



Founding or succeeding? Exploring how family embeddedness shapes the entrepreneurial intentions of the next generation

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ABSTRACT

In this study, we explore how a unique social institution, the family business, contributes to the transition from latent to emergent entrepreneurship by shaping the entrepreneurial intentions of the next generation. In line with the family embeddedness perspective, we argue that the enterprising family and the family enterprise, as two intertwined units of analysis pertaining to the family business context, influence the intention to found a new venture or succeed in the family business. Using an international sample of 40,508 students with a family business background, our findings reveal which specific factors related to either the family or the business explain next generation's preferences for succeeding over founding. The results extend our understanding of the role played by institutions in knowledge spillover theory and contribute to family business research on the succession process and its determinants.

1. Introduction

The knowledge spillover theory of entrepreneurship postulates that unexploited opportunities generated within a firm remain in a latent state and can be successively concretized by a different individual or firm that has the entrepreneurial capabilities to do so (Audretsch and Keilbach, 2007; Caiazza et al., 2015, 2016). Such a process of opportunity exploitation and concretization is at the core of the transition from latent to emergent entrepreneurship. It requires that knowledge filters, which are barriers or gaps between knowledge generation and its commercialization, are successfully overcome (Audretsch and Keilbach, 2007; Belitski et al., 2019; Caiazza et al., 2020). (Caiazza et al., 2020) highlight the crucial role played by entrepreneurial action (McMullen et al., 2020) in such a transition. In their view, entrepreneurial agents (firms or individuals) exposed to unexploited entrepreneurial

opportunities turn latent entrepreneurship into an emergent form by acting on those opportunities (Caiazza et al., 2015; Van Stel Storey and Thurik, 2007). In particular, the current debate emphasizes the crucial role that cognitive factors at the individual and contextual levels, such as capabilities, entrepreneurial learning and entrepreneurial culture, have in such a transition (Agarwal et al., 2007; Khurana and Dutta, 2021).

However, whereas capabilities and learning are certainly crucial, entrepreneurial intentions, defined as the general inclination to engage in entrepreneurial activities and “among the strongest predictors of entrepreneurial activity” (McMullen et al., 2020: 17), must also be present to allow the transition from latent into emergent entrepreneurship. Indeed, to overcome the barriers to action, entrepreneurial agents need not only the entrepreneurial capabilities to identify and act upon opportunities but also the willingness to bear the uncertainty permeating the concretization of opportunities (Shepherd and

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McMullen, 2006). Since entrepreneurial intentions are shaped by the context in which the agent is embedded (McMullen et al., 2020), identifying the situational factors that contribute to shaping entrepreneurial intentions is crucial for fully understanding the process through which latent entrepreneurship is brought to emergence (Caiazza et al., 2020; Khurana and Dutta, 2021).

Building upon the family embeddedness perspective on entrepreneurship (Aldrich and Cliff, 2003), we aim to examine the role that the family business context plays in shaping entrepreneurial intentions (Jaskiewicz et al., 2017; Minola et al., 2016a; Nordqvist and Melin, 2010). Such a context includes both the family enterprise and the enterprising family as two intertwined units of analysis. While the former refers to the *business* controlled by one or more families (Chua et al., 1999), the latter refers to the *family* controlling one or more businesses (Nordqvist and Melin, 2010). Growing up in an enterprising family and being exposed to firm-specific family business experience certainly shapes the entrepreneurial intentions and capabilities of the next generation, a process known as the *intergenerational transmission of entrepreneurship* (Criaco et al., 2017; Pittino et al., 2018). Since next-generation members are overly exposed to entrepreneurial opportunities, they are in a suitable position to undertake forms of emergent entrepreneurship by creating a new firm (Sieger and Minola, 2017). At the same time, to exploit such opportunities and engage in emergent entrepreneurship, next-generation members have the option to succeed in the family business instead of founding a new venture (Zellweger et al., 2011). On the one hand, the family business context can create a sense of attachment to the parents' business, leading to a preference for succession (Hamilton, 2011; Sharma and Irving, 2005); on the other hand, it provides resources, learning opportunities and role models, which can either facilitate or discourage new firm creation (Criaco et al., 2017; Sieger and Minola, 2017). As research is relatively silent on which specific factors of the family business context will drive the intention toward firm creation versus succession (Pittino et al., 2018), our understanding of the role of social institutions as facilitators of the transition into emergent entrepreneurship is still limited.

To address this gap, we made use of an international sample of 40,508 students with a family business background and explored the relationship between family business factors and the entrepreneurial intentions of the next generation. These intentions can be directed to alternative entrepreneurial career paths (Block et al., 2013), either as a preference for continuing the family legacy, and hence succeeding, or as a preference for founding a new firm within or outside the sphere of the family business. For the family business context, we consider three factors pertaining to the family enterprise: affective commitment, normative commitment and parents' performance in entrepreneurship (Criaco et al., 2017; Sharma and Irving, 2005). We also consider four factors pertaining to the enterprising family: instrumental assistance, career-related modeling, verbal encouragement and emotional support (Turner et al., 2003). These two dimensions allow us to have a nuanced understanding of the influence of the family business context on the preferred mode of transition from latent to emergent entrepreneurship of the next generation.

Our findings contribute to the knowledge spillover theory of entrepreneurship by exploring the role played by the family business as a social institution that facilitates the transition from latent to emergent entrepreneurship. In doing so, we also add to the family business literature and highlight which specific factors of the family enterprise and the enterprising family contribute to the formation of the entrepreneurial intentions of the next generation, thereby affecting the succession process.

2. Literature review and conceptual framework

Previous research has shown that having a family business background plays a central role in explaining the entrepreneurial activities of individuals (Aldrich and Cliff, 2003; Chang et al., 2009; Heck et al.,

2006; Sieger and Minola, 2017; Steier, 2007) and increases the offspring's general likelihood of pursuing an entrepreneurial career (Las-pita et al., 2012; Schoon and Duckworth, 2012; Sørensen, 2007). (Linguist, Sol and Van Praag, 2015), for instance, found that parental entrepreneurship increases the probability of children's entrepreneurship by about 60%, with post-birth factors (i.e., upbringing and socialization) being about twice as crucial as pre-birth factors (i.e., the influence of biological parents and genetic disposition). This is in line with other studies finding that the family context plays a decisive role with respect to entrepreneurial intentions (e.g., Chang et al., 2009; Dyer and Handler, 1994; Zellweger et al., 2011), opportunity recognition (Aldrich and Cliff, 2003; Baron and Shane, 2005), opportunity exploitation (Aldrich and Cliff, 2003), and the decision to proceed through the phases of new venture creation (Nordqvist and Melin, 2010; Steier, 2007).

The influence of entrepreneurial parents on offspring's entrepreneurial intentions and actions is commonly explained by the family's ability to provide access to both financial and non-financial resources, as well as by the conscious and unconscious transmission of values and behaviors (Las-pita et al., 2012; Schoon and Duckworth, 2012; Sørensen, 2007). Furthermore, the family has been depicted as a learning context (Hamilton, 2011) that imprints the next generation (Mathias et al., 2015). Put differently, children adopt both the values and the behavior of their families through observational learning (Bandura, 1986; Boyd and Vozikis, 1994). Thereby, parents or other family members may serve as cognitive models—that is, role models adopted by their children to construct their possible future selves (Gibson, 2004). Particularly in entrepreneurship, as a highly complex and uncertain vocational path, having entrepreneurial role models may fulfill several interrelated functions that are crucial to shaping career aspirations and decisions: inspiration and motivation, which means creating awareness and motivating people to get started; increasing self-efficacy, which means making people confident that they can achieve a specific goal; learning by example, which means providing normative guidelines for action; and learning by support, which means providing hands-on support or advice (Bosma et al., 2012). We assume that the effects of these role models may turn out to be particularly strong for the next generation. The omnipresence of the family business and the high levels of exposure to entrepreneurial action and behavior during childhood and adolescence are likely to shape an individual's attitude toward entrepreneurship and may strongly influence his or her intent to follow an entrepreneurial path (Carr and Sequeira, 2007).

Against this background, we suggest an extension of the model proposed by (Caiazza et al., 2015), explaining the transition from latent to emergent entrepreneurship. Our model features entrepreneurial intentions, alongside entrepreneurial capabilities, as key elements for such a transition. Furthermore, our model includes two dimensions constituting the family business background and shaping entrepreneurial intentions: the enterprising family and the family enterprise. In the following, we introduce and describe the specific factors pertaining to both dimension and discuss how they relate to the next generation's preferred mode of transition from latent to emergent entrepreneurship (i.e., founding or succeeding).

2.1. The role of the family enterprise in shaping next-generation entrepreneurial intentions

Previous literature has highlighted the role of factors belonging to family enterprises in shaping entrepreneurial attitudes and behaviors, including affective commitment, normative commitment and parents' performance in entrepreneurship (Criaco et al., 2017; Sharma and Irving, 2005).

Next-generation members have been shown to develop both affective and normative commitment toward the family enterprise by identifying themselves with it (Dawson et al., 2014; Schröder and Schmitt-Rodermund, 2013; Sharma and Irving, 2005). *Affective commitment*

(AC) describes the emotional attachment to the family enterprise (Björnberg and Nicholson, 2012; Dawson et al., 2015). (Dawson et al., 2014) stated that individuals who strongly identify with the family enterprise come to view the firm as an extension of themselves and their family name. As a result, they may develop a strong desire to maintain the firm and preserve it for future generations. Hence, higher levels of AC might result in a stronger preference for continuing the family business as a successor (Sharma and Irving, 2005). However, it is also plausible that the feeling of attachment and the desire to preserve the business induces the next generation to found a new firm and expand the family's portfolio of activities with the aim of further contributing to the overall family endowment (Michael-Tsabari et al., 2014).

Similarly, *normative commitment* (NC) is linked to an intrinsic desire to preserve family assets (Dawson et al., 2014). Unlike AC, however, NC is accompanied by a moral obligation and a feeling of loyalty that next-generation members develop due to pressure from the senior generation to join the family business (Dawson et al., 2014). As a result, the next generation will feel a sense of "ought to" and pursue a career in the family business (Sharma and Irving, 2005). In other instances, some family members may be reluctant to fulfill such an obligation, which could lead to the founding of a new firm without strings attached.

Parents' performance in entrepreneurship (PPE) indicates the extent to which children perceive the family business as strong and solid (Criaco et al., 2017; Hahn et al., 2020). On the one hand, PPE enhances the next-generation members' perception of the desirability and feasibility of founding a business: by observing the parents' success in entrepreneurial activities, children feel more attracted to an entrepreneurial career and have more confidence in pursuing it. On the other hand, PPE pushes the next generation toward succession because taking over a solid and successful business might be perceived as a comparably attractive vocational path. PPE also indirectly affects entrepreneurial intentions by triggering a social comparison mechanism (Criaco et al., 2017) according to which next-generation members compare their own abilities and skills with those of the senior generation. If parents are perceived as highly successful, the comparison generates a feeling of inadequacy in the members of the next generation, thus leading them to prefer founding their own venture over succeeding in the established one. On the contrary, at lower levels of PPE—that is, when the performance of the senior generation is not viewed as satisfactory—the next generation might feel less pressure from comparison with the senior generation and thus become more confident in taking over the family business and implementing changes to it (Hamilton, 2011).

2.2. The role of the enterprising family in shaping next-generation entrepreneurial intentions

Past research has considered different factors related to the enterprising family that might influence the form of entry of next-generation members into entrepreneurial careers. These factors refer to the various forms of support the enterprising family offers to the next-generation members that help them acquire and develop entrepreneurial and management skills (Porfeli et al., 2008; Turner et al., 2003). By creating awareness and motivation, boosting next-generation members' self-confidence and offering role models, the enterprising family prepares them either for succession or new venture creation.

In this paper, we consider four supporting factors from (Turner et al., 2003): *instrumental assistance* (IA), *career-related modeling* (CRM), *verbal encouragement* (VE) and *emotional support* (ES). IA refers to the parents' role in supporting and promoting the acquisition of relevant abilities. In particular, it includes their help in pointing out the connection between education and career in the family business, the transmission of direct skills and the provision of opportunities for learning career-related skills. With these abilities being specifically fit for the parents' business, they are low in fungibility and make it likely for the next generation to develop a preference for succession over founding. CRM refers to parents' sharing their own work and vocational activities with the next

generation. In so doing, children directly and indirectly experience the family business context, with parents acting as role models therein. It is thus likely that the next generation will construct its possible future self in line with the entrepreneurial model offered by the parents. VE refers to parents' encouragement associated with their children's educational development. It includes expression of approval for hard work at school, rewards for learning and praise for excellence (i.e., making good grades). Through these behaviors, parents strengthen the next generation's self-efficacy, increasing their children's confidence in their human and entrepreneurial capital. ES is related to parents' reinforcement of career-related positive emotions. In particular, it refers to the effort that parents expend in establishing a link between positive feelings and working in the family business. The next generation's preference for succession over founding is to be expected.

To sum up, we explore the effects of three factors related to the family enterprise (i.e., AC, NC and PPE) and four factors related to the enterprising family (i.e., IA, CRM, VE and ES) on next-generation members' entrepreneurial intentions.

3. Methods

3.1. Sample and procedure

We explore our research question with an international sample of university students with family business backgrounds (Zellweger et al., 2011, 2016). Such a sample is particularly appropriate for our objectives because it includes next-generation members (Criaco et al., 2017). The participants are experiencing a moment of decision-making about their future careers, including the option of undertaking an entrepreneurial path (Hahn et al., 2020; Meoli et al., 2020). Furthermore, they are socially embedded in the university environment, which offers fresh knowledge and entrepreneurial opportunities for both business creation (Colombo and Piva, 2020) and succession (Zellweger et al., 2011).

Specifically, the empirical analysis of this paper is based on survey data from the 2018 wave of the GUESSS survey ("Global University Entrepreneurial Spirit Students' Survey"), which records the answers of 208,636 university students from 54 countries.⁶ For our study, we only included students with a family business background and no missing values for our variables of interest. We also excluded students who were running a business. The final sample was thus formed by 40,508 observations for our main specification. The average age of the students in the sample is 23; almost half of them (47%) are male; most are studying at the bachelor' level (81%); 12% are studying at the master level; and the remaining students are pursuing some other form of postgraduate education, such as a PhD. Finally, students are quite equally distributed among various fields of study: 38% in business, management, law, and economics; 35% in natural sciences (science, technology, engineering and mathematics); and 27% in social sciences. We could not explicitly test for potential non-response bias because the GUESSS data collection procedure involves different starting and closing dates for each country and university, thereby precluding the possibility of identifying and comparing early and late respondents in a reliable way (Oppenheim, 1966). However, forming two groups of respondents (early and late) in different countries, we did not detect significant differences between the two groups, which mitigates the concern about nonresponse bias (Zellweger et al., 2011; Sieger and Minola, 2017).

3.2. Measures

Dependent Variable. Our dependent variable captures university

⁶ More information about the GUESSS project can be found at <http://www.guesssurvey.org/>, where national and international reports of the surveys are freely available. The page also contains a non-exhaustive list of papers published in academic journals based on GUESSS data.

students' preferred career choice five years after finishing their studies (Zellweger et al., 2011). It is categorical and has three options: (1) succession intention, (2) founding intention and (3) employee intention. Since the formation of entrepreneurial intentions usually precedes entrepreneurial behavior (Kautonen et al., 2015), it represents the first step in the transition from latent to emergent entrepreneurship.

Independent Variables. PPE is obtained as the average of the following five items evaluated on a 7-point Likert scale (Criaco et al., 2017; Hahn et al., 2020): "How do you rate the performance of your parents' business compared to its competitors over the last three years in the following dimensions? (1) Sales growth; (2) Market share growth; (3) Profit growth; (4) Job creation; and (5) Innovativeness." The Cronbach's alpha of this measure is 0.92.

AC and NC have been measured by asking students to evaluate these items on a 7-point Likert scale (Dawson et al., 2014): (1) "I feel as if my parents' business's problems are my own"; (2) "I feel a sense of belonging to my parents' business"; (3) "I would be very happy to spend the rest of my career with my parents' business"; (4) "I feel emotionally attached to my parents' business"; (5) "My parents' business has great personal meaning for me"; (6) "I feel an obligation to my family to pursue a career with my parents' business"; (7) "My parents' business deserves my loyalty"; (8) "I would feel guilty if I did not pursue a career with my parents' business"; and (9) "I owe a great deal to my parents' business." AC corresponds to the average of the items 1 – 5, with a Cronbach's alpha of 0.90. NC is the average of items 6 to 9, with alpha equal to 0.87.

Finally, the constructs IA, CRM, VE and ES (Turner et al., 2003) were obtained from answers to the following question: "The following items pertain to how your parents behaved toward you while you were growing up. Please indicate your level of agreement with the following statements." Single items were evaluated on a 7-points Likert scale. IA (Cronbach Alpha = 0.91) was measured as the average of the following items: (1) "My parents talked to me about how what I am learning will someday be able to help me in their business"; (2) "My parents taught me things that I will someday be able to use in their business"; and (3) "My parents gave me chores that taught me skills I can use in my future career in their business." CRM (Cronbach's alpha = 0.91) is measured as the average of the following items: (1) "My parents told me about the kind of work they do at their business"; (2) "My parents told me about things that happen to them at their business"; and (3) "My parents have taken me to their business." VE (Cronbach's alpha = 0.88) is measured as the average of the following items: (1) "My parents encouraged me to learn as much as I can at school"; (2) "My parents encouraged me to make good grades"; and (3) "My parents told me they are proud of me when I do well in school". ES (Cronbach's alpha = 0.93) is measured as the average of the following items: (1) "My parents talked to me about what fun my future job in their business could be"; (2) "My parents said things that made me happy when I learned something I might use in their business"; and (3) "I get excited when we talk about what a great job I might have someday in their business."

Control Variables. As in previous studies (e.g., Zellweger et al., 2011; Criaco et al., 2017), we controlled for a selection of individual-level influences, which are potentially related to career choice intentions. Gender is measured with a dummy variable, where '1' indicates male and '0' female. Age is a discrete variable measured in years. We also include two dummy variables—Bachelor and Master—that control for the level of education of the respondents, with further postgraduate education (e.g., PhD/doctorate, faculty/post doc, or MBA/executive education) being the reference group. We control for student's field of study. To do so, we have grouped the field of study into three broad areas: (1) management (which also includes law, business, and economics); (2) STEM (i.e., science, technology, engineering, and mathematics); and (3) social sciences. We created a dummy variable for the first two study areas, while "social sciences" was considered as the reference category. We also control for students' current entrepreneurial activities by including the variable "nascent," which is a dummy equal to

'1' if the respondent is trying to start his or her own business or to become self-employed at the time of the survey ('0' otherwise). Finally, we controlled for the country by including university fixed effects.

3.3. Common method bias

We took several ex-post and ex-ante measures to address common method bias concerns, which can arise when variables are obtained from survey data. First, we performed Harman's one factor test by conducting a principal component analysis including all the variables in our model (Podsakoff et al., 2003). The first factor accounted for only 15.1% of the total variance, which was below the 50% threshold that signals the presence of a dominant factor (which is evidence of common method bias). Second, we assessed the validity and distinctiveness of the constructs used as independent variables (Podsakoff et al., 2003). To do so, we conducted a confirmatory factor analysis and compared the fit of our seven-factor model with that of a one-factor structure. Our measurement model fits the data better ($\chi^2(278) = 56,792$, RMSEA = 0.071, CFI = 0.938) than the one-factor structure ($\chi^2(299) = 410,139$, RMSEA = 0.184, CFI = 0.549). Besides ruling out common method bias concerns, this exercise indicates that our constructs are both theoretically and empirically distinguishable (Podsakoff et al., 2003). Finally, the items referring to the same variable were scattered throughout the questionnaire, such that respondents were not likely to anticipate the researchers' objectives, which could influence their answers (Hahn, 2020).

4. Results

The means, standard deviations, and correlations of the variables in this study can be found in Table 1.

In order to ensure that our data do not suffer from shared variance, besides running the confirmatory analysis reported above, we calculated the variance inflation factors (VIFs). Since all of them remain below 4, with an average of 1.97, we conclude that multicollinearity is not a concern in our regression models (Kennedy, 2008).

Since our dependent variable is categorical, we conducted a multinomial logistic regression, featuring three different career aspirations. When we interpret the coefficients of the independent variables on each outcome, we compare their effects, taking as reference a base category, *succession intention* (Zellweger et al., 2011).

To deal with the nested structure of our data, which are made up of individual-level observations nested within countries, we took advantage of clustered standard errors in all our models and included country fixed effects (Hahn et al., 2020; Morris et al., 2017).

Table 2 contains the results of our main regression analyses. Models 1a and 1b include control variables only. We found that age has a statistically significant and negative impact on the likelihood of preferring succession vis-à-vis other career choices. Male students are significantly more likely to prefer succession to employment and founding. Bachelor students and STEM students are significantly less likely to opt for employment and prefer being entrepreneurs (either successors or founders); in contrast, management students display a significantly higher likelihood to opt for succession. Not surprisingly, the favorite choice for nascent entrepreneurs is founding.

In Models 2a and 2b, the independent variables are included. PPE is statistically significant and negatively associated with employee intention ($\beta = -0.054$; $p < 0.05$). The constructs related to commitment (AC and NC) are statistically significant and positively related to succession rather than employment intention ($\beta = -0.260$; $p < 0.01$ for AC; $\beta = -0.338$; $p < 0.01$ for NC) or founding ($\beta = -0.244$; $p < 0.01$ for AC; $\beta = -0.386$; $p < 0.01$ for NC). The same pattern applies to IA, which is statistically significant and negatively related to both employee and founding intention ($\beta = -0.106$; $p < 0.01$; $\beta = -0.080$; $p < 0.01$). CRM has a negative and significant impact on the probability of preferring employment ($\beta = -0.104$; $p < 0.01$), while its effect on the likelihood of

Table 1
Means, standard deviations, and Pearson correlations.

	Mean	S.D.	Founder	Successor	Employee	PPE	AC	NC	IA	CRM	VE	ES	Age	Gender	Bachelor	Master	Management	STEM	Nascent
Founder	0.429	0.495	1																
Successor	0.049	0.215	-0.196	1															
Employee	0.522	0.500	-0.906	-0.237	1														
PPE	4.244	1.512	0.048	0.111	-0.096	1													
AC	3.667	1.788	0.013	0.184	-0.092	0.498	1												
NC	3.451	1.819	0.022	0.194	-0.106	0.530	0.786	1											
IA	3.921	1.991	0.074	0.146	-0.136	0.510	0.625	0.646	1										
CRM	5.070	1.808	0.057	0.101	-0.100	0.433	0.432	0.429	0.592	1									
VE	5.948	1.369	0.051	0.009	-0.054	0.226	0.136	0.108	0.199	0.380	1								
ES	3.684	2.048	0.061	0.132	-0.117	0.487	0.620	0.640	0.736	0.407	0.204	1							
Age	22.864	9.243	-0.016	-0.024	0.026	-0.082	-0.047	-0.045	-0.042	-0.037	-0.013	-0.041	1						
Gender	0.473	0.499	0.028	0.023	-0.038	0.026	0.098	0.119	0.097	0.015	-0.094	0.094	0.008	1					
Bachelor	0.807	0.395	0.053	0.016	-0.059	0.039	0.009	0.030	0.036	0.025	-0.005	0.035	-0.185	0.011	1				
Master	0.123	0.329	-0.054	-0.006	0.056	-0.041	-0.015	-0.044	-0.045	-0.019	0.000	-0.047	0.119	0.003	-0.766	1			
Management	0.376	0.484	0.092	0.088	-0.129	0.070	0.113	0.113	0.138	0.053	-0.015	0.128	0.001	-0.045	0.029	-0.010	1		
STEM	0.347	0.476	0.023	-0.031	-0.009	-0.032	-0.027	-0.020	-0.023	-0.009	-0.004	-0.024	-0.029	0.250	-0.002	0.011	-0.565	1	
Nascent	0.311	0.463	0.202	0.020	-0.209	0.141	0.175	0.202	0.204	0.090	0.002	0.201	-0.007	0.144	0.015	-0.030	0.048	0.0034	1

Absolute values of pairwise correlations above 0.01 are significant at the $p < 0.05$ level.

opting for founding over succession is not statistically significant. Finally, VE increases the probability of opting for either employment ($\beta = 0.174$; $p < 0.01$) or founding ($\beta = 197$; $p < 0.01$) rather than succession. There is no statistically significant evidence for the effect of ES on succession and founding intentions.

4.1. Additional analyses

We also performed two post-hoc analyses in order to observe how results change if we focus on career choices adopting a different time horizon. First, we relied on students' intentions regarding career choice right after studies instead of choice in five years after studies. Results of the multinomial regression with such a dependent variable are displayed in Table 3. They are quite similar to our main specification, discussed above. However, in the short term, PPE leads to a higher probability of opting for founding rather than succeeding. IA is negatively associated with the likelihood of preferring employment, with no significant difference between succession and founding. The same applies for ES. Overall, it seems that, when adopting a shorter time horizon, the impact of the family-related constructs is slightly stronger.

Second, we relied on a continuous measurement of founding and succession intentions (adapting the scale of Liñán and Chen, 2009) and calculated the difference between the two constructs. The results of the linear regression with such a dependent variable are displayed in Table 4. The time horizon of this variable relates to an indefinite future and to the long-term career objectives of the respondents. Examples of items are "I am determined to create a business (become a successor in my parents' business) in the future" or "I have the strong intention to start a business (become a successor in my parents' business) one day." Results of this specification should be taken with caution because it does not take into account employment as a possible career option, and it does not refer to a specific point in time. However, these results provide further insights into the family-related variables that push the next generation toward a career as founder rather than successor. Overall, these results confirm the role of commitment variables in increasing the attractiveness of succession over founding. Also, ES, which leverages the emotional component of the next generation toward the family business, encourages succession rather than founding intentions. On the other hand, PPE, IA, CRM and VE increase the attractiveness of a founding career with respect to succession.

Finally, and as a robustness check, we ran an additional specification by clustering standard errors by university instead of country (Minola et al., 2016b). The results remained substantially unchanged.

5. Discussion

In this study, we explore how the family business as an idiosyncratic social institution shapes next-generation entrepreneurial intentions and affects the preference for alternative career paths. While previous research on family embeddedness (Aldrich and Cliff, 2003) has widely acknowledged the role of both family and business aspects in encouraging entrepreneurial endeavors (Bird and Wennberg, 2014; Discua Cruz, Howart and Hamilton, 2013; Laspita et al., 2012; Pittino et al., 2018), our findings reveal how specific factors related either to the enterprising family or the family enterprise influence the preferred mode to engage with entrepreneurship.

Regarding factors related to the family enterprise, we find that parents' performance in entrepreneurship (PPE) strengthens potential successors' preference for an entrepreneurial career, while leaving them indifferent to the choice between founding and succession. Our results are consistent with previous studies highlighting that high PPE creates positive expectations with respect to an entrepreneurial career (Criaco et al., 2017). In the case of founding, the next generation is attracted by the results obtainable through this career path; in the case of succeeding, the prospect of taking over a successful business raises the interest of the next generation in the family business itself. In contrast, low PPE

Table 2
Results of multinomial logistic regression analyses^a.

Variable	Model 1a: employee intention	Model 1b: founding intention	Model 2a: employee intention	Model 2b: founding intention
<i>Control</i>				
Age	0.0410*** (0.00696)	0.0374*** (0.00694)	0.0384*** (0.00722)	0.0357*** (0.00741)
Gender	-0.323*** (0.0661)	-0.205*** (0.0481)	-0.195*** (0.0611)	-0.0660 (0.0527)
Bachelor	-0.256* (0.145)	-0.00896 (0.107)	-0.248* (0.148)	-0.00929 (0.115)
Master	-0.208 (0.149)	-0.121 (0.105)	-0.243* (0.147)	-0.157 (0.113)
Management	-1.083*** (0.119)	-0.539*** (0.0739)	-0.771*** (0.0978)	-0.252*** (0.0578)
STEM	-0.394*** (0.102)	-0.0316 (0.0877)	-0.322*** (0.0959)	0.0326 (0.0771)
Nascent	-0.783*** (0.111)	0.320*** (0.100)	-0.621*** (0.118)	0.457*** (0.131)
<i>Independent</i>				
PPE			-0.0544** (0.0228)	0.00180 (0.0257)
AC			-0.260*** (0.0525)	-0.244*** (0.0518)
NC			-0.338*** (0.0360)	-0.386*** (0.0313)
IA			-0.106*** (0.0355)	-0.0804*** (0.0299)
CRM			-0.104*** (0.0377)	-0.0597 (0.0388)
VE			0.174*** (0.0298)	0.197*** (0.0319)
ES			0.00169 (0.0239)	0.0109 (0.0226)
Intercept	1.163*** (0.233)	-0.246 (0.187)	3.638*** (0.394)	1.588*** (0.272)
Log pseudolikelihood	-30,841.182		-29,790.93	
Pseudo R-squared	0.1038		0.1343	

$N = 40,508$.

Heteroskedasticity robust standard errors, clustered by country, are reported in brackets. Country fixed effects are included in each regression.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

^a The comparison baseline is "succession intention."

exposes the next generation to the downsides of an entrepreneurial career, such as the negative emotions and stress associated with managing a poor-performing family business (Shepherd, 2009; Uy et al., 2013) and thus discourages them from pursuing such a career path. The other two factors related to the family enterprise are affective and normative commitment (AC and NC). They induce the next generation to prefer succession over founding. These variables are likely to increase the intention to pursue succession due to a combination of moral obligation and emotional attachment to the family business (Dawson et al., 2014; Sharma and Irving, 2005).

Moving to the factors related to the support offered by the enterprising family, we find that instrumental assistance (IA) pushes the next-generation preference toward succession rather than founding. This type of assistance is closely related to learning abilities that specifically fit the parents' business, thereby increasing the confidence of the next generation in effectively succeeding (Vanevenhoven and Liguori, 2013). In fact, IA differs from other forms of family support that are more fungible and thus applicable to multiple ends interchangeably (Penrose, 1959; Sieger and Minola, 2017). The second form of family support that has an influence on the preferred career choice is career-related modeling (CRM), which strengthens the intention to pursue an entrepreneurial career. Indeed, through CRM, parents share their entrepreneurial experiences with their children, and thereby offer themselves as role models (Chlosta et al., 2012). Finally, family support in the form of verbal encouragement (VE) leads the next generation to prefer founding over succession. Offspring encouraged to invest and excel in education will build confidence in skills obtained outside the family context; as a result, they are more likely to prefer distinguishing themselves by exploiting their capabilities outside the family business (Chowdhury

et al., 2019). Therefore, the founding option becomes comparatively more attractive with respect to succession.

5.1. Contributions to research

Our findings offer several contributions to research. First, we add to the most recent developments in the knowledge spillover theory of entrepreneurship (Caiazza et al., 2015; 2020) by illustrating the role played by institutions in the transition from latent to emergent entrepreneurship. In particular, we posit that entrepreneurial intentions, jointly with capabilities, are necessary for a latent entrepreneur to act upon entrepreneurial opportunities. By adopting a family embeddedness perspective (Aldrich and Cliff, 2003), we investigate the role of the family business as a social institution molding entrepreneurial intentions. We regard this context as comprising two intertwined units of analysis, namely the family enterprise and the enterprising family, and examine their separate influence on the next generation's preference for a mode of transition into emergent entrepreneurship (i.e., founding versus succession). In so doing, we suggest an extension of Caiazza and colleagues' model on the transition from latent to emergent entrepreneurship (2015: 902). Our extended model proposes entrepreneurial intentions, along with capabilities, as having an influence on such a transition. Furthermore, it highlights the family business-related factors that contribute to shaping these intentions (see Fig. 1).

Second, we contribute to the family business literature on succession by exploring which specific factors related to the family enterprise and the enterprising family drive the entrepreneurial intentions of the next generation toward succession versus founding. Family business research has so far shown a tendency to focus on the incumbents' perspective

Table 3
Results of multinomial logistic regression analyses with career choice intentions immediately after studies^a.

Variable	Model 1a: employee intention	Model 1b: founding intention	Model 2a: employee intention	Model 2b: founding intention
<i>Control</i>				
Age	0.0601*** (0.0103)	0.0662*** (0.0109)	0.0577*** (0.0101)	0.0642*** (0.0107)
Gender	-0.280*** (0.0601)	-0.0228 (0.0596)	-0.174*** (0.0532)	0.0703 (0.0653)
Bachelor	-0.451*** (0.117)	-0.714*** (0.146)	-0.451*** (0.116)	-0.717*** (0.143)
Master	-0.184 (0.183)	-0.594*** (0.219)	-0.211 (0.176)	-0.613*** (0.213)
Management	-0.996*** (0.104)	-0.769*** (0.0827)	-0.728*** (0.0980)	-0.543*** (0.0784)
STEM	-0.0684 (0.127)	-0.158 (0.108)	-0.0168 (0.132)	-0.112 (0.101)
Nascent	-0.656*** (0.0840)	0.816*** (0.127)	-0.528*** (0.0882)	0.924*** (0.142)
<i>Independent</i>				
PPE			-0.000873 (0.0203)	0.0541*** (0.0208)
AC			-0.246*** (0.0332)	-0.232*** (0.0395)
NC			-0.287*** (0.0275)	-0.282*** (0.0268)
IA			-0.0657** (0.0290)	-0.0393 (0.0388)
CRM			-0.134*** (0.0438)	-0.161*** (0.0487)
VE			0.182*** (0.0379)	0.139*** (0.0366)
ES			-0.0456** (0.0202)	0.00452 (0.0250)
Intercept	19.35*** (1.025)	16.45*** (1.041)	21.03*** (1.053)	17.91*** (1.035)
Log pseudolikelihood	-16,922.58		-16,189.892	
Pseudo R-squared	0.1074		0.1460	

$N = 41,590$.

Heteroskedasticity robust standard errors, clustered by country, are reported in brackets. Country fixed effects are included in each regression.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

^a The comparison baseline is "succession intention."

rather than that of next-generation members (De Massis et al., 2016; Hauck and Prügl, 2015; Prügl and Spitzley, 2020; Spitzley and Prügl, 2018). Furthermore, the focus of succession research has mainly been on the firm rather than the individual (Garcia et al., 2018; Jaskiewicz and Dyer, 2017). Finally, while such literature has emphasized the role played by the family and the business in providing resources and support to the next generation for a successful takeover of the parents' business (e.g., Hamilton, 2011), we show that such a role can represent a double-edged sword. Whenever the family is able to leverage the next generation's sense of commitment to the family business and confidence in its own leading capacity, preferences for succession are likely to emerge. However, the next generation might instead decide to exploit the support received from the family to establish its own firm rather than succeed in the family business.

Finally, our results are relevant for the study of entrepreneurial careers (Burton et al., 2016) and of entrepreneurial mode of entry (e.g., Block et al., 2013; Parker and van Praag, 2012). These streams of research might benefit from incorporating insights taken from the family embeddedness perspective and distinguishing family enterprise influences from enterprising family influences.

5.2. Limitations and future research directions

First, as is the case for other studies on university students' entrepreneurial intentions, career choices, and entrepreneurial entry modes (e.g., Block et al., 2013; Criaco et al., 2017; Zellweger et al., 2011), it is outside the scope of this research to explore in which circumstances the next generation is able to concretize entrepreneurial intentions (Meoli et al., 2020). As proposed in our conceptual framework, intentions are

one of the factors contributing to the transition into emergent entrepreneurship. The model would benefit from future longitudinal studies that focus on the conditions under which the preferred career choice is implemented and how much time it takes to do so. For example, it would be intriguing to study the career spells of latent entrepreneurs (Burton et al., 2016; Wennberg et al., 2011) and understand what they do before eventually founding a business or taking over parents' business. In this respect, having a time horizon longer than five years would be very useful.

Second, in considering succession and new venture creation as alternative career choices, we did not explicitly consider the possibility that the new venture founded by the next generation is somehow related to the family business; some of the aspiring founders might indeed plan to establish a new firm within the boundaries of the family business, a phenomenon known as corporate venturing (Minola et al., 2016a, 2021). Future research could investigate which mechanisms encourage the next generation to engage in family corporate venturing as the preferred career choice.

Finally, the quantitative nature of our analysis constrains understanding of the socio-cognitive micro-processes leading to the formation of specific career preferences. Future qualitative and inductive research could take advantage of recent applications of social psychology to the interface between family and entrepreneurship (e.g., role and social identity theories; Shepherd and Haynie, 2009) in order to describe the dilemmas and the tradeoffs faced by the next generation in opting for founding or succeeding.

Table 4
Results of linear regression analyses with the difference between founding and succession intentions as dependent variable.

Variable	Model 1	Model 2b
<i>Control</i>		
Age	0.00284** (0.00128)	0.00199* (0.00111)
Gender	0.0150 (0.0481)	0.151*** (0.0437)
Bachelor	0.119* (0.0621)	0.121* (0.0701)
Master	0.0804 (0.0707)	0.0629 (0.0693)
Management	0.0477 (0.0544)	0.229*** (0.0616)
STEM	0.203*** (0.0314)	0.227*** (0.0303)
Nascent	0.0506*** (0.00516)	0.230*** (0.0241)
<i>Independent</i>		
PPE		0.0332** (0.0151)
AC		-0.172*** (0.0228)
NC		-0.345*** (0.0164)
IA		0.0402*** (0.0123)
CRM		0.0442*** (0.0118)
VE		0.124*** (0.0170)
ES		-0.0422*** (0.00942)
Intercept	1.246*** (0.0573)	1.584*** (0.190)
R-squared	0.078	0.211

N = 33,367.

Heteroskedasticity robust standard errors, clustered by country, are reported in brackets. Country fixed effects are included in each regression.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

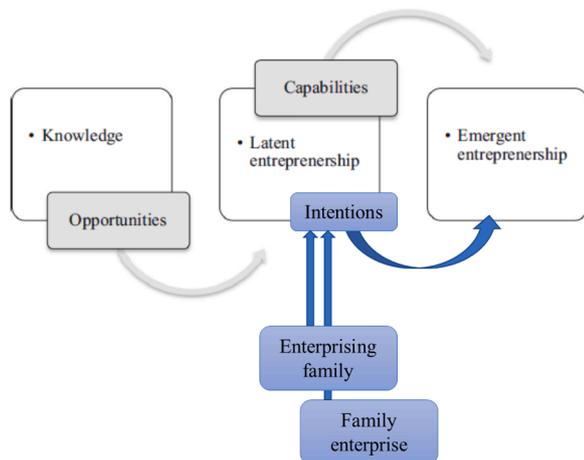


Fig. 1. Conceptual framework. Source: Adapted from [Caiazza et al. \(2015\)](#).

5.3. Practical implications

This study has some valuable practical implications. First, policy-makers can recognize that family business, besides representing the backbone of the economy, represents a social institution that nurtures generations of potential founders, thereby feeding oxygen to the fire of entrepreneurship (Rogoff and Heck, 2003). This adds a further element to our understanding of the institutional arrangements that facilitate the development and maintenance of an entrepreneurial culture (Caiazza

et al., 2014, 2020; Chowdhury et al., 2019).

Second, our study offers insights to family businesses to prepare for intra-family succession. Our results suggest that the older generation(s) should build up the commitment of the offspring to the family business over time and offer them the opportunity to develop firm-specific knowledge. This means, for example, involving the next generation in the business early on and complementing education with practice and training in the family enterprise.

Finally, while entrepreneurship education focused on venture creation is becoming largely diffused in universities all around the world as a mechanism to facilitate knowledge spillovers through student entrepreneurship (Mustar, 2009; Shah and Pahnke, 2014; Wright et al., 2017), succession undertaken by university students can also be a valuable mechanism to transfer university knowledge to existing businesses (Hamilton, 2011). In this respect, universities and other education institutions might consider offering targeted programs to potential successors in order to help them plan their future careers and inform them about the choice between founding and succession. Put differently, succession could represent an additional mode to enable knowledge transfer via student entrepreneurship.

6. Conclusions

In this study, we focus on the role of the family business as a social institution in the transition from latent to emergent entrepreneurship. Taking advantage of a large international sample of university students with a family business background, we explore the specific factors through which the family enterprise and the enterprising family shape the entrepreneurial intentions of the next generation. Our results indicate that the intention to pursue an entrepreneurial career increases with the success of the parents' business and with parents acting as role models for their children. Furthermore, the next generation is more likely to prefer succession over founding if it develops both normative and affective commitment to the family business and has the possibility to absorb capabilities tailored to the family business, thereby gaining self-confidence as successors. In contrast, when the family encourages excellence in education, the next generation will develop intentions to found a new business rather than succeeding in the family firm. Overall, this study shows the value of adopting a family embeddedness perspective to understand the transition from latent to emergent entrepreneurship.

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Declaration of Competing Interest

The authors declare that they have no conflict of interest.

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References

- Agarwal, R., Audretsch, D., Sarkar, M.B., 2007. The process of creative construction: knowledge spillovers, entrepreneurship, and economic growth. *Strateg. Entrep. J.* 1 (3–4), 263–286.
- Aldrich, H.E., Cliff, J.E., 2003. The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective. *J. Bus. Venturing* 18 (5), 573–596.
- Audretsch, D.B., Keilbach, M., 2007. The theory of knowledge spillover entrepreneurship. *J. Manag. Stud.* 44 (7), 1242–1254.
- Bandura, A., 1986. *Social Foundations of Thought and Action*. Prentice-Hall, Englewood Cliffs.

- Baron, R.A., Shane, S., 2005. *Entrepreneurship: A process Perspective*. Thomson South Western, Mason.
- Belitski, M., Caiazza, R., & Lehmann, E.E. (2019). Knowledge frontiers and boundaries in entrepreneurship research. *Small Bus. Econ.*, 10.1007/s11187-019-00187-0.
- Bird, M., Wennberg, K., 2014. Regional influences on the prevalence of family versus non-family start-ups. *J. Bus. Venturing* 29 (3), 421–436.
- Björnberg, Å., Nicholson, N., 2012. Emotional ownership: the next generation's relationship with the family firm. *Fam. Bus. Rev.* 25 (4), 374–390.
- Block, J., Thurik, R., Van der Zwan, P., Walter, S., 2013. Business takeover or new venture? Individual and environmental determinants from a cross-country study. *Entrep. Theory Pract.* 37 (5), 1099–1121.
- Bosma, N., Hessels, J., Schutjens, V., van Praag, M., Verheul, I., 2012. Entrepreneurship and role models. *J. Econ. Psychol.* 33 (2), 410–424.
- Boyd, N.G., Vozikis, G.S., 1994. The influence of self-efficacy on the development of entrepreneurial intentions and actions. *Entrep. Theory Pract.* 18 (4), 63–77.
- Burton, M.D., Sørensen, J.B., Dobrev, S.D., 2016. A careers perspective on entrepreneurship. *Entrep. Theory Pract.* 40 (2), 237–247.
- Caiazza, R., Audretsch, D., Volpe, T., Debra Singer, J., 2014. Policy and institutions facilitating entrepreneurial spin-offs: USA, Asia and Europe. *J. Entrep. Public Policy* 3 (2), 186–196.
- Caiazza, R., Richardson, A., Audretsch, D., 2015. Knowledge effects on competitiveness: from firms to regional advantage. *J. Technol. Transf.* 40 (6), 899–909.
- Caiazza, R., Foss, N., Volpe, T., 2016. What we do know and what we need to know about knowledge in the growth process. *J. Organ. Eff.* 3 (2), 1–23.
- Caiazza, R., Belitski, M., Audretsch, D.B., 2020. From latent to emergent entrepreneurship: the knowledge spillover construction circle. *J. Technol. Transf.* 45, 694–704.
- Carr, J.C., Sequeira, J.M., 2007. Prior family business exposure as intergenerational influence and entrepreneurial intent: a theory of planned behavior approach. *J. Bus. Res.* 60 (10), 1090–1098.
- Chang, E.P.C., Memili, E., Chrisman, J.J., Kellermanns, F.W., Chua, J.H., 2009. Family social capital, venture preparedness, and start-up decisions: a study of Hispanic entrepreneurs in New England. *Fam. Bus. Rev.* 22 (3), 1–15.
- Chlosta, S., Patzelt, H., Klein, S.B., Dormann, C., 2012. Parental role models and the decision to become self-employed: the moderating effect of personality. *Small Bus. Econ.* 38 (1), 121–138.
- Chowdhury, F., Audretsch, D.B., Belitski, M., 2019. Institutions and entrepreneurship quality. *Entrep. Theory Pract.* 43 (1), 51–81.
- Chua, J.H., Chrisman, J.J., Sharma, P., 1999. Defining the family business by behavior. *Entrep. Theory Pract.* 23 (4), 19–39.
- Colombo, M.G., Piva, E., 2020. Start-ups launched by recent STEM university graduates: the impact of university education on entrepreneurial entry. *Res. Policy* 49 (6), 103993.
- Criaco, G., Sieger, P., Wennberg, K., Chirico, F., Minola, T., 2017. Parents' performance in entrepreneurship as a "double-edged sword" for the intergenerational transmission of entrepreneurship. *Small Bus. Econ.* 49 (4), 841–864.
- Dawson, A., Irving, P.G., Sharma, P., Chirico, F., Marcus, J., 2014. Behavioral outcomes of next-generation family members' commitment to their firm. *Eur. J. Work Organ. Psychol.* 23 (4), 570–581.
- Dawson, A., Sharma, P., Irving, P.G., Marcus, J., Chirico, F., 2015. Predictors of later-generation family members' commitment to family enterprises. *Entrep. Theory Pract.* 39 (3), 545–569.
- De Massis, A., Sieger, P., Chua, J.H., Vismara, S., 2016. Incumbents' attitude toward intrafamily succession: an investigation of its antecedents. *Fam. Bus. Rev.* 29 (3), 278–300.
- Discua Cruz, A., Howorth, C., Hamilton, E., 2013. Intrafamily entrepreneurship: the formation and membership of family entrepreneurial teams. *Entrep. Theory Pract.* 37 (1), 17–46.
- Dyer, W.G., Handler, W., 1994. Entrepreneurship and family business: exploring the connections. *Entrep. Theory Pract.* 19 (1), 71–83.
- Garcia, P.R.J.M., Sharma, P., De Massis, A., Wright, M., Scholes, L., 2018. Perceived parental behaviors and next-generation engagement in family firms: a social cognitive perspective. *Entrep. Theory Pract.* 43 (2), 224–243.
- Gibson, D.E., 2004. Role models in career development: new directions for theory and research. *J. Vocat. Behav.* 65 (1), 134–156.
- Hahn, D., Minola, T., Bosio, G., Cassia, L., 2020. The impact of entrepreneurship education on university students' entrepreneurial skills: a family embeddedness perspective. *Small Bus. Econ.* 55, 257–282.
- Hahn, D., 2020. The psychological well-being of student entrepreneurs: a social identity perspective. *Int. Entrep. Manag. J.* 16 (2), 467–499.
- Hamilton, E., 2011. Entrepreneurial learning in family business: a situated learning perspective. *J. Small Bus. Entrep. Dev.* 18 (1), 8–26.
- Hauck, J., Prügl, R., 2015. Innovation activities during intra-family leadership succession in family firms: an empirical study from a socioemotional wealth perspective. *J. Fam. Bus. Strategy* 6 (2), 104–118.
- Heck, R.K., Danes, S.M., Fitzgerald, M.A., Haynes, G.W., Jasper, C.R., Schrank, H.L., Stafford, K., Winter, M., 2006. The family's dynamic role within family business entrepreneurship. In: Poutziouris, P., Smyrnios, K., Klein, S. (Eds.), *Handbook of Research on Family Business*. Edward Elgar Publishing, Cheltenham, pp. 80–105.
- Jaskiewicz, P., Combs, J.G., Shanine, K.K., Kacmar, K.M., 2017. Introducing the family: a review of family science with implications for management research. *Acad. Manag. Ann.* 11 (1), 309–341.
- Jaskiewicz, P., Dyer, W.G., 2017. Addressing the elephant in the room: disentangling family heterogeneity to advance family business research. *Fam. Bus. Rev.* 30 (2), 111–118.
- Kautonen, T., Van Gelderen, M., Fink, M., 2015. Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrep. Theory Pract.* 39 (3), 655–674.
- Kennedy, P., 2008. *A Guide to Econometrics*. Blackwell Publishing, Malden.
- Khurana, I., Dutta, D.K., 2021. From latent to emergent entrepreneurship in innovation ecosystems: the role of entrepreneurial learning. *Technol. Forecast. Soc. Change* 167, 120694.
- Laspita, S., Breugst, N., Heblich, S., Patzelt, H., 2012. Intergenerational transmission of entrepreneurial intentions. *J. Bus. Venturing* 27 (4), 414–435.
- Liñán, F., Chen, Y.W., 2009. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrep. Theory Pract.* 33 (3), 593–617.
- Lindquist, M.J., Sol, J., Van Praag, M., 2015. Why do entrepreneurial parents have entrepreneurial children? *J. Labor Econ.* 33 (2), 269–296.
- Mathias, B.D., Williams, D.W., Smith, A.R., 2015. Entrepreneurial inception: the role of imprinting in entrepreneurial action. *J. Bus. Venturing* 30 (1), 11–28.
- McMullen, J.S., Ingram, K.M., & Adams, J. (2020). What makes an entrepreneurship study entrepreneurial? Toward a unified theory of entrepreneurial agency. *Entrep. Theory Pract.*, 1042258720922460.
- McMullen, J.S., Shepherd, D.A., 2006. Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Acad. Manag. Rev.* 31 (1), 132–152.
- Meoli, A., Fini, R., Sobrero, M., Wiklund, J., 2020. How entrepreneurial intentions influence entrepreneurial career choices: the moderating influence of social context. *J. Bus. Venturing* 35 (3), 105982.
- Michael-Tsabari, N., Labaki, R., Zachary, R.K., 2014. Toward the cluster model: the family firm's entrepreneurial behavior over generations. *Fam. Bus. Rev.* 27 (2), 161–185.
- Minola, T., Brumana, M., Campopiano, G., Garrett, R.P., Cassia, L., 2016a. Corporate venturing in family business: a developmental approach of the enterprising family. *Strateg. Entrep. J.* 10 (4), 395–412.
- Minola, T., Donina, D., Meoli, M., 2016b. Students climbing the entrepreneurial ladder: does university internationalization pay off? *Small Bus. Econ.* 47 (3), 565–587.
- Minola, T., Kammerlander, N., Kellermanns, F.W., Hoy, F., 2021. Corporate entrepreneurship and family business: learning across domains. *J. Manage. Stud.* 58 (1), 1–26.
- Morris, M.H., Shirokova, G., Tsukanova, T., 2017. Student entrepreneurship and the university ecosystem: a multi-country empirical exploration. *Eur. J. Int. Manag.* 11 (1), 65–85.
- Mustar, P., 2009. Technology management education: innovation and entrepreneurship at MINES ParisTech, a leading French engineering school. *Acad. Management Learn. Educ.* 8 (3), 418–425.
- Nordqvist, M., Melin, L., 2010. Entrepreneurial families and family firms. *Entrep. Reg. Dev.* 22 (3–4), 211–239.
- Oppenheim, A.N., 1966. *Questionnaire Design and Attitude Measurement*. Free Press, New York.
- Parker, S.C., Van Praag, C.M., 2012. The entrepreneur's mode of entry: business takeover or new venture start? *J. Bus. Venturing* 27 (1), 31–46.
- Penrose, E., 1959. *The Theory of the Growth of the Firm*. Oxford University Press, Oxford.
- Pittino, D., Visintin, F., Lauto, G., 2018. Fly away from the nest? A configurational analysis of family embeddedness and individual attributes in the entrepreneurial entry decision by next-generation members. *Fam. Bus. Rev.* 31 (3), 271–294.
- Podsakoff, P.M., MacKenzie, Scott, B., Lee, J., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J. Appl. Psychol.* 88 (5), 879–903.
- Porfeli, E.J., Wang, C., Hartung, P.J., 2008. Family transmission of work affectivity and experiences to children. *J. Vocat. Behav.* 73 (2), 278–286.
- Prügl, R. & Spitzley, D.I. (2020). Responding to digital transformation by external corporate venturing: an enterprising family identity and communication patterns perspective. *J. Manag. Stud.*, 10.1111/joms.12578.
- Rogoff, E.G., Heck, R.K.Z., 2003. Evolving research in entrepreneurship and family business: recognizing family as the oxygen that feeds the fire of entrepreneurship. *J. Bus. Venturing* 18 (5), 559–566.
- Schoon, I., Duckworth, K., 2012. Who becomes an entrepreneur? Early life experiences as predictors of entrepreneurship. *Dev. Psychol.* 48 (6), 1719–1726.
- Schröder, E., Schmitt-Rodermund, E., 2013. Antecedents and consequences of adolescents' motivations to join the family business. *J. Vocat. Behav.* 83 (3), 476–485.
- Shah, S.K., Pahnke, E.C., 2014. Parting the ivory curtain: understanding how universities support a diverse set of startups. *J. Technol. Transf.* 39 (5), 780–792.
- Sharma, P., Irving, P.G., 2005. Four bases of family business successor commitment: antecedents and consequences. *Entrep. Theory Pract.* 29 (1), 13–33.
- Shepherd, D., Haynie, J.M., 2009. Family business, identity conflict, and an expedited entrepreneurial process: a process of resolving identity conflict. *Entrep. Theory Pract.* 33 (6), 1245–1264.
- Shepherd, D.A., 2009. Grief recovery from the loss of a family business: a multi- and meso-level theory. *J. Bus. Venturing* 24 (1), 81–97.
- Sieger, P., Minola, T., 2017. The family's financial support as a "poisoned gift": a family embeddedness perspective on entrepreneurial intentions. *J. Small Bus. Manag.* 55, 179–204.
- Sørensen, J.B., 2007. Closure and exposure: mechanisms in the intergenerational transmission of self-employment. *Sociol. Entrep.* 25, 83–124.
- Spitzley, D.I., Prügl, R., 2018. The next generation in family firms and external corporate venturing: the mixed role of SEW. *Academy of Management proceedings*. Academy of Management, Briarcliff Manor (Vol. 2018, No. 1, p. 14775).

- Steier, L., 2007. New venture creation and organization: a familial sub-narrative. *J. Bus. Res.* 60, 1099–1107.
- Turner, S.L., Alliman-Brissett, A., Lapan, R.T., Udipi, S., Ergun, D., 2003. The career-related parent support scale. *Meas. Eval. Couns. Dev.* 36 (2), 83–94.
- Uy, M.A., Foo, M.D., Song, Z., 2013. Joint effects of prior start-up experience and coping strategies on entrepreneurs' psychological well-being. *J. Bus. Venturing* 28 (5), 583–597.
- Vanevenhoven, J., Liguori, E., 2013. The impact of entrepreneurship education: introducing the entrepreneurship education project. *J. Small Bus. Manag.* 51 (3), 315–328.
- Van Stel, A., Storey, D.J., Thurik, A.R., 2007. The effect of business regulations on nascent and young business entrepreneurship. *Small Bus. Econ.* 28 (2), 171–186.
- Wennberg, K., Wiklund, J., Wright, M., 2011. The effectiveness of university knowledge spillovers: performance differences between university spinoffs and corporate spinoffs. *Res. Policy* 40 (8), 1128–1143.
- Wright, M., Siegel, D.S., Mustar, P., 2017. An emerging ecosystem for student start-ups. *J. Technol. Transf.* 42 (4), 909–922.
- Zellweger, T., Sieger, P., Halter, F., 2011. Should I stay or should I go? Career choice intentions of students with family business background. *J. Bus. Venturing* 26 (5), 521–536.
- Zellweger, T., Richards, M., Sieger, P., Patel, P.C., 2016. How much am I expected to pay for my parents' firm? An institutional logics perspective on family discounts. *Entrep. Theory Pract.* 40 (5), 1041–1069.

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