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The origins of entrepreneurship: How parental role models and socialization shape later entrepreneurial intentions ^{*}

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Abstract

This exploratory study examines the effects of parental socialization and parental role models at ages 7 to 10 on the entrepreneurial intentions of their children in adolescence. Analysis of German household data and more than 1,400 observations shows a moderation effect between parental role models and socialization. An adolescent's willingness to become self-employed in the future is influenced by parental role models and moderated by parental child-rearing practices related to risk-taking during childhood. While child-rearing practices not focused on risk-avoidance reinforce the parental role model effect and increase an adolescent's intentions to become self-employed, parental child-rearing practices geared toward risk aversion nullify any positive effects of having self-employed parents as role models. Parental socialization during childhood thus

^{*}This paper uses the Socio-Economic Panel (SOEP) provided by the German Institute for Economic Research (Deutsches Institut für Wirtschaftsforschung, DIW). See https://www.diw.de/en/diw_01.c.678568.en/research_data_center_soep.html (accessed on 2025-06-24) for further details.

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casts a long-term shadow and may explain why some children with self-employed parents have as little intention of becoming self-employed as children of employees. Early parental socialization practices may, thus, contribute to explaining the lack of willing entrepreneurs and family business successors.

Keywords: entrepreneurial intentions; life course theory; role model; self-employment; socialization

JEL codes: L26, D19

1 Introduction

The entrepreneurship literature suggests that entrepreneurs are not born that way. Although genes might predispose individuals for occupations or entrepreneurship, Nicolaou and Shane (2010) conclude that genes play a minor role when compared to environmental factors. In fact, the entrepreneurship literature largely agrees that entrepreneurs are made, and that the family plays a salient role (Schröder et al., 2011; Lindquist et al., 2015). Entrepreneurship is deeply embedded into the family (Aldrich and Cliff, 2003; Shanine et al., 2023) and "Entrepreneurship runs in families" (Parker, 2009, p. 134). Parents serve as role models as well as sources of inspiration, education, and socialization, and they transmit competencies, intentions, and certain behaviors to their children (i.e., Dunn and Holtz-Eakin, 2000; Aldrich and Kim, 2007; White et al., 2007; Lindquist et al., 2015; Hopp et al., 2019). However, despite these impressive efforts to describe why the children of self-employed parents are more likely to become self-employed themselves later in life, it is surprisingly unclear why some of the children of self-employed parents actually become self-employed later, while others do not.

To gather a better understanding of why individuals become self-employed in later years, we not only focus on current family support and current family context, but embed our analysis into life course theory (Elder Jr, 1998; Elder Jr et al., 2003). In this regard, we consider today's entrepreneurial intentions, behaviors, and performance through the lens of an individual's past, where the childhood family context sows the seeds for later development (Aldrich and Kim, 2007; Aldrich and Yang, 2012; Andric et al., 2024). In other words, we examine how a family makes an entrepreneur. So far, it has been shown that the family background affects entrepreneurship, and Vladasel et al. (2021), studying siblings' correlations, present evidence that families are an important contextual factor for the development of entrepreneurial outcomes.¹ Li and Tong (2023), considering children aged between 10 and

¹Andric et al. (2024) present evidence that income from self-employment is affected by parental divorce during childhood (ages 0 to 18). Thereby, the authors explicitly incorporate the life course perspective by examining events that happened in the past (during childhood).

15 years, find that children with self-employed mothers show, especially if they are younger and female, better results in human capital formation. Hopp et al. (2019) suggest that parental socialization efforts at the age of 17 have effects on entrepreneurial intentions of adolescents.² Drawing on life course theory, this paper serves to improve the understanding of what makes an entrepreneur by explicitly considering the roots of entrepreneurial intentions in childhood through the lens of parental role modeling and parental nurture (Li and Tong, 2023; Andric et al., 2024). Specifically, we examine the parental self-employment status and parental child-rearing practices during childhood and their relation to the offspring’s later entrepreneurial intentions during adolescence.

The behavioral literature shows that preferences and attitudes, such as risk tolerance, are important determinants of behavior, choices, and outcomes across a range of domains (Cramer et al., 2002; Anderson and Mellor, 2008; Dohmen et al., 2011). So far, it is known that risk attitudes are transmitted from parents to their children: Hryshko et al. (2011) found that very risk-tolerant parents are less likely to have very risk-averse children, which is suggestive that parents transmit their risk attitudes to their offspring. In this line, Alan et al. (2017) show that the risk preferences of mothers and children are correlated very early on, i.e., when the children are between 7 and 8 years old. Moreover, the entrepreneurship literature linked risk attitudes to entrepreneurial intention and actual entrepreneurship. In fact, large-scale empirical studies usually show that self-employed individuals tend to be less risk-averse than employees (Ekelund et al., 2005; Dohmen et al., 2011; Skriabikova et al., 2014). However, there remains a knowledge gap when it comes to the life course-family perspective in entrepreneurship: No study, to date, has addressed whether parental nurture and parental socialization regarding risk avoidance during childhood might explain why some children of self-employed parents themselves do or do not become self-employed later in life.

In this exploratory paper, we draw on the life course-family perspective and focus on

²Li and Tong (2023) and Hopp et al. (2019) consider socialization efforts and outcomes in the same period, just giving us a hint that socialization might shape the life course. Nevertheless, from the life course perspective, it can be surmised that acquired skills can be applied throughout life, and intentions are actually a salient predictor for later behavior (Bade, 2022).

the effects of parental role modeling and parental socialization on their children’s self-employment intentions. Specifically, we examine the consequences of parental self-employment and parental practices geared towards risk avoidance during childhood and the children’s subsequent inclination towards self-employment in adolescence. We use German data that allow us to examine the relationship between parental child-rearing practices aimed at influencing their children’s risk avoidance at ages 7 to 10, parental self-employment status, and children’s entrepreneurial intentions at age 17. Our analysis of more than 1,400 observations on adolescents provides evidence for a moderation effect of parental role modeling and socialization on entrepreneurial intentions of adolescents. The less parental socialization is geared towards risk avoidance, the stronger the impact of the parental role model on the intention to become self-employed among adolescents. However, parental child-rearing practices geared toward risk aversion nullify any positive effects of having self-employed parents as role models.

2 Theoretical considerations

An individual’s life trajectory is shaped by historical times and places, embedded in socio-historical contexts, influenced by life transitions, events, and relationships, as well as affected by one’s own decisions (Elder Jr, 1998, 1999; Aldrich and Kim, 2007). Thus, the individual’s past shapes an individual’s self-employment (intentions) (Aldrich and Kim, 2007). In fact, parents transmit labor-related signals to their offspring (Aldrich and Kim, 2007; White et al., 2007; Wiese and Freund, 2011) and the family serves as an incubator for entrepreneurship (Dunn and Holtz-Eakin, 2000; Lindquist et al., 2015; Hopp et al., 2019; Andric et al., 2024). Rosado-Cubero et al. (2022, p. 261) identified the ”family environment as the most determining factor for young enterprising attitudes”, which is why we adopt a life course-family perspective.

Parents have a fundamental impact on their offspring as socializing agents, transmitting values at an early age (Döring et al., 2017). For this reason, our focus is on how parental

nurture and the employment of parents in the past shape the lives of their offspring. In this regard, literature shows that children of self-employed parents have higher entrepreneurial intentions and are more likely to become self-employed themselves, which is attributed to post-birth factors such as parental role modeling (Dunn and Holtz-Eakin, 2000; Lindquist et al., 2015; Rosado-Cubero et al., 2022). Similar applies to risk attitudes: Parents transmit risk attitudes to their offspring (Hryshko et al., 2011; Dohmen et al., 2012), which happens when children are very young (Alan et al., 2017). Since risk attitudes affect entrepreneurial attitudes (Skriabikova et al., 2014), we combine the so far separate strands of literature and examine the intergenerational transmission of entrepreneurship from a life course-family perspective, considering the effects of parental role models and parental socialization regarding the risk avoidance of their children during childhood and its effects on entrepreneurial intentions.

Parental role modeling fosters self-employment intentions among children when parents are self-employed (Lindquist et al., 2015). It is broadly acknowledged that children learn by observing their role models (Zozimo et al., 2017). However, studies challenge the view that role modeling is a purely observational process and also depends on interpersonal interactions and socialization (Bosma et al., 2012; Hopp et al., 2019; Schneck, 2025). Hopp et al. (2019) show that entrepreneurial intentions of adolescents are affected by parental role models and reinforced by parental socialization intensity, which describes, among others, the frequency of talks with children about activities or experiences, the frequency of showing parental trust or love, and the frequency of asking for a child’s opinion. Schneck (2025) presents evidence that parental interference, although presumably with the best intentions, might harm the development of entrepreneurial competencies of their sons. Parental socialization, thus, might not only foster entrepreneurial intentions, but might also help explain why children of self-employed do or do not develop entrepreneurial intentions.

Wiese and Freund (2011) suggest that children reflect on the parental role model and also modify it according to their beliefs and ideals. Among others, such beliefs and values

might be formed by child-rearing practices of parents during childhood (cf. Spencer, 1983). Since risk preferences of mothers and children are correlated when children are 7 to 8 years old (Alan et al., 2017), it is reasonable to assume that early child-rearing practices of parents affect children’s attitudes and beliefs. Since the self-employed are known to be, on average, less risk-averse than non-self-employed individuals (Ekelund et al., 2005; Skriabikova et al., 2014), it is reasonable to surmise that children who have been raised to avoid risks might be less likely to become self-employed than children for whom risk avoidance played a minor role during childhood.³

When considering that entrepreneurial intentions in children are formed through reflected role modeling (cf. Wiese and Freund, 2011), then previous parental socialization during childhood may moderate the effects of parental role modeling. In this paper, we posit that the extent of parental child-rearing practices during childhood explicitly shapes the signals of parental self-employment-related role models. On the one hand, we expect that child-rearing practices that do not focus on risk avoidance reinforce the entrepreneurial intentions of the offspring. On the other hand, we surmise that child-rearing practices geared towards risk avoidance undermine the positive effects of parental role models. In conclusion, we assume a moderation effect between parental role models and parental socialization.

3 Data and methodology

We use the German Socio-Economic Panel (SOEP, version 38.1, doi: 10.5684/soep.core.v38.1eu). The SOEP is a longitudinal representative survey of more than 10 thousand private households in Germany. It is provided by the German Institute for Economic Research (Deutsches Institut für Wirtschaftsforschung, DIW) Berlin. Each year, the SOEP contains information on demography, education, employment, and the household. There are also some special questionnaires concerning parents. Interviewers try to interview all members of a given sur-

³Few studies present no differences between self-employed and non-self-employed individuals, while some are even suggestive that at least some entrepreneurs or self-employed, respectively, tend to be more risk-averse (Xu and Ruef, 2004; Schneck, 2024).

vey household aged 12 years or older. More information about the data can be found in Wagner et al. (2007) and Goebel et al. (2018).

In this study, we focus on the data contained in the youth questionnaire, where 17-year-old adolescents are asked about, among others, school, their own behaviors, family relationships, future plans, and intentions (*jugendl* data set). Our dependent variable, entrepreneurial intentions, stems from this particular part of the SOEP. Specifically, adolescents are asked "How likely is it that you will experience the following career changes? How likely is it that you will become self-employed?". Intentions are indicated on an 11-item Likert scale ranging from "definitely not" (0 = 0%) to "such a change will definitely take place" (10 = 100%).⁴ We chose this variable because it predicts start-up efforts (Kolvereid, 2016) and also provides a holistic measure in the sense that it includes pecuniary as well as non-pecuniary considerations regarding entrepreneurship and self-employment (Abreu et al., 2019). Moreover, "entrepreneurial intentions precede new business ownership in the order of entrepreneurial engagement levels, and [...] intention is the best predictor of behavior" (Bade, 2022, p. 208). In the following, we refer to the adolescence phase when variables refer to the timing at age 17.

The variable regarding parental socialization comes from the parent and child questionnaire that refers to children aged between 7 and 8 years (*bioagel* data set).⁵ Note that only parents are asked to respond to questions regarding their children. Among others, parents are asked about the importance of several child-rearing practices: "Below are some of the qualities and abilities that can be fostered in children through parenting and child-rearing. How important are the following parenting goals to you? That the child ... learns to avoid risks in life", which is coded on a Likert scale ranging from 1 (very unimportant) to 5 (very important).⁶ We recoded this variable into a 3-item Likert scale by combining responses 1

⁴Variable *jl0227*, see SOEP Survey Papers no. 1247.

⁵We rely on the data set *bioagel* and the *bioage08*, *bioage10a*, and *bioage10b* (only FID) data. Some of the children, thus, are older than 8 years but younger than 11 years at the time of the survey.

⁶Variable *edgoal17*, see SOEP Survey Papers no. 1285. The SOEP questionnaire also refers to other educational goals of parents, such as the child using good judgment or working toward achieving his/her goals. The question regarding risk avoidance is the one with the highest variance among this set of questions,

and 2 (risk avoidance not (so) important) as well as 4 and 5 (risk avoidance (very) important). We refer to the childhood phase when variables refer to the timing of this particular data.

We match the information contained in the youth (*jugendl*) and the parent/children (*bioagel*) data sets. In other words, we match the information of the childhood phase to the one in the adolescence phase so that we can evaluate the impact of educational goals of parents during childhood (at the age of 7 to 10) on the adolescent’s entrepreneurial intentions at the age of 17. We also match parent and household-related data at different times of the surveys so that, e.g., the parental self-employment status or years of experience in the current self-employment (role modeling) of parents are known.

We estimate OLS regressions with the dependent variable referring to entrepreneurial intentions of adolescents at the age of 17. The central independent variables refer to socialization and role modeling of parents during childhood. Socialization is measured by the parental response regarding the importance of risk avoidance as an educational goal during childhood. Role models of parents are indicated by distinguishing self-employed from non-self-employed parents during childhood. Moreover, following Hopp et al. (2019), we examine the tenure of parental self-employment, which is 0 if the parent is not self-employed and, in the case of self-employment, it indicates the time spent in the current self-employment in years. Therefore, we examine the effects of parental role modeling and socialization at the age of 7 to 10 on entrepreneurial intentions at the age of 17. In other words, we follow life course theory by analyzing how the past shapes individual attitudes.

We also add a rich set of control variables, such as sex of parent and adolescent (measured at time of parent-child survey), the logarithm of the gross labor income of the parent (childhood and adolescence phases), the logarithm of the household net income (childhood and adolescence phases)⁷, the working time of the parent during childhood as well as an-

indicating that parents differ the most in their evaluation of this particular goal. For other dimensions, the variance is comparably small, suggesting that parents do not differ considerably in their evaluation regarding the importance of these dimensions (e.g., the child is honest or the child gets along well with other children).

⁷The household income is considered as proxy for financial means of the family, which affect the transition

nual dummy variables referring to the youth and the parent/children survey. In total, the sample consists of more than 1,434 adolescents. The standard errors are clustered by 825 adolescents. Descriptive statistics are presented in Table A.1 in the Appendix.

4 Results

4.1 Effects of parental role model and socialization on entrepreneurial intentions

Self-employed parents socialize their children differently compared to non-self-employed parents. Table 1 clearly shows that self-employed parents are less commonly thinking that it is important to implement child-rearing practices geared towards avoiding risks in life than non-self-employed parents. More than half of all non-self-employed parents report that it is (very) important that their children learn to avoid risks in life. 44% of self-employed parents share this opinion. In turn, 30% of self-employed parents think it is not important to implement child-rearing practices geared towards avoiding risks in life, while less than 15% of non-self-employed parents think so. Moreover, we see variation in responses within and across employment types. Self-employed and non-self-employed parents thus do not uniquely (dis)agree on whether they should teach their children to avoid risks in life.

Insert Table 1 about here

We now shift the focus to the effects of parental role modeling during childhood on adolescents' entrepreneurial intentions. Adolescents report higher entrepreneurial intentions when a parent was self-employed during childhood (cf. specification (1) in Table 2). The results are robust when using parental tenure in self-employment as the central indicator (specification (2)). Self-employed parents seem to serve as role models for their children, corroborating prior studies. Furthermore, the estimation results are also suggestive of socialization effects. ¹to entrepreneurship (Dunn and Holtz-Eakin, 2000).

The higher the importance of child-rearing practices geared towards risk avoidance, the lower the entrepreneurial intentions of adolescents. Parental socialization during childhood, thus, exhibits an impact on adolescents' risk attitudes.⁸

Insert Table 2 about here

Next, we discuss the proposed moderation effect between the socialization of parents and parental role modeling. Figure 1 presents the predictive margins of socialization for self-employed and non-self-employed parents. At first, the adolescent's intentions to become self-employed in the future are shaped by socialization. Adolescents exhibit lower entrepreneurial intentions when parents reported that risk avoidance was important to them, compared to parents who reported that risk avoidance is not (so) important. At each level of socialization, the effect of parental self-employment matters. For example, adolescents with parents who identify the avoidance of risks as not so important are significantly more likely to consider self-employment in the future when parents are self-employed than when parents are not self-employed. This effect is statistically significant and also economically meaningful. When risk avoidance was identified by parents to be not (so) important, the children of self-employed parents are 1.1 points or 28.2% more likely to consider self-employment in the future. Second, there is virtually no difference between adolescents with self-employed parents who were socialized to be risk-averse and adolescents with employed parents who were not educated to avoid risks. Thus, parental socialization geared towards risk avoidance offsets almost any positive effects of parental role modeling. However, when risk avoidance is not (so) important in parental socialization, the entrepreneurial role model effects are reinforced. In combination, the results are indicative of the proposed moderation effect.

Insert Figure 1 about here

⁸Regarding the control variables, the estimates reveal that the total household and individual parental income situation plays a minor role in entrepreneurial intentions of adolescents. However, we find a negative relationship between the working time of parents during childhood and entrepreneurial intentions of adolescents (also see Wiese and Freund, 2011). The higher the parental work-time at ages 7 to 10, the lower the entrepreneurial intentions among adolescents.

When examining the tenure of parental self-employment in years, our results again provide evidence in favor of the proposed moderation effect (Figure 2). When parents consider risk avoidance of children as not so important during childhood, then the entrepreneurial intentions of their offspring increase with the strength of the parental role model effect, i.e., the self-employment experience of parents. However, it is not generally a fact that an additional year of self-employment of parents increases entrepreneurial intentions among adolescents. If parents socialize their children in ways to avoid risks in life, then we estimated no distinct effect of role modeling by parents. Children with self-employed parents and non-self-employed parents do not differ significantly in their entrepreneurial intentions when parents apply child-rearing practices geared towards risk avoidance.

Insert Figure 2 about here

Same-sex dyads matter when it comes to self-employment of parents and parental socialization (Hopp et al., 2019; Schneck, 2025). Moreover, (Alan et al., 2017) show that the transmission of risk attitudes from mother to daughter is considerably stronger than the one from mother to son. Due to the low number of observations of self-employed parents for father-son, mother-daughter, father-daughter, and mother-son dyads, we estimate our regressions for samples consisting of same-sex dyads and combinations where parents and children do not share the same sex. Our analysis clearly corroborates the postulated moderation effect (see Figure 3). We also reaffirm that the effects of entrepreneurial socialization are affected by gender constellations between parents and children. The effects of role modeling and socialization are characterized by steeper positive slopes when parents and children share the same sex compared to dyads with different sexes, if child-rearing practices are not geared toward risk avoidance.

Insert Figure 3 about here

Our results also provide an interesting special case where parental socialization can even counteract any positive effects of parental role modeling. When parents and children are not

of the same sex, we find that parental socialization with a focus on risk avoidance reduces the entrepreneurial intentions of adolescents when self-employed role models exist. We thus show that parental socialization with a focus on risk avoidance during childhood may be a potential channel through which entrepreneurial intentions are weakened across generations if parents and children do not share the same sex. In same-sex dyads, the role model effects of having self-employed parents are always increasing entrepreneurial intentions, even when parental socialization fosters risk avoidance. Thus, when parents and children share the same sex, then parental role models positively influence children’s entrepreneurial intentions early on, irrespective of socialization practices.

4.2 Robustness checks

Our estimates presented above might be biased if parental risk attitudes influence parental child-rearing practices. We, therefore, include parental risk attitudes, which are coded on a Likert scale ranging from 0 (not willing to take risks) to 10 (willing to take risks), as an additional control variable.⁹ When including the parental willingness to take risks into our specifications, we find that the effects of having self-employed parents are corroborated. Thus, when children have self-employed parents, parental socialization plays a crucial role in entrepreneurial intentions among their offspring. However, children without self-employed parents have almost identical intentions to become self-employed, regardless of parental socialization (see the left panel of Figure 4). When examining the parental tenure in self-employment, the results are robust to the ones presented in Figure 3 (see the right panel of Figure 4). The effect of the parental willingness to take risks is estimated to be insignificant at conventional levels in all of the robustness checks.

Insert Figure 4 about here

⁹Note that the Pearson χ^2 test does not reject the null hypothesis of independence between parental risk attitudes and parental socialization practices ($p=0.165$). It is thus sufficient to include the parental risk attitudes as a control variable without considering potential interactions. The number of observations drops considerably: 810 observations on 506 adolescents remain for this robustness check.

The results presented in Figures 2 and 3 suggest that parental tenure in self-employment has a distinct impact on the offspring’s entrepreneurial intentions. However, for many individuals, spells of self-employment are temporary (Hyytinen and Rouvinen, 2008; Kaiser and Malchow-Møller, 2011). For this reason, we aim to clarify whether and how the duration in self-employment matters by investigating the relationship between entrepreneurial intentions of adolescents, parental role models, and parental socialization nonparametrically, i.e., without imposing any distributional assumptions. Specifically, we apply kernel-weighted local polynomial smoothing to illustrate the effect of parental role models on entrepreneurial intentions for children who have been socialized in different ways.

Insert Figure 5 about here

Parental socialization geared towards risk avoidance tends to lead to lower entrepreneurial intentions among adolescents when compared to adolescents with parents whose parenting practices were not directed towards risk avoidance in childhood (lower vs. upper panel of Figure 5). The duration in self-employment plays a crucial role. Especially long-term parents who have been self-employed and use parenting practices geared towards risk avoidance tend to reduce the entrepreneurial intentions of adolescents. In comparison, parents with more than ten years of experience in self-employment who socialize their children in a way that risk avoidance plays a minor role increase entrepreneurial intentions among adolescents. Thus, the effects of parental role modeling vary by parental socialization, providing evidence in favor of the proposed moderation effect. Additionally, this analysis underscores the significance of the role of parental tenure in self-employment by showing that short-term self-employment is unlikely to trigger large differences in an adolescent’s entrepreneurial intentions, regardless of parental socialization. However, the socialization efforts of long-term self-employed parents who were already self-employed before the birth of their child have a strong influence on their children.

The next robustness check also concerns the fact that parental role models, such as having self-employed parents, might change over time. In fact, spells of self-employment

are temporary, which also holds true in our data: Not all parents are self-employed in both waves when the surveys were conducted. 62 observations correspond to children with self-employed parents during childhood, where the parents are not self-employed at age 17. For 33 observations, the reverse is observed: Parents were self-employed during adolescence, but they were not self-employed during childhood. In 69 cases, parents were self-employed in both years. This basically corroborates Aldrich and Yang (2012, p. 9), who conclude that "[s]pells of self-employment and business ownership are quite short for most people and the chances that such spells coincide with opportunities for their children to take advantage of them are low."

Our next robustness check, therefore, concerns the timing of the self-employment spells of parents. Precisely, we checked the robustness of the results by additionally accounting for parental self-employment status at the time of the adolescence survey. McNally et al. (1991) showed that child-rearing practices are rather stable over time. We hence provide a robustness check of the proposed moderation effect and estimate the interaction between socialization effects and self-employment of parents in the different years (see Figure 6).¹⁰

Insert Figure 6 about here

Figure 6 shows that the main role model and socialization effects stem from parents who are self-employed in both surveys. Furthermore, a distinct socialization effect is evident when parents have never been self-employed and when parents have been self-employed during childhood. However, almost no effects of socialization can be found during adolescence. This might be due to parental child-rearing practices not bearing fruit among adolescents, or it might be contributed to changing child-rearing practices of parents over time, which cannot be tested here. Moreover, the 90% confidence intervals overlap with the entrepreneurial intentions of adolescents, who did not have self-employed role models in the considered

¹⁰Technically, we generate a new variable describing whether the parents were self-employed in both periods, only in the childhood phase, only in the adolescence phase, or not self-employed in both periods. We then estimate a model describing the effects of this variable, of socialization practices during childhood, and interaction terms of both variables.

periods. In sum, the results are suggestive that the estimates presented in Figure 1 are driven by the self-employed parents in both periods or by socialization and role modeling during childhood. Thus, parental role modeling and socialization influence their children at an early age. Moreover, the results are suggestive that the long-lived self-employed shape their children’s entrepreneurial intentions the most.

In sum, our results suggest that parental socialization and parental role models matter. Entrepreneurial socialization exhibits an impact as early as childhood. Moreover, our results are suggestive that parental socialization effort matter the most when parents are self-employed for a longer period of time. The offspring’s entrepreneurial intentions thus depend crucially on whether, when, and how long they come into contact with self-employed role models in their family.

5 Conclusion and discussion

It is widely acknowledged that self-employed parents have more frequently self-employed children than employed parents (Lindquist et al., 2015). More recently, the analysis of the channels for this phenomenon gained increasing attention, and the effects of parental role models, parental socialization intensity, parental socialization practices, and parenting styles have been examined (Schmitt-Rodermund, 2004; Hopp et al., 2019; Liu et al., 2024; Schneck, 2025). Drawing on the life course-family perspective, this exploratory paper presents evidence in favor of a moderation effect between parental socialization and role modeling on entrepreneurial intentions. Hereby, we show that children with self-employed parents who are not keen on educating risk-averse children during childhood are more likely to reinforce their offspring’s entrepreneurial intentions at age 17. However, we highlight that parenting practices may neutralize any positive effects of role modeling. An adolescent’s entrepreneurial intentions are no stronger than those of children with working parents when parents adopt parenting practices geared towards risk avoidance. In parent-child dyads of different sexes,

an adolescent’s entrepreneurial intentions are lower when self-employed parents, compared to employed parents, consider socialization regarding risk avoidance important during childhood. This paper thus shows that parental role modeling effects might be counteracted by parental socialization practices, contributing to an explanation for the lack of willing family firm successors (Parker, 2016; Schwartz, 2024). Moreover, we present evidence that parental role model effects depend on the duration of parental self-employment spells, where long-lived self-employed parents have the strongest impact on their children’s entrepreneurial intentions.

Our results reveal that entrepreneurial role models and parental socialization matter at a very young age. Parents make entrepreneurial children as early as 7 to 10 years old. In fact, socialization efforts regarding risk-taking and role modeling are already bearing fruit at this young age. Moreover, these parental influences continue to cast a long shadow years later, as they continue to influence their children’s entrepreneurial intentions, which are a predictor of future self-employment. In this regard, note that our results also have implications for entrepreneurship education programs. When the seed for later entrepreneurship seems to be planted during childhood (broadly defined in terms of age, also see Vladasel et al., 2021; Andric et al., 2024), such programs become progressively less effective as individuals grow up (i.e., after entering adolescence or adulthood). Furthermore, although entrepreneurial habits, attitudes, and behaviors can be learned, it is a matter of chance whether children are born into an entrepreneurial household or a household with self-employed parents, respectively, and thus are exposed to entrepreneurial role models. Moreover, the impact of past events is contingent on when they occur in life. Future studies might, therefore, engage in addressing the question of when exactly children learn from parental role models. Hereby, the exposure to self-employed role models in the family is of crucial interest, especially against the background that parental self-employment is often temporary and does not last a lifetime (Aldrich et al., 1998; Aldrich and Kim, 2007; Hyytinen and Rouvinen, 2008; Kaiser and Malchow-Møller, 2011; Aldrich and Yang, 2012).

Promoting entrepreneurship is a policy priority for governments in several countries (Drennan et al., 2005, p. 231). Since entrepreneurial intentions are a strong predictor of later entrepreneurship (Skriabikova et al., 2014; Kolvereid, 2016; Bade, 2022), fostering entrepreneurial intentions may contribute to achieving this goal. With this paper, we show that an entrepreneurial culture starts to flourish within the family at an early age. Parental socialization and nurture during childhood influence the children’s intentions to become self-employed later in life (cf. Aldrich and Kim, 2007). Our study also has important messages for family firms by highlighting the importance of parental influences in children’s entrepreneurial intentions as early as childhood and adolescence (see Schröder et al., 2011, for business succession intentions). Parker (2016) proposes that the offspring or family members might not be willing to succeed as business owners, and Schwartz (2024) reports a declining willingness to succeed within families in Germany. Parental socialization practices geared towards risk avoidance during childhood might provide one explanation for this development. Thus, there may be a long shadow of parental child-rearing and parental socialization. Future studies might engage in analyzing the reasons why and when parents consider child-rearing practices geared towards risk aversion as preferable. For example, one might examine changes in child-rearing practices over the business cycle or their correlation with the World Uncertainty Index. Based on these findings, we might identify ways and develop measures to reverse the decline in self-employment (Brieger et al., 2024) and fading interest in business succession within the family (Schwartz, 2024).

Risk attitudes and nascent entrepreneurship differ globally (Falk et al., 2018) and are transmitted across generations (Hryshko et al., 2011; Dohmen et al., 2012; Alan et al., 2017). We show that entrepreneurial intentions among adolescents differ significantly by parental role models and socialization practices of parents. Chanda and Unel (2021) present evidence that entrepreneurship of 2nd-generation Americans is correlated with the risk attitudes in the country of origin. Therefore, it might be promising to study the structure and timing of (ancestral) migration patterns (cf. Becker et al., 2020) to gather a deeper understanding

of the role of cultural attributes, differences in parental socialization, and their role in entrepreneurship. Moreover, Zozimo et al. (2017) show that not only do parents matter as role models. Among others, teachers also have an impact on potential future entrepreneurs. In Germany, individuals with a comparably high aversion against risks sort themselves into the school service and the public sector (Dohmen and Falk, 2010; Pfeifer, 2011). Since this study highlights that the transmission of risk attitudes to the next generation is an important channel for future entrepreneurship, we encourage studies examining entrepreneurial education, the school environment, as well as teachers' socialization practices, and their relationship to the formation of entrepreneurial attitudes among pupils and students. In fact, considering the family environment and the school environment and analyzing their relative importance offers the opportunity to elevate early childhood entrepreneurial education to a new level.

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Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data statement

The authors declare that they cannot share the data. The German Socio-Economic Panel (SOEP) is provided by the German Institute for Economic Research (Deutsches Institut für Wirtschaftsforschung, DIW) and can be accessed for scientific purposes. See https://www.diw.de/en/diw_01.c.601584.en/data_access.html (accessed on 2025-10-02) for

further details. The author's program code will be provided upon request.

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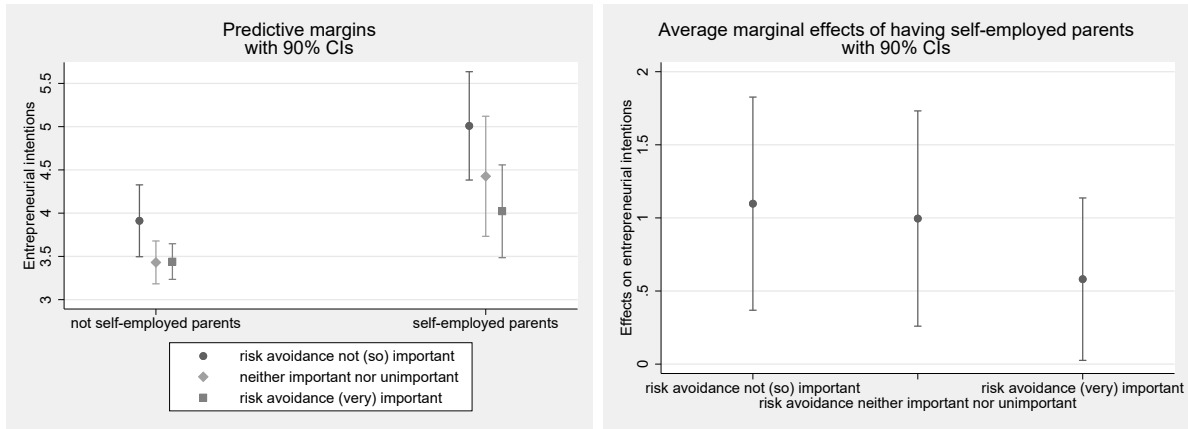
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Figures included in the text

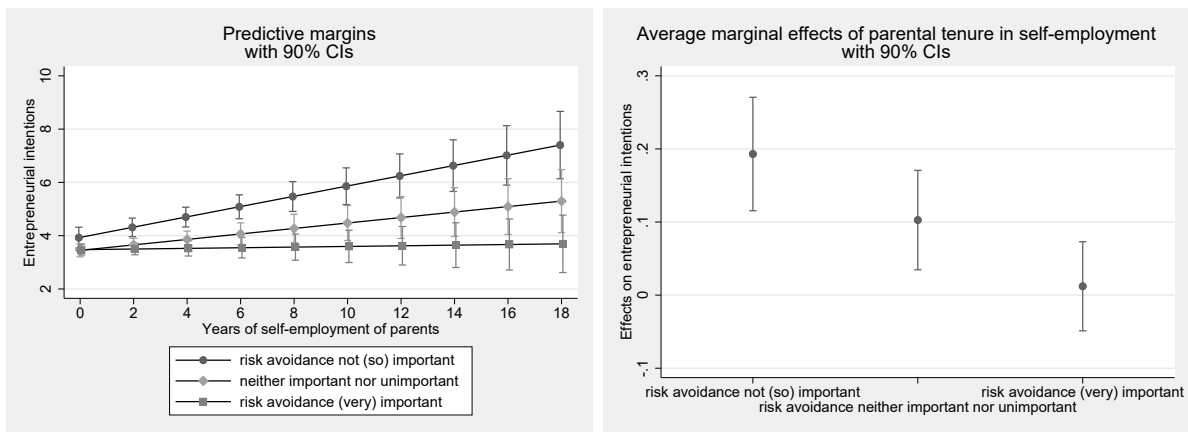
Figure 1: Predictive margins and average marginal effects with 90% CIs regarding parental self-employment and socialization



Number of observations: 1,434.

Estimation results can be found in Table 2, specification (3).

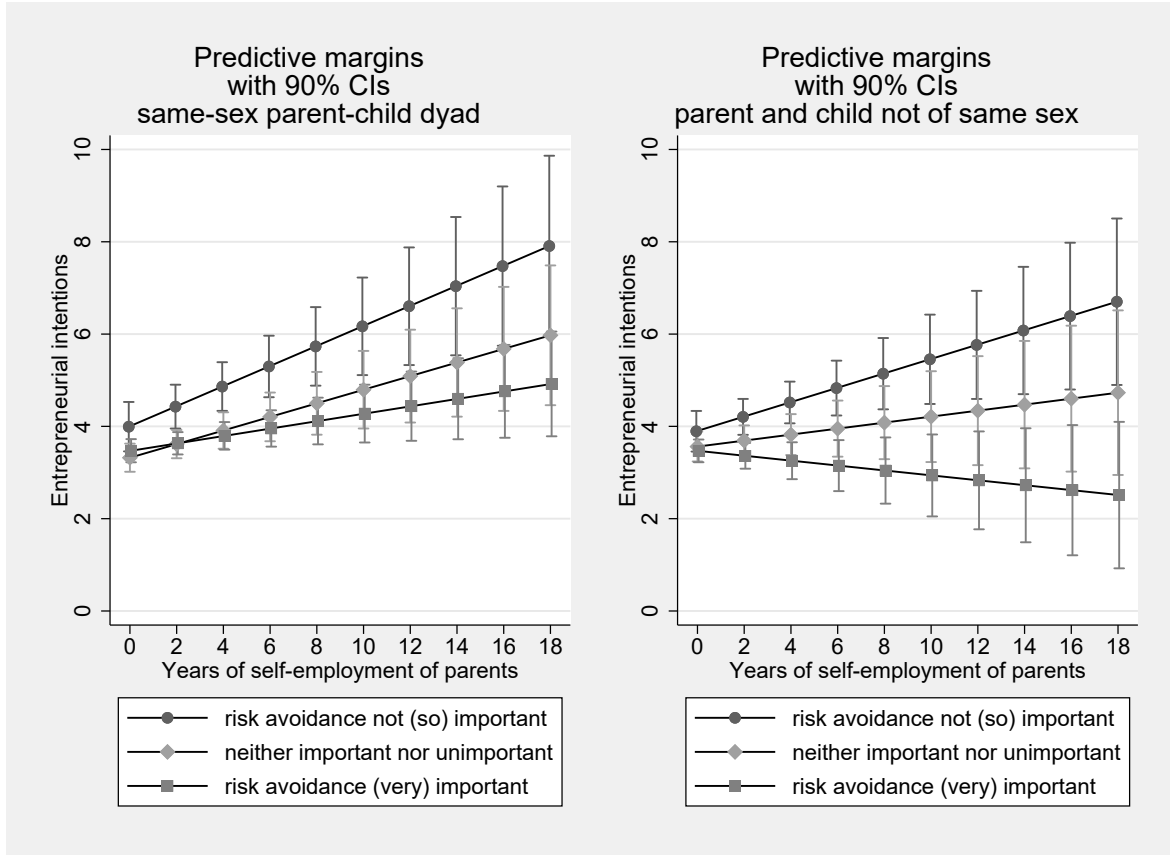
Figure 2: Predictive margins and average marginal effects with 90% CIs regarding parental tenure in self-employment and socialization



Number of observations: 1,434.

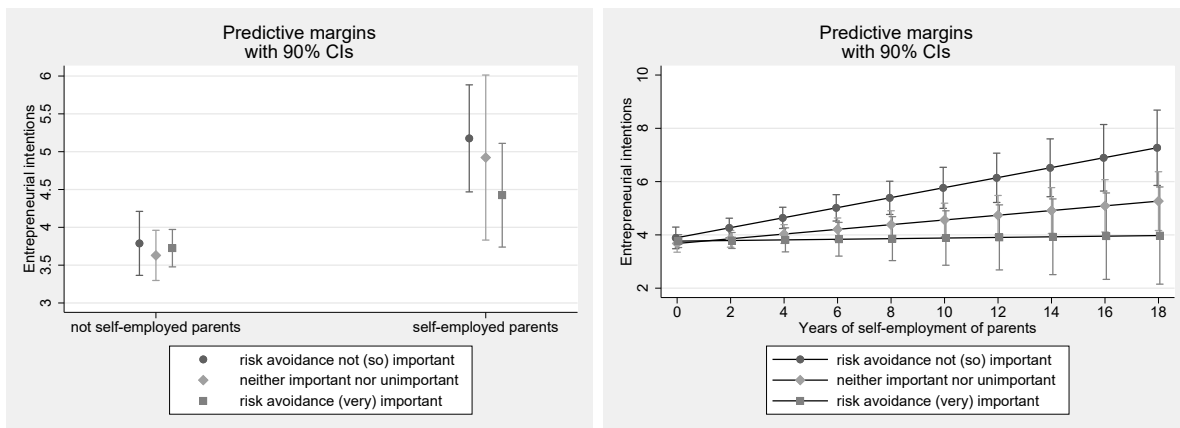
Estimation results can be found in Table 2, specification (4).

Figure 3: Predictive margins and average marginal effects with 90% CIs regarding parental tenure in self-employment and socialization by sex of parent-child dyads



Number of observations: 703 (same sex) and 731 (not same sex).

Figure 4: Predictive margins explaining entrepreneurial intentions of adolescents at age 17. Robustness check including parental risk attitudes at the time of childhood as a control variable.



Number of observations: 810 observations on 506 adolescents at age 17.

Figure 5: Kernel-weighted local polynomial smoothing by parental socialization

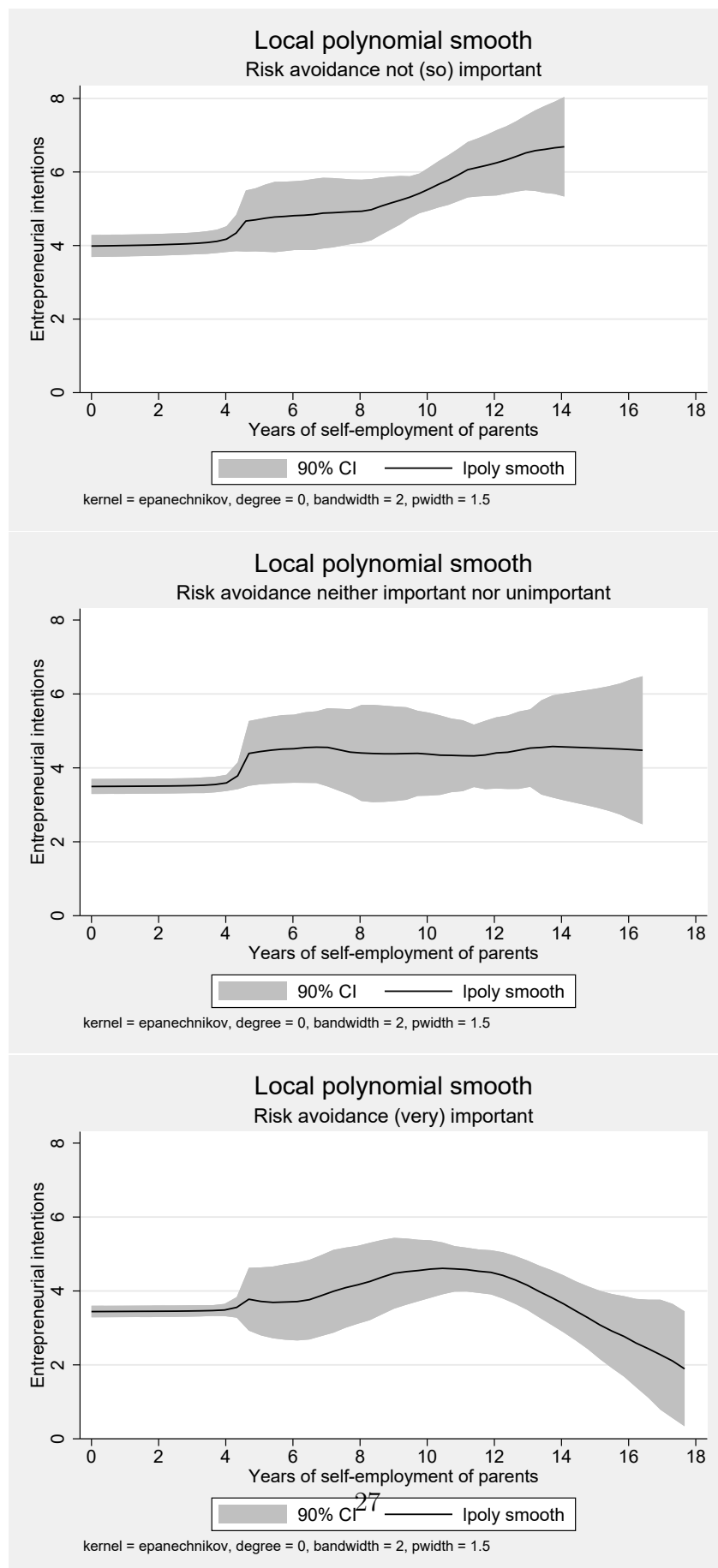
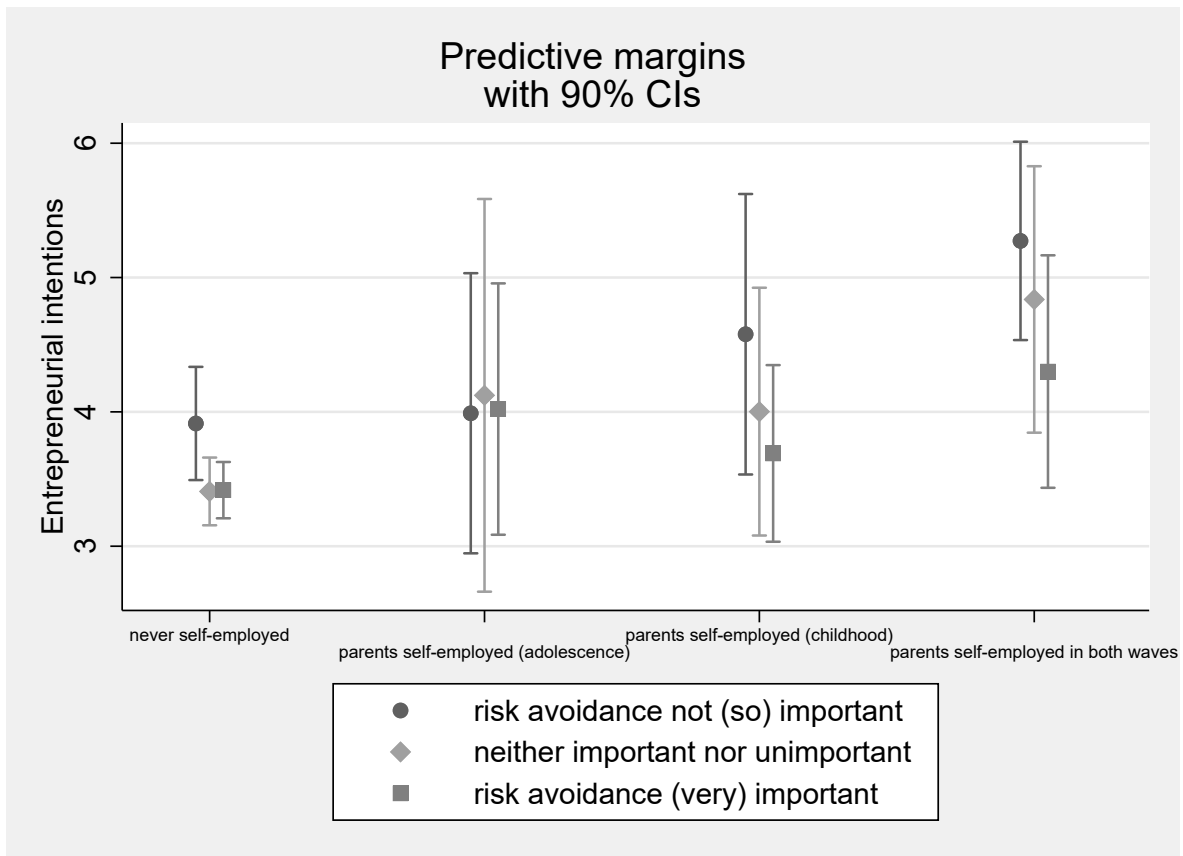


Figure 6: Predictive margins and average marginal effects with 90% CIs regarding parental self-employment and socialization across the considered survey waves



Number of observations: 1,430.

Tables included in the text

Table 1: Educational goal and self-employment of parents in childhood phase (when children were between 7 and 10 years old)

	parent is self-employed		
Risk avoidance	no	yes	total
not (so) important	194	40	234
	(14.90)	(30.30)	(16.32)
neither important nor	388	34	422
unimportant	(29.80)	(25.76)	(29.43)
(very) important	720	58	778
	(55.30)	(43.94)	(54.25)
Total	1,302	132	1,434
	(100.00)	(100.00)	(100.00)

Column percentages (in parentheses.)

Table 2: OLS estimation results explaining entrepreneurial intentions of adolescents (at age 17)

	(1)	(2)	(3)	(4)
Parental role model (childhood)				
Self-employed parents	0.833***		1.097**	
(dummy variable)	(0.258)		(0.443)	
Parental tenure in self-employment		0.074**		0.193***
(in years)		(0.030)		(0.047)
Socialization (childhood)				
Risk avoidance not (so) important		reference category		
Neither important nor unimportant	-0.514**	-0.570**	-0.481*	-0.477*
	(0.245)	(0.241)	(0.273)	(0.258)
Risk avoidance (very) important	-0.537**	-0.595**	-0.471*	-0.450*
	(0.243)	(0.240)	(0.269)	(0.255)
Interaction terms (childhood)				
Self-employed parents X			-0.102	
neither important nor unimportant			(0.560)	
Self-employed parents X			-0.516	
risk avoidance (very) important			(0.540)	
Parental tenure in self-employment X				-0.090
neither important nor unimportant				(0.056)
Parental tenure in self-employment X				-0.181***
risk avoidance (very) important				(0.060)
Parent is father	0.173	0.176	0.171	0.167
	(0.169)	(0.168)	(0.169)	(0.167)
Parent is mother		reference category		

Child is son	0.048	0.063	0.043	0.063
	(0.194)	(0.194)	(0.194)	(0.194)
Child is daughter	reference category			
ln(gross income) of parent	0.020	0.020	0.021	0.022
(adolescence)	(0.054)	(0.054)	(0.054)	(0.054)
ln(gross income) of parent	0.144	0.126	0.149	0.139
(childhood)	(0.106)	(0.104)	(0.108)	(0.106)
ln(net household income)	0.314	0.327	0.320	0.353
(adolescence)	(0.297)	(0.296)	(0.296)	(0.292)
ln(net household income)	-0.119	-0.123	-0.124	-0.159
(childhood)	(0.306)	(0.305)	(0.306)	(0.305)
Working hours of parent	-0.015**	-0.015*	-0.016**	-0.016**
(childhood)	(0.008)	(0.008)	(0.008)	(0.008)
Year of survey (adolescence): 2017	reference category			
Year of survey (adolescence): 2018	-0.609	-0.632*	-0.603	-0.598
	(0.378)	(0.379)	(0.378)	(0.379)
Year of survey (adolescence): 2019	-0.326	-0.301	-0.322	-0.305
	(0.355)	(0.356)	(0.355)	(0.356)
Year of survey (adolescence): 2020	-0.561	-0.573	-0.556	-0.547
	(0.349)	(0.350)	(0.349)	(0.350)
Year of survey (adolescence): 2021	-0.482	-0.469	-0.477	-0.470
	(0.418)	(0.420)	(0.418)	(0.419)
Year of survey (childhood): 2011	-0.023	-0.008	-0.027	-0.047
	(0.143)	(0.143)	(0.143)	(0.144)
Year of survey (childhood): 2012	0.385*	0.371	0.382*	0.366
	(0.230)	(0.232)	(0.230)	(0.230)
Year of survey (childhood): 2013	reference category			

Constant	1.820 (1.818)	1.938 (1.822)	1.728 (1.815)	1.808 (1.811)
Number of observations	1,434	1,434	1,434	1,434
R ²	0.0342	0.0310	0.0349	0.0357
R ^{2,adjusted}	0.0233	0.0201	0.0226	0.0234

Childhood refers to children aged between 7 and 10.

Adolescence refers to childrens aged 17.

Standard errors clustered for 825 adolescents at age 17.

* p<.10, ** p<.05, *** p<.01

Appendix

Table A.1: Descriptive statistics

Variable	standard			
	mean	deviation	minimum	maximum
Entrepreneurial intentions	3.592	2.558	0	10
Parental role model (childhood)				
Self-employed parent	0.092	0.289	0	1
Parental tenure in self-employment	0.620	2.562	0	20.417
Socialization (childhood)				
Risk avoidance not (so) important	0.163	0.370	0	1
Not important nor unimportant	0.294	0.456	0	1
Risk avoidance (very) important	0.543	0.498	0	1
Control variables				
Parent is father	0.494	0.500	0	1
Parent is mother	0.506	0.500	0	1
Child is son	0.517	0.500	0	1
Child is daughter	0.483	0.500	0	1
ln(gross income) of parent (adolescence)*	7.682	1.677	0	10.508
ln(gross income) of parent (childhood)*	7.468	1.116	0	10.597
ln(net household income (adolescence)	8.398	0.473	6.685	11.002
ln(net household income (childhood)	8.079	0.482	5.979	9.903
Working hours of parent (childhood)	34.974	14.479	2.500	80
Year of survey (adolescence): 2017	0.091	0.288	0	1
Year of survey (adolescence): 2018	0.139	0.346	0	1
Year of survey (adolescence): 2019	0.256	0.437	0	1

Year of survey (adolescence): 2020	0.351	0.477	0	1
Year of survey (adolescence): 2021	0.163	0.370	0	1
Year of survey (childhood): 2010	0.224	0.417	0	1
Year of survey (childhood): 2011	0.333	0.471	0	1
Year of survey (childhood): 2012	0.287	0.452	0	1
Year of survey (childhood): 2013	0.157	0.364	0	1
Number of observations				1,434
Number of adolescents				825

* value is set to 0 if respondent reported that gross income was 0.

Childhood refers to children aged between 7 and 10.

Adolescence refers to childrens aged 17.