmission mechanism. Therefore, we substitute in our model the three context-related variables with *Indiv. uncertainty*, and re-estimate our OLS and Logit specifications (Column 6 of Table 2 and It is also noteworthy that in both the OLS and Logit models probabilistic risk evaluation (*Feasibility*) is always highly significant. Its positive sign is also confirming the classical notion of a link between risk-loving attitude and entrepreneurial intention, which we assumed *a priori* worth of empirical testing.

Table 3). It can be seen in Table 4 that the new estimation results are closely consistent with those of Table 2 and It is also noteworthy that in both the OLS and Logit models probabilistic risk evaluation (*Feasibility*) is always highly significant. Its positive sign is also confirming the classical notion of a link between risk-loving attitude and entrepreneurial intention, which we assumed *a priori* worth of empirical testing.

Table 3 and therefore support **Hypothesis 2**. Thus, the conceptually suitable variable *Indiv. uncertainty* can be accepted as also statistically suitable substitute for the three levels of contextual uncertainty: parents, peers and neighbours.[6]

Table 4. Model (3), OLS and Logit estimations (Indiv. uncertainty test)

Dependent variable	*Intention*		*Intention (dummy)*	
	Coef.	*t*-value	Coef.	*z*-value
Indiv. Uncertainty	0.077	3.34***	0.092	3.69***
Male	–0.009	–0.09	0.093	0.78
Age	–0.044	–0.63	0.011	0.13
Educ. achievement	0.006	0.14	0.023	0.43
Math skills	–0.044	–0.36	–0.007	–0.05
Home ownership	–0.089	–0.82	0.100	0.76
Own resources	0.145	1.27	0.287	2.28**
Feasibility	0.657	24.23***	0.478	15.36***
Embeddedness (parents)	0.029	0.88	0.031	0.94
Embeddedness (parents; control)	0.105	3.02***	0.121	3.16***

[6] We carried out variance inflation factor (VIF) tests as well (not reported), which showed that no relevant multicollinearity issues concerning the three contextual level variables exist in an OLS regression setting.

Dependent variable	*Intention*		*Intention (dummy)*	
	Coef.	*t*-value	Coef.	*z*-value
Embeddedness (neigh.)	0.027	1.31*	0.001	0.02
Embeddedness (neigh.; control)	0.037	2.11**	0.035	1.78**
Embeddedness (peers)	0.006	0.23	0.006	0.20
Entrepreneur mother	–0.603	–1.44*	0.276	0.71
Entrepreneur father	–0.168	–0.93	–0.219	–0.98
Crisis effect	0.068	2.21**	0.059	1.87**
Constant	0.970	1.76**	–5.986	–8.84***
F or chi-squared	(16, 1675) = 55.61		2 (16) = 405.70	
Prob (or chi-squared) > *F*	0.0000		0.0000	
R-squared (or Pseudo-R-squared)	0.389		0.181	
N	1,692		1,693	

Note: Robust standard errors are employed. ***, **, * denote statistical significance at the 1%, 5%, 10% level.

We proceed with operationalizing Model (4), for which results are presented in Table 5. The recursive relationship between the cultural environment [*Trust (parents)*, *Trust (peers)* and *Trust (neigh.)*] and *Indiv. uncertainty*, at a first step, and between *Indiv. uncertainty* and entrepreneurial *Intention*, at a second stage, justifies the use of a 3SLS approach.[7]

Table 5. Model (4), 3SLS estimation

Dep. var.: *Indiv. uncertainty*	Coef.	*z*-value	Coef.	*z*-value	Coef.	*z*-value	Coef.	*z*-value
Trust (parents)	0.057	2.00**					0.041	1.29*
Trust (peers)			0.061	2.15**			0.026	0.83
Trust (neigh.)					0.102	3.81***	0.073	2.59***
Constant	5.946	25.18***	5.945	26.84***	5.716	30.26***	5.389	18.98***
Parameters	1		1		1		3	
RMSE	2.434		2.431		2.426		2.428	
R-squared	0.002		0.003		0.009		0.009	
Chi-squared (*p*-value)	3.98 (0.046)		4.64 (0.031)		14.48 (0.001)		15.17 (0.002)	
Dep. var.: *Intention*	Coef.	*z*-value	Coef.	*z*-value	Coef.	*z*-value	Coef.	*z*-value
Indiv. uncertainty	0.909	2.66***	0.688	2.04**	0.064	0.32	0.353	1.94**
Male	–0.012	–0.12	–0.008	–0.08	–0.006	–0.06	0.001	0.01
Age	–0.055	–0.75	–0.057	–0.77	–0.052	–0.75	–0.051	–0.72
Educ. achievement	0.012	0.27	0.010	0.23	0.001	0.03	0.006	0.14
Math skills	–0.088	–0.64	–0.099	–0.72	–0.058	–0.45	–0.078	–0.61
Home ownership	–0.178	–1.05	–0.155	–0.93	–0.101	–0.75	–0.119	–0.91
Own resources	0.103	0.82	0.121	0.98	0.141	1.24	0.137	1.20
Feasibility	0.632	16.97***	0.649	17.83***	0.663	23.52***	0.655	24.12***

[7] We tested the possibility of instrumenting the 'uncertainty' variable with family- and peers-specific human capital, which are standard instruments for modelling vertical transmission. However, 2SLS results suggested that these instruments were weak. Consequently, no evidence based on 2SLS is presented here.

Embeddedness (parents)	0.029	1.05	0.023	0.86	0.020	0.74	0.021	0.78
Embeddedness (parents; control)	0.094	3.02***	0.106	3.44***	0.124	4.06***	0.114	3.72***
Embeddedness (neigh.)	0.011	0.40	0.014	0.49	0.023	1.03	0.019	0.85
Embeddedness (neigh.; control)	0.019	0.63	0.024	0.80	0.035	1.57*	0.032	1.49*
Embeddedness (peers)	–0.045	–0.56	–0.033	–0.42	0.000	0.01	–0.012	–0.26
Entrepreneur mother	–0.535	–1.52*	–0.573	–1.62*	–0.585	–1.72**	–0.604	–1.75**
Entrepreneur father	–0.099	–0.46	–0.119	–0.56	–0.166	–0.83	–0.124	–0.71
Crisis effect	0.058	1.92**	0.060	2.00**	0.067	2.45***	0.065	2.37***
Constant	–3.518	–2.77***	–2.393	–1.95**	1.058	1.29*	–0.582	–0.74
Parameters	16		16		16		16	
RMSE	2.811		2.457		1.973		2.086	
R-squared	–0.230		0.060		0.394		0.325	
Chi-squared (*p*-value)	1298.89 (0.000)		1264.89 (0.000)		1072.19 (0.000)		1152.09 (0.000)	
N	1,689		1,683		1,673		1,666	

Note: Robust standard errors are employed. ***, **, * denote statistical significance at the 1%, 5%, 10% level.

In the second equation, we re-estimate our intention model, plugging in *Indiv. uncertainty* as an explanatory variable. The results are fully consistent with regard to all the other main explanatory variables, with statistically significant effects found for uncertainty (*Indiv. uncertainty*), slow-thinking-related risk-evaluation (*Feasibility*), the impact of the economic crisis (*Crisis effect*) and embeddedness with parents [*Embeddedness (parents; control)*]. Here having an entrepreneur mother (*Entrep mother*) becomes marginally significant, with a fairly large negative sign. It should be recalled that only 2 per cent of students in the surveyed sample (about 40 students) respond to this characteristic. With regard to the first equation results, we observe that the local neighbourhood context [*Trust (neigh.)*] is the strongest determinant of students' uncertainty, supporting our expectation that the general cultural context is a source of endogeneity before vertical and horizontal transmission. Finally, in the second equation we note that the effect on *Indiv. uncertainty* from the local context is positive, and individuals who are freer from uncertainty are more prone to entrepreneurship. This means that if a city or a neighbourhood has higher social capital, it will be characterized by less uncertainty in the individuals and stronger proneness towards entrepreneurship, indifferently of the vertical and the horizontal transmissions. Still, it should be noted that, in our estimates, vertical transmission is always stronger than the horizontal one.

In sum, the empirical evidence confirms our **Hypotheses 1a** and **1b**, supporting the view that the family and the personal networks impact entrepreneurial intention formation (especially when referring to high intention). However, this formation is also endogenously dependent on the overall local context, which determines the general personal feeling of uncertainty of all individuals (students, their parents and their peers, and the neighbours).

8 Discussion and Directions for Future Research

Taking hints from different strands of literature in management, economics, psychology, and sociology we modelled the formation of entrepreneurial intention of adolescents as a function of different levels of individual and contextual uncertainty, analysing the cultural endogeneity of social capital transmission by means of a three-stage least squares (3SLS) framework. Data from a unique survey of second-year high school students in the city of Palermo, Italy, were used for empirical testing, and allowed us: (i) to investigate some well-known facts in entrepreneurship research on a sample of younger individuals (such as the importance of risk evaluation or the influence of parental contact); and (ii) to explore innovative links between entrepreneurial intention and social/cultural capital (i.e., trusting behaviour in the students' social environments).

In general, we find that it is the embeddedness in the relationship with the parents that fosters formation of entrepreneurial intention. The effect of peers on intention toward entrepreneurship, mostly relevant for developing strong intention, is only secondary in magnitude. When treated for endogeneity, the model reports statistically significant effects from the neighbourhood's social capital context. Entrepreneurship is confirmed to be perceived as a tool for social and spatial mobility, and as a way out of adverse economic conditions. We also find clear indications that one's feeling of uncertainty plays a role in determining intention, and that the former is in turn largely determined by the level of local social capital. This means that, if high local social capital exists in a place, this may influence positively local entrepreneurship levels, as result of vertical and horizontal transmission. The opposite holds true for low social capital levels.

Furthermore, on a conceptual level, our results give the following indications. First, they suggest that there are two significant components driving the impact of the cultural dimension on adolescents' intention formation: individual uncertainty, and contextual uncertainty. Second, the theoretically different levels of proximity in one's environment – the parental level of the context (bonding relationships), the peers' network, and the neighbours' network (two types of bridging relationships) – differ in their relevance to individual intention. The formation of entrepreneurial intention seems to be most strongly impacted by the vertical transmission of social capital (between parents and students), which is always significant through all our empirical specifications. Yet, when we consider only stronger intention, we see peer effects starting to play a significant role as well.

To disentangle endogeneity and avoid reverse causality, we employed a 3SLS approach, which allows to handle this issue, and to come to a third conceptually-relevant finding: contextual uncertainty as a factor for one's intention formation is *a priori* shaped by one's cultural environment. Most importantly, we see that the general context (the neighbours level) is what drives it the most. Conversely, individual uncertainty remains strongly associated with parental influence, suggesting that vertical transmission is the most important mechanism for intention formation.

With regard to the limitations of this study, it should be acknowledged that our data provide only self-reported assessments of trust, this being an especially sensitive issue when we attempt to quantify the objective level of social and cultural capital of the interviewees' neighbours. Possible distortions due to this data limitation can be cross-checked under the condition of availability of self-reported information from the neighbours themselves (which was not possible to collect) or another unbiased measure of the neighbours' social capital. With such better quantification, the endogenous mechanism modelled here can be re-examined.

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Appendix

Table A. Correlation matrix

Intention	1.0000																				
Trust (parents)	0.1229	1.0000																			
Trust (peers)	0.1002	0.4403	1.0000																		
Trust (neigh.)	0.0788	0.2815	0.3212	1.0000																	
Indiv. uncertainty	0.1447	0.0546	0.0534	0.0908	1.0000																
Male	–0.0129	–0.1044	–0.1274	–0.0417	0.0476	1.0000															
Age	0.0080	–0.1091	–0.0809	–0.0713	0.0510	0.1140	1.0000														
Educ. achievement	0.0444	0.0712	0.0557	0.0021	–0.0173	–0.1249	–0.1524	1.0000													
Math skills	0.0094	0.0457	0.0552	0.0476	0.0161	0.0943	–0.0688	0.0335	1.0000												
Home ownership	0.0009	0.0176	0.0013	–0.0032	0.0459	0.0037	–0.1452	0.0443	0.0890	1.0000											
Own resources	0.0720	0.0053	–0.026	–0.0198	0.0444	–0.0102	0.0096	0.0304	0.0096	0.0314	1.0000										
Feasibility	0.6108	0.0847	0.0638	0.1058	0.1099	–0.0044	0.0301	0.0556	0.0231	0.0224	0.0717	1.0000									
Embeddedness (parents; control)	0.1406	0.2885	0.2926	0.1394	0.0117	–0.0525	–0.0376	0.0823	0.0770	0.0145	0.0248	0.0870	1.0000								
Embeddedness (parents)	0.1137	0.1372	0.1146	0.0820	0.0046	–0.0220	–0.0460	0.0874	0.0364	0.0636	0.0411	0.1202	0.3249	1.0000							
Embeddedness (neigh.)	0.0624	–0.0149	–0.0405	0.0730	0.0850	0.1117	0.0437	–0.0315	–0.0271	–0.0712	0.0049	0.0689	0.0291	0.0593	1.0000						
Embeddedness (neigh.; control)	–0.0073	–0.0074	0.0260	–0.1321	0.0527	–0.0801	0.0168	0.0044	–0.0383	0.0148	–0.0002	–0.0721	–0.0379	–0.1129	–0.3258	1.0000					
Embeddedness (peers)	0.0962	–0.1195	–0.0753	–0.0117	0.2064	0.1782	0.1353	–0.0725	–0.0525	–0.0797	0.0191	0.1403	–0.0051	0.0051	0.2286	–0.0750	1.0000				
Entrep mother	–0.0144	–0.0234	–0.0531	–0.0231	–0.0087	0.0140	–0.0037	0.0201	0.0023	0.0029	–0.0062	0.0456	–0.0518	0.0103	–0.0157	0.0024	0.0327	1.0000			
Entrep father	0.0439	–0.0369	–0.0152	–0.0112	–0.0003	0.0334	0.0147	–0.0097	0.0162	0.0460	0.0225	0.1131	0.0032	0.0306	–0.0258	–0.0481	0.0968	0.1252	1.0000		
Crisis effect	0.0742	0.0130	–0.0048	0.0079	0.0288	–0.0696	0.0087	0.0259	0.0103	–0.019	–0.0267	0.0371	0.0011	0.0567	–0.0121	0.0226	–0.0292	0.0208	–0.0045	1.0000	