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VALUES, BELIEFS AND THE ENTREPRENEURIAL ATTITUDE OF NEW GENERATIONS OF FAMILY BUSINESSES

Name: Daniel Lorenzo / Álvaro Rojas

Affiliation: Family Business Chair
University of Cadiz

Address: Facultad de Ciencias Económicas y Empresariales
Av. Duque de Nájera, 8
11002 Cádiz
Spain

Telephone: (34) 956 015 394

Fax: (34) 956 015 402

e-mail: daniel.lorenzo@uca.es / alvaro.rojas@uca.es

Abstract:

The purpose of this paper is to analyse whether the new generations of family business members have stronger entrepreneurial attitudes in comparison with the whole population. In order to measure this entrepreneurial attitude, we consider cultural values and beliefs to be important determinants of the entrepreneurial level of a given society (Reynolds et al., 1999; Uhlaner and Thurik, 2007). In recent years, the relevance of family businesses in promoting entrepreneurship and entrepreneurial values among its younger members, in order to foster anticipation, change adaptation, market openness and opportunity recognition, has been recognised.

This study draws upon a paper by Davidsson and Wiklund (1997), who analysed the values (such as change orientation, need for achievement, need for autonomy, competitiveness, valuation of money, etc.) and beliefs (societal contribution, financial payoff, perceived risk, social status, etc.) affecting a society's level of entrepreneurship, to verify whether individuals in business families have a higher level of entrepreneurial values and beliefs and thus, a stronger entrepreneurial attitude than individuals who are not members of business families. We use several entrepreneurial intentions models to analyse students' entrepreneurial attitudes (Davidsson, 1995a; Audet, 2004).

The data for this research was obtained from a sample of university students in Andalusia, one of Spain's largest regions. From this total sample, a subsample of 220 students who stated that they were members of business families was identified. By means of a structural equation model, the statistical analysis provides evidence of the positive influence of business families' common entrepreneurship values and supports the notion that university students from business families have a higher level of entrepreneurship and a different composition of entrepreneurial values and beliefs as determinants of entrepreneurial intentions, compared with students who are not from business families.

Keywords: entrepreneurial attitude, family business, next generations

1. Introduction

All around the world, family firms play an important role in the growth of wealth and economic development. Their presence is pervasive in most countries and represents a substantial share of economic activity. For instance, 65% of all Spanish firms are owned by families, representing about 65% of GDP, according to figures from the Instituto de la Empresa Familiar¹, an umbrella organisation for Spain's major family businesses.

The long-term nature of family firms' property can provide the resources needed for innovation and risk taking and encourage entrepreneurial skills (Zahra, Hayton and Salvato, 2004). Barney, Clark and Alvarez (2003) indicate that the kinship relations specific to family firms may aid recognition of business opportunities.

The relationship between family businesses and the development of business projects has been noted in various studies by different authors (Hoy and Verser, 1994; Veciana, 1999; Aldrich and Cliff, 2003; Chrisman, Chua and Steier, 2003; Chua, Chrisman and Steier, 2003; Zahra, Hayton and Salvato, 2004; Steier, 2007).

Chrisman, Chua and Steier (2003) mention four reasons that justify the relationship between entrepreneurship and family business research:

- the fact that the creation of new business projects usually occurs following the involvement of a family that provides the necessary human and financial resources, which is estimated to take place 80% of the time;
- the creation and renewal of a business activity involves a series of strategic decisions that are determined by a set of economic and non-economic factors, amongst which the role of the family stands out in the case of family businesses;
- the intention of family business founders to combine family with business in order to strengthen the family legacy and create economic value;
- the key role that the head of a business plays in the succession process.

As a set of values and beliefs, culture is an important determinant of a given society's entrepreneurial level (Reynolds et al., 1999; Uhlaner and Thurik, 2007). The social and cultural context, understood as values, attitudes and customs of a society's members, have an important impact on decisions that lead to specific behaviours, such as starting a business (North, 1994, 2005). In recent years, the relevance of family businesses in promoting entrepreneurship and entrepreneurial values among the younger members in order to foster anticipation, adaptation to change, market openness and opportunity recognition has been recognised.

The purpose of this paper is to analyse whether new generations of business families have a more highly developed entrepreneurial attitude in comparison with the general population. By using models that integrate entrepreneurial intentions and beliefs, as well as entrepreneurship attitudes, the paper aims to examine whether business family members' values and beliefs may explain possible differences in their willingness to start businesses.

2. Theoretical framework

2.1. Organisational culture and values in family firms

In the introduction to the special edition of the Journal of Business Venturing (2003), dedicated to research on entrepreneurship and family business, editors Rogoff, Kay and Heck (2003; p. 559) stress as a core idea that "family is the oxygen that feeds the fire of entrepreneurship."

¹ www.iefamiliar.com

In order to compensate for the lack of literature on the interrelationship between family businesses and entrepreneurship, Aldrich and Cliff (2003) point out the need to include a family perspective in research on business start-ups, which would allow the phenomenon of entrepreneurship to be understood more thoroughly. Thus, they propose a conceptual model that relates the features of an entrepreneur's family system to the processes and results of starting new businesses.

According to Aldrich and Cliff's model (2003), transitions - which are understood to be changes in family life (weddings, births, divorces etc.), family resources (financial, human, social, physical or informative) or family customs, values and attitudes - have an influence on the business start-up process (Astrachan, 2003). This process, which includes recognising business opportunities, deciding to be an entrepreneur, gathering the necessary resources and implementing initial strategies, structures and processes in new businesses, results in a new organisation's form of success or failure. In turn, this result has a bearing on the resources of an entrepreneur's family system, which triggers new transitions and ultimately changes the family's customs, attitudes and values.

Organisational culture can be defined as the enduring values that make up a company's traits and its adaptation to the environment (Schein, 1988; Zahra, Hayton and Salvato, 2004). These cultures include beliefs, hopes, stories and concepts that influence companies' willingness to support and initiate activities.

In the case of family businesses, the family's customs, values and attitudes form part of the organisational culture and are determined by regional culture, among other factors (Zahra, Hayton and Salvato, 2004). A family firm's culture develops over time and reflects the dynamic exchange between the owners' values, history and organisational achievements, the competitive conditions in the sector and national cultures. These cultures also reflect the ethnic heritage of the family that owns and manages the company. A society's regional cultures and historical experiences also shape these cultures.

The social and cultural context (values, attitudes and customs) of a society's members greatly determines the decisions that lead to certain behaviour (North, 1994, 2005). In the case of new businesses, the customs, values and attitudes that affect the decision to set up a new venture are a result of the cultural and social environment and determine the actions or performance to be considered and in the end, adopted (Shapiro and Sokol, 1982). The possibility of sharing resources, including social networks, between the family and the business play key roles in the growth and development of both (Rogoff, Kay and Heck, 2003; Steier, 2007).

Family firms are created as a result of an individual's entrepreneurial intention, which involves several other family members in order to get the business off the ground. Owners of family firms are aware of the need to maintain this entrepreneurial impulse along the years, as these firms' survival depends on their ability to enter new markets and revitalise existing operations so that new business can be created (Ward, 1987). From this point of view, it can be said that family firms have an entrepreneurial orientation.

On the other hand, some family firms become conservative over time, because of the perceived high risk of failure of business projects and in turn, the risk of destruction of family wealth (Zahra, Hayton and Salvato, 2004). Family firms can also follow conservative strategies because of their organisational cultures, which may evolve from the initial entrepreneurial impulse to a more cautious stance.

A recent study on corporate social responsibility (CSR) in large Spanish family businesses (Casado and Rodríguez, 2009) highlights the three distinctive features they share: the relevance of maintaining the family reputation, the validity of founding values and maintenance of the

family's leadership in the firm. This study also shows that long-term vision, an entrepreneurial attitude, adaptation to change and the pursuit of economic and non-economic benefits are family businesses' main values.

Regarding entrepreneurship, the study points out that it seems that maintaining the entrepreneurial spirit should undeniably be one of the cornerstones of good corporate governance, regardless of the corporate philosophy adopted. This idea is shared by most of the firms analysed in the study, but several expressed that this is not always applied in practice. Large Spanish family firms also stated that maintaining the entrepreneurial spirit within the family business is closely linked to the full force of the founding spirit (Casado and Rodríguez, 2009).

According to the firms in the study, entrepreneurship is related to a confident relationship with stakeholders, an open-minded attitude regarding markets and society, self-criticism and an effort-oriented organisational culture. The results of this study are consistent with those of Zahra, Hayton and Salvato (2004).

Zahra, Hayton and Salvato (2004) analyse the influence of organisational culture on entrepreneurship in family firms by means of four cultural dimensions assumed to be associated with entrepreneurial skills: individual vs. group cultural orientation, external orientation, an organisational culture oriented toward decentralisation and long-term orientation. The results of their study support the notion that the influence of cultural values on entrepreneurship is greater in family than in non-family firms (Zahra, Hayton and Salvato, 2004; 374).

Tàpies (2009) points out five core values common to successful family firms: (1) excellence, understood as the constant desire to improve and maintain high quality standards in every activity within the firm, (2) hard work, (3) initiative, such as the capacity to assume risks, (4) simplicity and (5) austerity, the avoidance of unnecessary waste. Other possible values mentioned as specific to family firms include honesty, coherence, discretion, social responsibility, commitment, employee-orientation and long-term orientation (Bermejo, 2009). Family firms are also very concerned about maintaining their values and passing them on to following generations.

This is a brief summary of the entrepreneurial features of family firms, which are apparently embedded in their organisational culture and values, according to previous studies. Below, we analyse how values and beliefs can influence the entrepreneurial attitude.

2.2. Entrepreneurial values and beliefs

An individual's propensity to start a business has been analysed from the perspective of entrepreneurial traits, although this approach has been overtaken by others that consider entrepreneurs' broader context and their personal experience (Davidsson, 1995b; Reynolds, 1995). A review of the studies that have contributed to furthering knowledge about entrepreneurship was conducted by Guerrero, Rialp and Urbano (2008), who examined the evolution of entrepreneurial intention models and considered several models as the frames of references for studying entrepreneurial intentions, in order to conclude that the Davidsson model (1995a, 1995b) can be regarded as a summary and integrated version of those models.

The concept of entrepreneurial intention has been defined by several models. The first model that attempted to explain this concept was the Entrepreneurial Event Model (Shapiro and Sokol, 1982). Shapiro and Sokol (1982) considered that entrepreneurship can be explained by the relationship among initiatives, skills, management, autonomy and risk. An individual's decision to start a business depends on the personal perception of the desirability of entrepreneurship, the propensity to act and the perception of feasibility. This event-based model was empirically tested in several studies, such as Audet's (2004), among others. The Theory of Planned

Behavior (Ajzen, 1991) draws on the notion that any behaviour requires some kind of planning and that this behaviour can be predicted by means of the intention to adopt it. In this approach, intention is shaped by an individual's attitudes toward the behaviour, the perception of social norms and the individual's perception of behavioural control (Guerrero, Rialp and Urbano, 2008).

The Entrepreneurial Attitude Orientation instrument (Robinson, Stimpson, Huefner and Hunt, 1991) formulates a scale in order to explain attitude prediction by means of elements such as achievement, self-esteem, personal control and innovation; it also considers three kinds of reactions: affective, cognitive and conative. The Basic Intention Model (Kreuger and Carsrud, 1993) may be considered a forerunner of the subsequent Entrepreneurial Potential Model (Krueger and Brazeal, 1994), which also draws on earlier models by Shapero and Sokol (1982) and Ajzen (1991).

Finally, Davidsson's model (1995a, 1995b) explains the intention to create a new business as a function of an entrepreneur's conviction and personal situation. This conviction is influenced by general and specific attitudes, which in turn are conditioned by an individual's personal background (Davidsson, 1995a).

The model developed by Davidsson (1995a, 1995b) summarises several findings from previous research, in order to integrate what is known about the kinds of factors that influence individuals' entrepreneurial inclinations. The Davidsson model also goes beyond a mere integration of prior knowledge by adding several new insights.

Davidsson and Wiklund (1997) applied Davidsson's model to analyse the influence of cultural elements, such as values and beliefs, on the variation in regional business start-up rates. This study draws upon this research by Davidsson and Wiklund (1997), who analysed values (such as change orientation, need for achievement, need for autonomy, competitiveness, valuation of money) and beliefs (such as societal contribution, financial payoff, perceived risk, social status) affecting the level of entrepreneurship in a society, to verify that individuals in business families have higher levels of entrepreneurial values and beliefs and thus, a stronger entrepreneurial attitude than individuals who do not belong to business families.

2.3. Entrepreneurship and family firms

We used entrepreneurial intentions models as a tool to analyse students' entrepreneurial attitudes (Davidsson, 1995a; Audet, 2004; Guerrero et al., 2008) and thus, propose a model to measure credibility as a prior indicator of family business members' entrepreneurial intentions. The credibility construct is formed by the feasibility and desirability of creating own businesses and has its roots in earlier works by Audet (2004), Krueger and Carsrud (1993) and Krueger and Brazeal (1994). Feasibility, also called self-efficacy, is measured by both personal viability towards entrepreneurship and perceived entrepreneurial skills. We also considered values that influence entrepreneurship (Davidsson and Wiklund 1997).

We used the credibility construct, since we consider that it will better reflect family firm members' entrepreneurial attitudes. Family firm members don't necessarily have to start new firms, because they can expect to join family firms that are up and running. However, they can contribute to family firms by applying their entrepreneurial attitudes. Credibility may be a sound precursor of entrepreneurial intentions (Guerrero, Rialp and Urbano, 2008). In turn, entrepreneurial activity is influenced by values such as competitiveness, effort, change orientation, valuation of money and autonomy (Davidsson, 1995a; Davidsson and Wiklund, 1997).

In order to analyse family firm members' entrepreneurial attitudes, we propose a model that considers the credibility construct and the values that influence it. As noted in section 2.1,

competitiveness, achievement motivation, and change orientation can be regarded as specific values in family firms that are common to entrepreneurship, whereas valuation of money and autonomy are not among the values common to both family firms and entrepreneurship. Therefore, competitiveness, achievement motivation, and change orientation shall be considered the three values that influence credibility.

3. Model

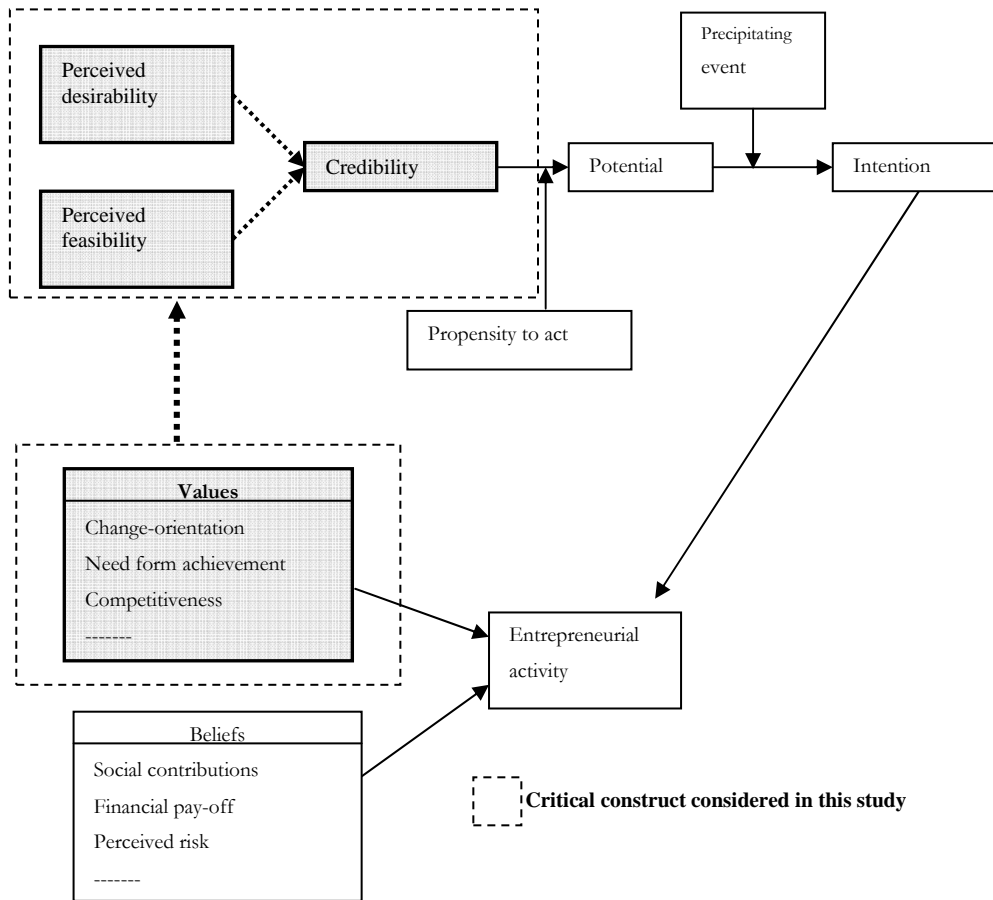
As a result of the conceptual background, this study is based on Krueger and Brazeal's model (1994) and Audet's (2004) and Davidsson and Wiklund's (1997) research. We conceptualise a model that resumes how entrepreneurial values influence an entrepreneurial attitude. The credibility construct (unobserved) is made up of desirability and feasibility. The entrepreneurial values construct (unobserved) is made up of change orientation, achievement motivation, and competitiveness.

Davidsson and Wiklund (1997) apply Davidsson's model (1995) to analyse the influence of cultural elements, such as values and beliefs, on variations in regional firm creation rates.

Krueger and Brazeal's model analyses the influence of perceived desirability and feasibility on credibility and later, on entrepreneurial intentions. According to the Planned Behaviour Theory (Ajzen, 1991), entrepreneurial intentions arise prior to entrepreneurial activity. As we noted in section 2, not all family firm members will create new businesses, but family firms need entrepreneurial attitudes and skills in order to continue and renovate their activities. Thus, we chose to analyse how the entrepreneurial values common to successful family firms (Tàpies, 2009) influence entrepreneurial attitudes and also how entrepreneurial skills influence credibility. A summary of the selected integrated model is shown in Figure 1.

The study's general framework is based on Douglas North's institutional theory (1994, 2005). Hence, we distinguish between informal institutions (culture, values, norms) and formal institutions (rules, laws, regulations).

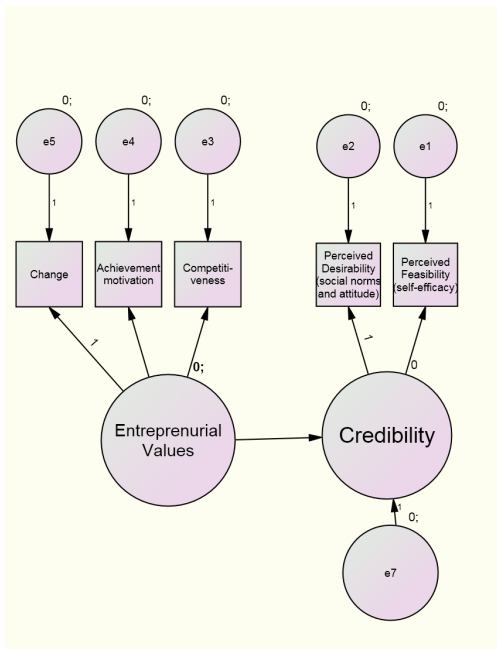
Figure 1. Model of the entrepreneurial attitudes that affect entrepreneurship



Elaboration based on Kueger y Brazeal, (1994: 95); and Davidsson and Wiklund, (1997)

We consider this model, as shown in Figure 2, a general context for a framework of informal institutions in order to analyse how entrepreneurial values affect family firm participants' perceived desirability (attitudes and social norms) and perceived feasibility (self-efficacy and capacity). The credibility construct (unobserved) is made up of desirability and feasibility. The entrepreneurial values construct (unobserved) is made up of change-orientation, achievement motivation and competitiveness.

Figure 2. Modelling entrepreneurial values and credibility



This theoretical framework suggests a model to be tested through structural equations in which family business participants are compared with non-family business members that are divided into two other sub-samples, one of which includes students who are planning to create new businesses and the other which includes students who declared they are not thinking about starting new businesses. This division was made so as to analyse both the composition and impact of values on entrepreneurial attitudes and beliefs (i.e., credibility).

4. Methodology

The data for this study was obtained from a sample of 3,070 students from eight public universities in Andalusia (one of Spain's largest regions), stratified by university, gender and study field from a general population of 233,308 students in 2007. The fieldwork was conducted in May and June, 2007 through personal interviews using a structured questionnaire that included variables that measured constructs of entrepreneurial values and beliefs (Davidsson and Wiklund, 1997) and determinants of entrepreneurial intentions (Davidsson, 1995a; Audet, 2004). The items were measured using a Likert scale from 1 to 5. On the basis of this sample, we identified a sub-sample of 220 students who stated that they were members of business families.

The respondents were selected through a simple random proportional selection according to branch of knowledge (humanities, experimental sciences, economics, social and legal sciences, health sciences and technical education), sex, age group and year of study (first or other year) and Andalusian university.

In the general sample, the sample error was 2.18% at the 95% level ($Z=1.96$ $p=q=0.5$). In the sub-samples, the highest sample error appeared in the humanities, with a sample error of 7.33% at the 95% level. At the universities, the maximum error was 5.1%.

The selection of value dimensions was based on theories and papers analysed in the literature reviewed. Each value dimension was measured by 4 or 5 items and all the items were measured

on a Likert scale from 1 to 5. The statistical analysis was conducted using a structural equation modelling that allowed us to examine an established relation between one or more independent and dependent variables. The statistical software used was the SPSS and AMOS version 18.0.

We tested the structural equation model using the total sample (3,070) and three sub-samples. The first sub-sample encompassed university students who were members of business families (226), the second sub-sample encompassed students with firm intentions to start a company (166) and the third encompassed those with no entrepreneurial intentions (1,244).

The Cronbach's alpha indices for change-orientation and achievement motivation were 0.51. We revised these indices by eliminating one dispersed item for each index, with which Cronbach's alpha rose to 0.72. Cronbach's alpha for competitiveness reached 0.824. Then we constructed indices for change-orientation, achievement motivation and competitiveness with a factorial analysis. In order to make the maximum use of the available data, mean substitutions were employed for internal non-responses to individual items in the values indices.

The total sample included 3,070 students, most of whom were females (54.3%) between 20 and 25 years old who were not in the first year of their university studies. This total sample was divided into three sub-samples: family business members, strong entrepreneurial intention and no entrepreneurial intention, each of which had no relevant differences from the main features of the total sample. Table 1 describes the main demographic variables of the sub-samples considered.

Table 1
Descriptive statistics

	Total	Family Business	Entrepreneurial intention	No entrepreneurial intention
Size	3,070	226	166	1,244
Sex				
Female (%)	54.3	49.8	40.4	58.4
Male (%)	45.7	50.2	59.6	41.6
Year				
First	20.4	24.0	18.8	18.4
Other	79.6	76.0	81.3	81.6
Age				
Under 20	27.8	26.9	25.3	28.5
20-25	57.7	56.0	59.3	56.1
26-35	14.0	16.7	15.4	15.0
Over 35	0.6	0.5	0.0	0.4
Professional experience %	45.1	61.5	57.2	37.7

Table 2 shows information on the indices of desirability, feasibility, change-orientation, competitiveness and achievement motivation related to number of items, a sample of items for each one, arithmetic mean, S.E., maximum and minimum values, standard deviation and earlier references in the literature about them.

Table 2
Values and beliefs, measures of the critical construct indices

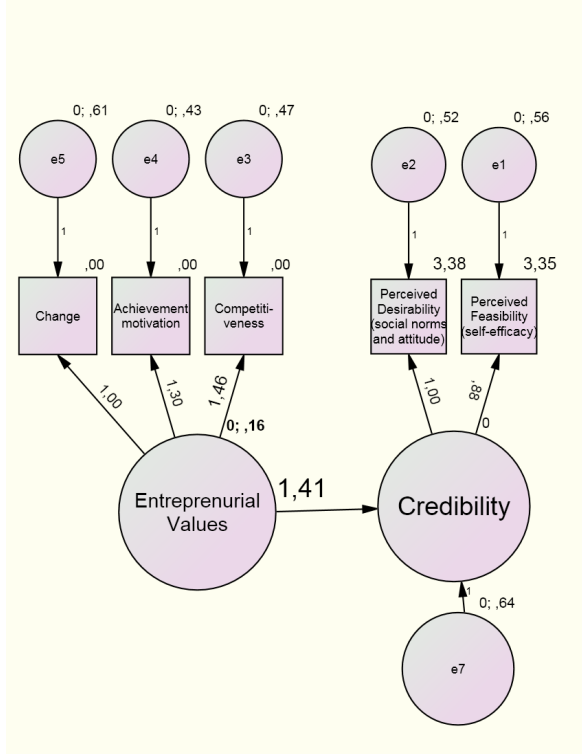
Index label	Items	Sample item	Mean	S.E.	Min	Max	Desv.	References
Desirability	1	How attractive you find the idea of starting your own business	3.39	.023	1	5	1.217	Audet (2004), Guerrero et al. (2008)
Feasibility	1	How confident you are about your skills and abilities to start a business	3.35	.021	1	5	1.145	Audet (2004), Guerrero et al. (2008)
Change	2	Dramatic changes in one's life situation are for the most part an enrichment in the long run	0.00	.0158	-2.00	1.516	.876077	Davidsson and Wiklund (1997)
Competitiveness	5	I try harder when I'm competing with others	0.00	.0163	-2.06	1.905	.903834	Davidsson and Wiklund (1997)
Achievement motivation	4	Facing new challenges and successfully coping with them is extremely important to me	0.00	.0151	-2.49	1.746	.836810	Davidsson and Wiklund (1997)

In order to analyse model fit, we identified statistics such as the chi-square, its degrees of freedom (DF), its probability value (P), the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA).

If the probability value of the chi-square test is below .05, the null hypothesis that the model fits the data would be rejected. The chi-square test is an absolute test of model fit: if the probability value (P) is below .05, the model is rejected. The Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) compare the specified model's absolute fit with the independence model's absolute fit. Hu and Bentler (1999) recommend RMSEA values below .06, and Tucker-Lewis Index and the Comparative Fit Index values of .95 or higher. Since the RMSEA for this model is .004 and the Tucker-Lewis Index value is .973, the model was a good fit, according to the descriptive measures of fit.

This model (Figure 3) was not significant for the whole sample of students. The CFI, TLI and RMSEA levels indicate a very good fit. All the regression coefficients in this model are significantly different from zero beyond the .01 level.

Figure 3. Modelling entrepreneurial values and credibility



($\chi^2=23.474$, $df=8$, $p=0.000$, $CMIN/DF=5.869$)
 CFI(0.993). TLI (0.973). RMSEA (0.04)

In this sense, Tabachnick and Fidell (1996) stated that when the chi-square is not significant in a structural equation model, but the other indices present reasonable results, it is feasible to continue working with the data. We tested the model using three sub-samples from the total sample. These sub-samples include (1) students who belong to business families, (2) students who are not interested in starting new businesses, and (3) students who are considering starting a new business.

A summary of the results from the structural equation modelling for the sub-samples is shown in Table 3.

Table 3
Main estimation models fit by sub-sample

Sub-sample	Chi-square	Degrees of freedom	Probab. level (p)	CMIN / DF	CFI	TLI	RMSEA	
Family business members	7.653	4	0.105	1.913	0.979	0.921	0.059	Significant
No entrepreneurial intention	2.371	4	0.668	0.593	1.000	1.022	0.000	Significant
Stronger entrepreneurial intention	5.203	4	0.267	1.301	0.992	0.970	0.043	Significant

As shown in Table 3, all the sub-samples were significant.

As shown in Table 4, within the model estimated for family firm members, an increase of one unit for entrepreneurial values leads to an increase of 1.387 units in credibility. Credibility is made up of 0.9 units of feasibility and one unit of desirability. The entrepreneurial values construct is made up of one unit for change, 1.77 units for achievement motivation and 1.54 units for competitiveness.

Table 4
Main regression weights by sub-sample

Sub-sample	Credibility Entrepr. Values	Desirability ← Credibility	Feasibility ← Credibility	Change ← Entrep.Values	Achievement motivation ← Entrep.Values	Competitive- ness ← Entrep.Values
Family business members	1.387	1.000	.903	1.000	1.778	1.541
No entrepreneurial intention	.771	1.000	.797	1.000	1.033	1.234
Stronger entrepreneurial intention	1.242	1.000	.844	1.000	2.201	2.191

Credibility is less affected by entrepreneurial values in the sub-sample of students with no intention of creating new businesses. An increase in one unit for entrepreneurial values only increases credibility by 0.77 units. Credibility is made up of a lower level of feasibility. The entrepreneurial values construct is made up of one unit for change, 1.03 units for achievement motivation and 1.23 units for competitiveness.

Lastly, for the sub-sample that comprises students with stronger entrepreneurial intentions, entrepreneurial values have a notable influence on credibility. An increase of one unit for entrepreneurial values results in 1.24 units for credibility. Credibility is made up of a lower level of feasibility. The entrepreneurial values construct is made up of higher figures for achievement motivation (2.21) and competitiveness (2.19).

Table 5 shows that within the estimated model, business family members have a fairly high level of desirability (3.806) and feasibility (3.836), which is higher than the average for students for whom these variables are 3.39 and 3.35 respectively. The change index was estimated at 0.10, near the average, which was 0.00. However, family firm participants presented higher values for achievement motivation (0.114) and competitiveness (0.117).

Table 5
Main intercepts: estimations by sub-sample

Sub-sample	Desirability	Feasibility	Change	Achievement motivation	Competitiveness
Mean / Min/Max	3.39 / 1 / 5	3.35 / 1 / 5	0.0 / -2.00 / 1.51	0.0 / -2.49 / 1.74	0.0 / -2.06 / 1.90
Family business members	3.806	3.836	.010	.114	.177
No entrepreneurial intention	2.680	2.680	-.170	-.181	-.216
Stronger entrepreneurial intention	4.383	4.241	.101	.221	.292

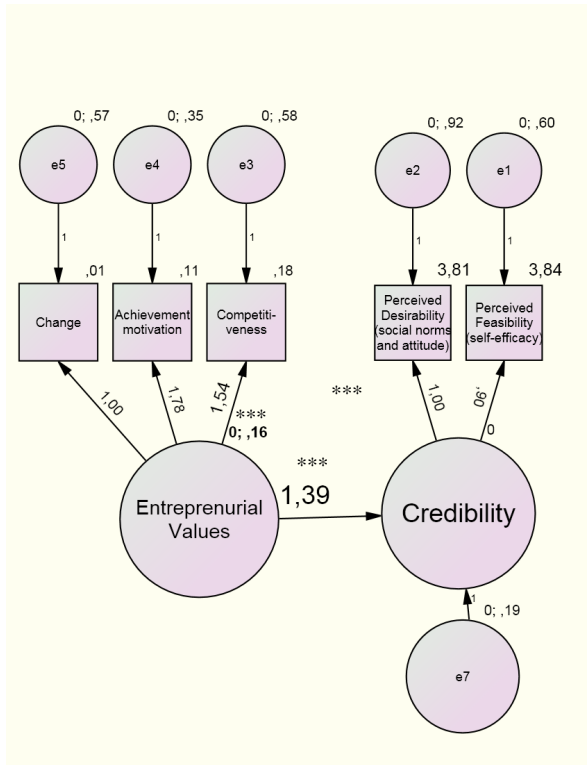
The sub-sample of students who have no intention of starting businesses had much lower

estimations for desirability and feasibility (2.680 for both of them). The indices for entrepreneurial values were negative.

The students who intend to create new businesses also had higher estimations for desirability and feasibility (4.38 and 4.241), as well as for change (0.101), achievement motivation (0.221) and competitiveness (0.292).

The results from the model estimation for family firm participants are shown in Figure 4.

Figure 4. Model for family firm participants



X²=7.653. df=4. p=0.106. CMIN/DF=1.913)
CFI(0.979). TLI (0.922). RMSEA (0.059)

The figures for this model for family firm participants (Figure 4) indicates that it is a good model (CMIN/DF<2) and a good fit, as indicated by (CFI (0.979). TLI (0.922) and RMSEA (0.059) <0.06)

All the regression coefficients in this model are significantly different from zero beyond the .01 level. Standardised estimates allow the relative contributions of each predictor variable to each outcome variable to be evaluated.

Table 6 shows the regression weights for the group of students who are business family members.

Table 6
Regression Weights

		Estimate	S.E.	C.R.	P
Credibility	← Entrepreneurial Values	1.387	.309	4.483	***
Desirability	← Credibility	1.000			
Feasibility	← Credibility	.903	.175	5.156	***
Change	← Entrepreneurial Values	1.000			
Achievement motivation	← Entrepreneurial Values	1.778	.328	5.422	***
Competitiveness	← Entrepreneurial Values	1.541	.290	5.317	***

5. Discussion and conclusions

The entrepreneurial attitude of family firm members was analysed by a model tested for structural equations modelling. The model shows how entrepreneurial values, such as change-orientation, achievement motivation and competitiveness, influence credibility, understood as feasibility and desirability.

We used a sample of university students in Andalusia, who were asked about their entrepreneurial intentions and attitudes. The total sample included 3,070 students divided into three sub-samples: (1) students who belong to business families, (2) students who are not eager to start new businesses, and (3) students who were considering starting new businesses.

Although the model is not valid for the total sample, because the chi-square is not significant, it can be used to analyse the data, since the other indices (CFI, TLI, RMSEA) present reasonable figures (Tabachnick and Fidell, 1996). The model is valid for the sub-sample that includes new generations of family firm members.

As noted in section 1, this paper aims to analyse whether new generations of family businesses have a stronger entrepreneurial attitude in comparison with the whole population. By comparing the figures for the three sub-samples, it seems that students who are business family members seem to be more entrepreneurially-oriented than non-business family students, whether they wish to create a new firm or not. Students who clearly intended to start new businesses had stronger entrepreneurial values as well as a stronger entrepreneurial attitude. These results may partially support the notion that the new generations of a family business can maintain the entrepreneurial spirit needed in the family firm when they join it.

These results advance knowledge of the factors that positively influence entrepreneurship by providing evidence of the positive influence of values common to family businesses. Thus, the results suggest that university students who are members of business families have a higher level of entrepreneurship and a different composition of entrepreneurial values and beliefs as determinants of entrepreneurial attitude compared with students who are not members of business families.

References:

- AJZEN, I. (1991): "The theory of planned behaviour", *Organizational Behavior and Human Decision Processes*, Vol. 50, pp.179–211.
- ALDRICH, H.E. and CLIFF, J.E. (2003): "The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective", *Journal of Business Venturing*, Vol. 18, pp. 573–596.
- ANDERSON, A.R., JACK, S.L. and DODD, S.D. (2005): "The Role of Family Members in Entrepreneurial Networks: Beyond the Boundaries of the Family Firm", *Family Business Review*, Vol. 18, n° 2, pp. 135-154.
- AUDET, J. (2004): "A longitudinal study of the entrepreneurial intentions of university students", *Academy of Entrepreneurship Journal*, Vol. 10, No. 1, pp. 3-15.
- CASADO, F. and RODRÍGUEZ, M.A. (2009): *La RSE en la gran empresa familiar española*. Instituto de la Empresa Familiar.
- CHUA, J.H., CHRISMAN, J.J. and STEIER, L.P. (2003): "Extending the Theoretical Horizons of Family Business Research", *Entrepreneurship Theory and Practice*, Vol. 27, n° 4 (summer), pp. 331-338.
- DAVIDSSON, P. (1995a): "Determinants of entrepreneurial intentions". Paper presented at the Rent IX Workshop, Piacenza, Italy.
- DAVIDSSON, P. (1995b): "Culture, structure and regional levels of entrepreneurship", *Entrepreneurship and Regional Development*, 7(1), pp. 41–62.
- DAVIDSSON, P. and WIKLUND, J. (1997): "Values, beliefs and regional variations in new firm formation rates", *Journal of Economic Psychology*, Vol. 18, pp. 179-199
- GUERRERO, M., RIALP, J. and URBANO, D. (2008): "The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model", *International Entrepreneurial Management Journal*, Vol. 4, pp.35–50.
- HABBERSHON, T.G. and WILLIAMS, M.L. (1999): "A resource-based framework for assessing the strategic advantages of family firms", *Family Business Review*, Vol. 12, pp. 1-15.
- HU, L. and BENTLER, P. M. (1999): "Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives", *Structural Equation Modeling*, Vol. 6, No. 1, pp. 1-55.
- KRUEGER, N. F., and BRAZEAL, D. (1994): "Entrepreneurial potential and potential entrepreneurs", *Entrepreneurship Theory and Practice*, Vol. 18, No. 3, pp.91–104.
- KRUEGER, N. F., and CARSRUD, A. L. (1993): "Entrepreneurial intentions: Applying the theory of planned behaviour", *Entrepreneurship and Regional Development*, Vol. 5, No. 4, pp. 315–330.

NORTH, D. C. (1990): *Institutions, institutional change and economic performance*. Cambridge, UK: Cambridge University Press.

NORTH, D.C. (1994): "Economic performance through time", *American Economic Review* 84, 3, pp. 359- 368.

NORTH, D. C. (2005): *Understanding the process of economic change*. Cambridge, UK: Cambridge University Press.

REYNOLDS, P.D. (1995): "Who Starts New Firms? Linear Additive versus Interaction Based Models", paper presented at the *15th Babson College Entrepreneurship Research Conference*, London, April 13-15.

REYNOLDS, P., HAY, M. and CAMP, R.M. (1999): *Global Entrepreneurship Monitor. 1999 Executive Report*. Babson College, Kauffman Center For Entrepreneurial Leadership; Ed. London School Business, London.

ROGOFF, E.G., KAY, R. and HECK, Z. (2003): Editorial "Evolving research in entrepreneurship and family business: recognizing family as the oxygen that feeds the fire of entrepreneurship", *Journal of Business Venturing*, Vol. 18 (5), pp. 559-566.

SHAPERO, A. and SOKOL, L. (1982): "The Social Dimensions of Entrepreneurship" in C. A. KENT, D. L. SEXTON and K. H. VESPER (Eds.): *Encyclopedia of Entrepreneurship*, pp. 288-307. Englewood Cliffs, NJ: Prentice Hall.

STEIER, L. (2003): "Variants of agency contracts in family-financed ventures as a continuum of familial altruistic and market rationalities", *Journal of Business Venturing*, Vol. 18, pp. 597-618.

TABACHNICK, B. G., and FIDELL, L. S. (1996): *Using multivariate statistics*. New York: Harper Collins.

UHLANER, L. and R. THURIK (2007): "Postmaterialism influencing total entrepreneurial activity across nations", *Journal of Evolutionary Economics*, Vol. 17, pp.161-185.

VECIANA, J.M. (1999): "Creación de empresas como programa de investigación científica", *Revista Europea de Dirección y Economía de la Empresa*, Vol. 8, nº 3, pp. 11-36.

ZAHRA, S.A., CLAYTON, J.C. and SALVATO, C. (2004): "Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture", *Entrepreneurship Theory & Practice*, summer, pp. 363-381.